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Add this template as a comment to mark the associated article as Reviewer Approved. The article then displays a small "star" on the right hand side of the article, with a link down to the comment where the approval will be displayed.

Usage

The Reviewer Approved star is used when a member of the Nokia Developer's community reviews and approves of an article that *they did not write*. The purpose of this review is to create a member generated approval system so that other members may trust the articles and code examples on the Wiki. Note that if you're not really impressed by an article, don't use this template. Instead add comments suggesting how the article can be improved, or even better, improve it yourself!

To review an article, write a short two or three paragraph review on that article's comment page describing:

- the article and what it accomplishes
- why you felt it a good article. For example perhaps you used the code example or you felt the article was very instructive or contained information that is not captured elsewhere

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{{ReviewerApproved|user=your_user_name_in_bar_format|timestamp={{subst:CURRENTTIMESTAMP}}|text=your
review of the article }}
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List of Approved Articles

Below is list of articles that have been updated with approvals as comments (ie up to date)

Article	Timestamp	User	Comment
Talk:Symbian OS Error Codes	20090904	Savaj	Although the content of this article have only table showing error value its name and suggested text, this article is very useful because it is not possible to remember name of all error value. Symbian documented these errors code in different header files, so reading error code name and text from these header files is difficult. Article will be useful to both for beginners and for experienced developers.
Talk:Create SMS locally in inbox using Symbian C++	20090903	Kamalakshan	The code snippet demonstrates on how an SMS can be created in the local Inbox. SMS does not use external network services and hence user is not charged for this. However, for the user it might seem to be just another SMS from someone else. The function can be implemented directly by including the required header and library files.
Talk:Create more flexible table in Java ME	20090926	Larry101	This article presents a very impressive table component for use in Java ME. Java ME does not provide any default table component. The NetBeans Mobility Pack does provide a fairly basic table component, but as the author of this article rightly points out, it suffers from several shortcomings, including the fact that it does not support text-wrapping within a cell. The following article discusses the NetBeans TableItem: How to show table layout data in a MIDP form The code for the table component is nicely organised into three classes. First is the Table class which contains the logic and rendering code for the table. Secondly, the TableCell class contains the logic and properties of individual table cells, such as width, height and whether or not the cell is editable. Finally, the CellEditor class contains logic for editable table cells. The code is commented where appropriate to help the reader understand what is going on in the code. The result is a table component which is impressive both in terms of its appearance and scalability. Text can wrap within a cell where appropriate, and the table is able to scroll. Cell contents are also editable. In my personal opinion, it is a big improvement on the NetBeans TableItem component.
Talk:Emulator Startup Modes in S60 5th Edition SDK	20090930	Deepikagohil	This article represents the possible two start-up modes of Emulator in S60 5th Edition SDK. The advantages and disadvantages in using these start-up modes are clearly described by the given article. The related images are also presented for the two modes for our ease. It also provides code for enabling and disabling the Start-up modes. This article is specially created for beginners who have just installed the S60 5th Edition SDK and are getting started.
Talk:MicroFloat for floating point numbers in CLDC 1.0	20090930	Larry101	This article introduces one of the several libraries that exist for getting around the limitation of CLDC 1.0 (no floating point primitive types). This article gives a brief introduction of the MicroFloat library, which provides methods for performing arithmetic using floating point numbers, using values stored in long variable types to simulate double and float primitive types. The article also demonstrates how the necessary constants the library uses can be generated using a simple call in Java SE to the toHexString method of the Long class. A useful article for those who need to perform floating point mathematics in CLDC 1.0.
Talk:How to disable the screen saver on Java ME	20091001	Kalki	This article demonstrate a complete example on how we can interrupt screen save from being started automatically. To do that task we must make sure in code that we loop the light's on method and we are only interrupting screen save not blocking. Given code example ready to be tested and run.I have tried it. it runs well and will interrupt screen saver for a time until the application closed.
Talk:How to create a TextBox in LCDUI	20090929	Kalki	This article sows a complete code example on creating a Text Box in j2me. Text box is a very basic UI element j2m2. The main class used is "TextBox" then its constructor takes height and width of the text box with optional pre-loaded text. Given code is perfect as per j2me code standards and conventions. It runs and display text box as described in this article. A snapshot is given of code example for better understanding of reader.
Talk:How to create a high score database in Java ME	20090921	Larry101	This article shows how to implement a high score database in Java ME. Such functionality is often built into games to keep track of the highest scores achieved so far. The code example shows how to achieve this using the Record Management System (RMS). The article shows how to add a new score to the database and also how to retrieve the highest scores. If scores are to be sorted (as is usually the case – highest scores are normally sorted in descending order), the article provides an example of the implementation of the RecordComparator interface. An implementation of this interface is passed as a parameter to the enumerateRecords method of the RecordStore class, which ensures that the returned RecordEnumeration is sorted using the provided comparator. For devices which support JSR-75 (the FileConnection API), this functionality could also be implemented using File I/O. In the case of high-scores stored in a file, however, some sort of basic encryption should probably be maintained to prevent users cheating by directly editing the high-scores file.
Talk:Record sorting in RMS	20090928	Larry101	For those familiar with how sorting works in Java SE, this will be a very familiar concept. The code example is kept nice and simple. It shows both how to instantiate a sorted RecordEnumeration and how to implement the RecordComparator interface (through the compare method). The entire process is also shown in a complete code example, showing the process from start to finish. One relatively minor criticism I have of this article is that it does not show how the compare method should be implemented differently if the programmer desires the records to be sorted in descending order as opposed to ascending order. This is a simple matter of swapping the PRECEDES and FOLLOWS return values.

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Talk:What to do if installation of a signed MIDlet fails	20090919	Larry101	This simple article highlights several simple, but common problems that may lead to problems installing a signed Java ME midlet. Midlet signing can be very confusing for beginners, and the reason for the errors can often be difficult to track down. Almost every day, new threads are to be found in the discussion forums relating to problems installing signed Midlets. Some of the most common and confusing problems relate to a failure to list the required API permissions in the JAD file. Renaming a Midlet (and resulting inconsistency between the Midlet name and what appears in the JAD file) is another common cause of troubles. The following link provides a useful discussion of midlet signing and common problems encountered: Midlet signing
Talk:Recieving Cell Broadcasting Services (CBS) Messages on Java ME	20090922	Vkmunjpara	This article explains about what is CBS(Cell Broadcasting Services) and how you will do settings in your phone.So Device Settings are explained with brief. In the given example, the good thing is that the author imports just 14 classes, not importing full packages. Only needed classes are imported so the midlet size is automatically reduced. This article shows how we will use MessageConnection class and how to register for a particular channel. Well Explained.
Talk:SMS handling in Java ME	20090913	Vkmunjpara	Message Handling is explained in a very easy way in this article. In this article a class MessageListenerImpl implements MessageListener. And this interface has one method for notifying incoming message. The Class WirelessMessageReader is used for handling of pending messages. And I also supports networking functionality.
Talk:How to install 2 copies of the same application	20090903	Kamalakshan	In case if you have a requirement to have the same application installed twice on the same device, you may refer to the tips provided in this article. The author has tried to cover almost all of the changes that needs to be made to the application. Special care needs to be taken that all the UID references in the project are updated to the new UID.
Talk:Finding position in Java ME	20090924	Kalki	Article is all about using how to make Location Based Application. LBS application use some basic information to find some interesting places.Articles gives code example of usage of Location Class and its different methods. Ways to get Current Position of the Device or user. Code Given in this article can become the primary source for those who wants to develop LBS application. Code Example should must try. It gives expected out.
Talk:Porting Android (Java) applications to Java ME on S60 5th Edition	20090923	Nirpsis	This article demonstrates a fundamental knowledge of Android platform that would allow you to port Android applications to S60 5th edition with the help of Java ME. The Android SDK provides the tools and APIs which is necessary for developing applications on the Android platform using the Java ME. The author has explained Android architecture with number of screenshots. The application framework, libraries, android runtimes and linux kernel are the various components of Android architecture. The step by step instruction is given in such a way that everyone can easily understand this. In the article , the author has recommended various components of an Android applications like activity, intentreceiver, service, content provider and user interface. The author has given some common guidelines with suitable code snippet in both of this platform. This article is very important for developers for understanding the architecture and features of Android platform. If you want to port Android applications to S60 5th edition using J2ME, this article is a stating point.
Talk:SMS Utilities API	20090929	Savaj	SMS Utilities API's are useful to sending and receiving SMS using sockets. It is particlularly very useful to send/listen SMS silently, to listen SMS on particlular port and to listen SMS based on some pattern matching. This article demonstrates the use of SMS Utilities API to send SMS and listen SMS silently with pattern matching (## here). Note that this API, SMS Utilities API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:How to install a Java ME application on a mobile device	20090927	Kalki	Level:Basic This article discusses on how to install java based Mobile Application on Mobile.There are many ways we can do that,firs one is if the application files are on your PC then you can transfer it using Infrared or Blue tooth or you can transfer it from other devices also. Second way is to get the .jar or .jar file using Over The Air means suing Wap site or SMS. All the possible ways of installing J2ME application is described in detail with required steps.Article description is easy to understand. Beginners can get to know same without any hassle.
Talk:Data Connection Log Counters API	20090929	Savaj	Data Connection Log Counters API are useful to get the total amount of data sent and received using GPRS and WLAN. The application that is started as file server client is identified by application UID. This article demonstrates the use of Data Connection Log Counters API to displays the total data sent using GPRS and WLAN, to displays the total data received using GPRS and WLAN. Note that this API, Data Connection Log Counters API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Get application icon using Symbian C++	20090928	Savaj	Normally one application need not to access application icon of other application. But in some case one application may need to access application icon of other application, for example when application is maintaining list of installed application in device. This article demonstrates how to get application icon based on application UID. It illustrates how to use API AknsUtils::CreateAppIconLC() to get application icon. Article also describes that application needs AllFiles capability to access application icon of Java applications, So be aware of this issue (as getting AllFiles capability is very hard) before using it for java applications.
Talk:Theming Symbian UI Components	20090907	Warjan	You want to theme ui? You should know what you can theme and this article will show you ui components to customize. And there is plenty. But before introducing and decomposing them in smaller components author writes a bit about how to get inspiration, the tools you can use and about theme creation process. Thus brings you closer to the whole theme subject, but I am not sure if it's really needed in article titled S60 UI Components. Of course mainly those are pictures. I wonder if it wouldn't be better to have for example three themes side by side. Maybe it would be too much, maybe it would show you how far you can travel with your imagination and software. Watch the pictures, get inspiration, create graphics in your tool of choice, fire up Carbide.ui and go component by

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			component. Thumbs up.			
Talk:Capturing the slider events on the Nokia N95	20090918	Kamalakshan	A very good reference for programmers require to track the sliding event for N95 device. It provides the key event code to look for in order to track the slider event.			
Talk:Splash screen with image using Symbian C++	20090904	Savaj	Usually all application need loading resource when it launches, splash screen is very useful to notify the user that the program is in the process of loading its resources or connecting to internet. Basically a progress bar within the splash screen indicates the loading progress. There is no direct API is available to use as a splace screen in symbian. This article is very useful to implement splash screen in symbian, as it clearly describe how to implement splash screen.			
Talk:Designing appealing mobile web pages	20090911	Deepikagohil	The article contains tips to design effective and efficient web pages. These tips are presented here in a very simple manner. Generally a mobile device is having a small screen and contents of the web-page should fit to screen well. The web-page should be short and should contain more content. Many more aspects are illustrated in this article. The artilce is important to everybody who are into designing mobile web-pages. Beginners and intermediate developers will get most out of this article.	20090917	Sangramp@cybage.com	Very good article to refer to start designing for mobile web pages. The author has very well explained aspects of optimising the web content for mobile with the illustration. The key design considerations like optimisation specific to device platform, scalable pages, navigation structure is very described with the different screen-shots for different devices. The comparision of not following the best practises against design with best practises is provided with the visuals.
Talk:CleanupStack	20090907	Deepikagohil	The article has abstracted the fundamental points of CleanupStack and mentioned here. The elementary features of cleanupStack and basic things should be kept in mind while using it are illustrated in this article. The article can be advantages to beginners only.	20090927	Larry101	This article addresses the use of the Cleanup Stack in Symbian C++. Symbian C++ does not provide garbage collection in the manner that other languages such as Java (including Java ME) does, so some of the responsibility for avoiding memory leaks is left to the programmer. This article gives a very good overview of the use of the Cleanup Stack in Symbian C++, with the author demonstrating a good understanding of the subject matter. All aspects of the use of the Cleanup Stack are addressed, beginning with a motivation of why it is necessary (i.e. how are memory leaks possible). Instead of just demonstrating how to use the CleanupStack, the author provides enough background to understand how the Cleanup Stack works. The author also provides a good overview of possible pitfalls and when NOT to use the Cleanup Stack (such as not pushing class member variables onto the stack). One of the better articles I have read on this topic. The explanation was simple enough even for relative newcomers to Symbian C++ to understand, which is important, as this is a fundamental concept for anybody targeting the Symbian C++ platform.
Talk:MIDlet JAR Manifest essentials	20090914	Kalki	This article is much useful when somebody wants to build their custom application using Ant script. Generally manifest file automatically generated by the IDE. But if you are developing using simple editor then you must have to look at this article to see how many mandatory and optional attributes one has to define in the build.xml file while building their application using Ant Script. All the Manifest compulsory and Optional Attributes are listed with clear explanation of each one.			
Talk:How to get external volume buttons events	20090926	Kalki	It becomes most important to get updated with new technology.As this article name suggest that How to get External Media Buttons Events. Now a days all devices having external buttons. The external buttons working are explained clearly.MIDlet change the volume level globally so all the players will be affected.Nokia has developed unique event for its devices to notify the MIDlet when volume is changed. Code Example on how to get notified while external volume buttons are pressed is written perfectly and code works fine without errors.Code is easy to understand and implement.			
Talk:Creating and loading custom fonts in Symbian	20090908	Savaj	Using custom fonts is most frequent requirement of GUI applications. Basically device supports system fonts and logical fonts, which may not fulfill requiremnt of end user. For example by default device does not support font "Monotype Corsiva", in that case user need to use custom fonts. In symbian custom fonts can be created in two ways, either using .gdr file or using .ttf file. This article demonstrates how to create custom fonts using .gdr files. Step by step explanation of source code simplifies understanding, a beginners quickly understand how it works. This source code can be easily extended to create fonts using .ttf files. Rendering fonts of custom language, for example arabic script or indic script, is also possible using this code example.			
Talk:How to get the current screen orientation using Symbian C++	20090928	Savaj	Application may need to get current orientation. In GUI application you can get it easily by using method CAknAppUiBase::Orientation(). Article describes how to get current orientation of application, which is more useful to beginners. Current orientation of application is different from orientation of device. Do not confuse with screen orientation of device and current orientation of application. CAknAppUiBase::Orientation() will returns the orientation that you have set using SetOrientationL() in your constructL() method of appui class, not screen orientation of device.			
Talk:Accessing native code	[illegible]	[illegible]	This article discusses a creative approach to overcome the limitations of the Java ME platform in terms of accessing native services. The article begins by discussing the reasons why Java ME has these limitations and discusses the design decisions that were made when designing Java ME with regards to security. For security reasons, Java ME midlets run in what is known as a "sandbox" environment, and are restricted in terms of the native services and data that they are able to access. For this reason, it is often a problem when we want to design midlets which access information such as the call logs or the active processes, because this data is not available via Java. This article outlines an approach which relies on socket communication to allow Java midlets access to native data. A daemon native application (such as a Symbian C++ application) starts when the device boots, and then services requests by midlets for native information. Sample code is provided, demonstrating how the framework would function for the simple example of a midlet which lists the current active processes. This information is sent via the local socket address (127.0.0.1) to the Java midlet. The use of threading is advisable to prevent the application blocking			

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from Java ME on Symbian	20090928	Larry101	waiting for this data. The approach described in this article is very interesting and useful. From personal experience, I made use of this architecture in an application I wrote a while back which allowed me to access the Contacts database (without the PIM API) and the call logs from a Java midlet. While the architecture is a bit clumsy – you end up needing two applications to do the work of one – this technique is really an ingenious way for getting around the limitations of Java ME. Having said that, as more and more "additional" APIs are added to Java ME, the need for such "tricks" is perhaps not quite as big as it was a few years ago. The PIM and File Connection APIs now provide access to some of the more commonly used native services and data. Nevertheless, there are still many native services and information sources that are still unavailable from Java midlets. This architecture may in some cases, be the easiest workaround, especially for those who are not well versed in Symbian C++. A similar architecture could also be implemented using Python instead of Symbian C++ to provide access to native services.			
Talk:Prototype Java ME payment API using HTTP	20090918	Kalki	This article implements a complete Payment API using simple and easy to understand code. Must try this code.If developers want their application to process payment they can try this code. Its a bug free code and runs without any exceptions.	20100108	Vivartpandey	In this article's example code where is the use of payment API jsr-229. this article is just about payment using http get nothing else.
Talk:How to utilize different keyboards in Java ME	20090930	Deepikagohil	Keypad is the basic User-intraction element of a mobile device. And as a developer, you should know how to effectively use the keypad to make the device more user-friendly. This article represents a breif overview about different kind of keypads being used in S60 devices and also disscusses about some related issues with them. The Image-imlementations given in the article are suited to the mentioned topic. After providing the introduction and properties of different keyboard, the article deals with a demostrated JAVA ME example to show the usage and features of the QWERTY keyboard. The demostrated example is also attached. This article can be useful to the beginners and intermediate developers to make them understand- how to use keyboard effectively.			
Talk:How to play mp3 from server in Java ME	20090925	Vkmunjpara	If any phone hasn't much space to store all mp3 files of his/her choice then a midlet which contains a method defined in this article can be used to play songs from server which has a lot of space to store songs… Here this article addresses a method playAudio(), in which mainly HttpConnnection class and player object is created. Here an important thing to understand is that , in the creation of player instance, an instance of InputStream is used. And in the creation of InputStream instance, an instance of HttpConnection is used. And similarly in creation of HttpConnection instance, an URL from server is used as a String. So this article explains playAudio() in a very way			
Talk:Media Recorder API	20090928	Deepikagohil	This article provides a brief overview to use Media Recorder API. The soul purpose of this API and how to use it- are clearly described in this article. The article also provides a code snippest which let us understand how to use it. It also provides the guidelines for the same. Apart from that, there is also a link to an example project, which help us to make it more clear. This article can be useful to developers who intend to use this API in their application.			
Talk:Full Duplex Audio	20090912	Narendrachinni	This article had explained about the Full Duplex Audio and what is ment by a full duplex is nothing but accessing fully the message pipes or message ques in two ends then it is possible to make the application full duplex . i will give the over view what we are going to do is we have to take two message pipes for each client program as well as server program and use that message pipes for end to end communication simultaniously that is full duplex application Here they explained about the Full Duplex Audio so with this we can make recording audio and playing at the same time these type of applications we are seen in FM Radio and this also important for the VOIP applications also This article help full to the begineers as well as intermediate developers to know about kernal progarmming			
Talk:How to get information about sensors in Java ME	20090918	Larry101	This article discusses the use of the JSR-256 mobile sensor API. The sensor API has been around for a while now, but has only relatively recently been supported by Nokia devices with the release of the Nokia 5800 Express Music (as an add-on) and by the Nokia N97 (no add-on necessary). This article gives a nice clear code example of how to use the Sensor API to access information about the various sensors available on a mobile device. The code example shows how to discover which sensors are available on the device in question through the SensorManager.findSensors method. The programmer can then use the returned SensorInfo objects to view various descriptive details about the available sensors, including a textual description, the sensor's model and the quantity the sensor in question measures. For each SensorInfo object, the available ChannelInfo objects can then be retrieved in order to view what kinds of information that sensor provides. Usefully, the output of the code on the Nokia N97 is provided, showing what is returned for the acceleration sensor on this device. Three channels are reported for this sensor, one for each axis of acceleration. Information regarding the unit of measurement and accuracy of these sensor channels are also reported. It is interesting to note that the API does not provide direct access to some of the N97's sensors such as the ambient light sensor and the magnetometer.			
Talk:Tabbed Menu in Java ME	20090929	Larry101	This article provides a code example demonstrating how to create a simple tabbed menu control in Java ME. The tabbed menu control supports horizontal scrolling (when the tabs don't fit on the screen) and also allows the programmer to customize the appearance of the tabs. The code example is separated into various sections, showing variables for customizing the appearance of the control, internal variables, code for creating the control, code for navigation and code for rendering the tabbed control. The code example is nicely written and separated into sections, each of which demonstrates a different aspect of the control. The use of meaningful variable names means that the code is easy to understand. It was also useful that a link was provided which shows the control in action. For those who want a very simple tabbed menu control, this code might well suit their needs. For those wanting something a bit more advanced, they might want to check out some of the other UI frameworks for Java ME, such as the LWUIT and J2MEPolish. Many of these also provide tabbed controls, some of which might provide more advanced functionality, albeit that you're then required to use those UI frameworks in your application. Nevertheless, a useful article, considering that Java ME does not provide a standard tabbed menu control.			
Talk:Accessing internal			Some developers require access to API's which are not public (internal API) and many a times they are requested to look for S60 API partnering program through the discussion			

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platform APIs through the API Partnering Program	20090906	Kamalakshan	boards. This article provides very relevant information to such developers who are unaware of when to apply for partnering and what process needs to be followed. It has also listed down some FAQ.			
Talk:How to autostart an application on boot up using Startup List Management API	20090903	FireSwarog	Autostart of applications during the device boot is a very important feature. S60 3rd Edition offers completely new approach for realization of such feature. Previous S60 2nd allows to realize autostart with the help of the file recognizers - currently such approach is not suitable because of the Platform Security. Article contains useful and important information, you have to clearly understand all parts of the article for success. Anyway you should also remember about Symbian Signed Criteries - it's necessary to switch off autostart by default.	20090926	Savaj	Autostart is an important feature to start application at device boot-up. Although autostart feature can also be applied to GUI applications, this feature is more important in background running exes, which monitor some events to occur. Startup List Management API, which is introduced from S60 release 3.0 and onwards, provides means for third party developers to add their native applications into the device's modifiable startup list in order to launch the application at device boot-up. Article describes how to use Startup List Management API for S60 3rd Edition and S60 5th Edition devices. Each section of article is important to implement autostart. Application that use Startup List Management API can not work with self-signed certificate, so do not forgot to use trusted certificate to sign application. Honestly, at-least 2 beginners ask the question "how do i start application on boot-up" everyday in Forum Nokia Discussion Boards and people suggest them to read this article.
Talk:Get thumbnail embedded in a JPG image using Qt	20120522014610	Hamishwillee	Getting an embedded thumbnail from a JPG is around 360 times faster than downscaling it. Where speed of display is important and the thumbnail is acceptable, this is an excellent optimisation technique.			
Talk:Encrypt-Decrypt contacts database entries using Symbian C++	20090909	Narendrachinni	In this article it had explaine about the Encrypt and Decrypt of contact database actually it is very important to keep the contact data securly because we have many important contact details are stored in contact database so we have to encrypt it for that these article had explianed about the program how to encrypt its contact database.Contact Database is being encrypted here which results in non-readable form of contact items in the Phonebook of user's phone.On the other side Contact Database is decrypted to get the readable content back.			
Talk:How to display drop down/fly out menu using Symbian C++	20090928	Sangramp@cybage.com	The article discuss the use-cases for drop down menu. It describes when the menu should be used and the way to use it. It also elborates the disadvantages of using the system based menu as compared to the custom menu with the images. The code shared in the article can be used to implement such a custom menu facilating the position,icons on the menu.			
Talk:Custom screen transitions in Symbian Web Runtime	20090921	Rahulvala	In this article the author has try to explains the effect of visual feedback. And how to generate visual feedback when custom screen transition from one to another. Screen Transitions are useful to give visual feedback to the user about the movement to another view of an application. A "screen" in intended as a HTML element that covers the whole widget's interface.The HTML code is also given for the reference.			
Talk:Hiding default scrollbars in Symbian Web Runtime	20090911	Rahulvala	Whenever we surf net in our mobile the scrollbar is taking some some space in the main display, however it is useful for the page location, some times we need to remove this scrollbar but we can not do it due to the programming of widget... In this article the coding of widget is given, and graphical output is also given when the scrollbar is removed(hiding). This article is for Widget developer who can hide scrollbar component of web runtime Widget.			
Talk:Contacts component for Symbian Web Runtime	20090914	Rahulvala	This article explain about the theory of contact list in web-runtime widgets.Also it explains about, how to **make contact list**, **visualization**, and **handling of the contacts**. The library of contact component in Java-script is used in designing the contact list. The example is shown graphically how the list is created in widget style. Also the issues are discussed in this article about the **add contact**, **construct list**, This article also explains how to search name from the contact list (dynamic filtering of the name).			
Talk:Battery JavaScript component for Symbian Web Runtime	20090924	Deepikagohil	Battery Indicator is one of the important feature of a mobile device, which gives information to the user about state of charge- does the device needs charging or not. This article merely represents how we can create an Battery indicator with Battery JavaScript component for WRT. This article mainly concentrate on explaining how to use the Battery JavaScript component for Web Run Time 1.0 and WRT 1.1. The article provides all the required information for battery component implementation. Explaination for the code snippests are provided in detail and step by step manner. We can also download the performed example for study from the link provided in the end. The article also provides image implementation for ease. The article lucidly describes the soul concept and can be very useful to beginners in their initial stage to understand basic concepts.			
Talk:How to create custom scrollbars in Symbian Web Runtime	20090911	Rahulvala	Scrollbars are very important part of web run widget. While surfing net scrollbar design (visualization and size) is very important for the user.For this reason the designer must design scrollbar such that, it should be stylish and small in size. In this article the design issues are discussed by programming and the output is shown graphically. Also the size and colours of scrollbar are changed by programming. This article is useful for the designer of the scrollbar using web runtime widget..			
Talk:Designing usability	20090921	Nirpsis	This article explains a deeper meaning of how to design usability. Usability is an attribute that shows how user can easily access the user interfaces. Usability is mainly used to ensure a high user satisfaction. Nowadays, usability is very important aspects when designing for the real estate application for mobile devices. The step by step instruction is given in such a way that everyone can easily understand designing of usability. The author has also demonstrated some important key component of usability design such as understanding the user, testing and validating the system, design to make the constraints your strength. The author has given some key points to remember while using the usability design for mobile applications. In this article, some references are also provided which is very useful for the usability versus design. This is one of the best article for beginner who focuses on	20090918	Sangramp@cybage.com	The article defines what the usability is all about and discuss some of the basic/important aspects of usability. Its very well explained how the usability aspect for mobile device is different than that of desktop PC's. The designers working on mobile apps will get most out of the article. The links provided in the article are even important and discuss the usability principles in details.

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			designing usability.			
Talk:Custom Swipe Gestures in Qt	20110404	Hamishwillee	Hi I like this article - very useful. I've given it a subedit and renamed it, primarily to make it obvious that this is about working around a bug, but also that the information on custom recognisers will still remain useful even when the bug is fixed. Would it be possible to attach a zip file showing a fully working recogniser and test code? This would be really helpful for anyone trying your code. I've also marked it as reviewer approved because it gives a clear example of a particular problem and a workaround.			
Talk:How to read data from a file in Qt	20090915	Nayan trivedi	This article is one of the very basic example of QT. Here they used Qfile class for reading data form a file.in Qt Qfile useful for reading from and writing to files. This class can be used by it self.But hear they used it with QTextStream for displaying Hello.You can check for a file's existence using exists(), and remove a file using remove(). The file is opened with open(), closed with close(), and flushed with flush(). Data is usually read and written using QDataStream or QTextStream so you can use any of this command for making different operation with use of Qt.This article is very useful for beginner.	20090928	Savaj	Application may need to save some text data on client. Flat text file is more suitable in storing large data. Creating a text file and saving text data, in it for later use, is good option. Reading text file is basic operation to use text file. QFile is key API to read data from file in Qt. The article describes methods to read data from text file. Before opening a file in ReadOnly mode one must check existence of a file, Opening a file in WriteOnly or ReadWrite mode will create a file if the relevant file does not already exist, but ReadOnly mode will gives error if file does not already exist.
Talk:Scrollable Text in Java ME	20090928	Larry101	This article demonstrates how to use low-level drawing operations to create our own vertically scrollable text container. The article provides a detailed code example, showing methods for adding text to the component, managing the scrolling, splitting the text into rows and rendering the component (including the scrollbar). Each block of code is preceded by a brief explanation of its functionality. The code example is nicely commented and therefore easy to follow. Such a component is useful, because often we want precise control over how text is rendered, and the high-level UI components available for adding text to forms are often very restrictive. However, drawing text on a Canvas means that we have to handle wrapping and scrolling functionality ourselves. This article addresses this, and programmers should easily be able to modify the look and feel of this component to match their own requirements. Both the article and the code example are clear, concise and well-written.			
Talk:WLAN Info API	20090929	Savaj	WLAN Info API's are useful to retrieve WLAN MAC Address and to check the WLAN status. This article demonstrates the use of WLAN Settings UI API to get WLAN MAC Address and get information about WLAN connection, using publish & subscribe keys provided by WLAN Info API, which helps to understand how this API can be used. Note that this API, WLAN Info API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.			
Talk:Reading IMSI in 3rd Edition	20090905	Kamalakshan	The IMSI number is used to identify the SIM card. Tracking this card number will help you track - say any SIM change event. This code example nicely illustrates the use of CTelephony API to retrieve the IMSI number from the SIM card.			
Talk:Porting Android (Java) applications to S60 5th Edition	20090923	Nirpsis	This article is used for developers who want to port the Android applications to S60 5th edition. The S60 platform is designed to provide easy and efficient services for mobile devices. The S60 platform supports various programming language like C/C++, Qt, Java, Flash, Python and Ruby. The author has described an excellent overview of S60 5th edition and Android development environment. The author has also mentioned how the developers can write applications using various programming language in touch user interface. The author has explained various topics which covers basic information before you get started like IDEs for Android and S60 5th edition ,SDK for Android and S60 5th edition , emulator, application package for Android and S60 5th edition. Here, the author has also given a code snippet for drawing graphics for Android and Symbian OS 5th edition. This is a nice article for porting Android Java application to S605th edition. The author has also given some technical references for further requirements.			
Talk:Thawte signing for Java ME	20090926	Kalki	This gives developers an another alternative of code signing their application to remove unwanted security messages while application is running. TTHAWTE is an alternative to code sign your application with cheaper rates than Verisign. Article explains step by step procedure and instructions on getting and signing application.Very important for those who want to spend less money on application signing.Article content is given after signing application.	20090928	Larry101	This article discusses the process of signing Java ME midlets using Thawte digital certificates. The article discusses the basic steps involved in getting your midlet signed using a Thawte certificate. The article is split into the five basic steps involved in signing your midlet, namely generating the keystore, buying your certificate, the certification process, importing the digital certificate and signing your application. Links are provided to useful resources related to the Thawte signing process where appropriate. Having recently gone through the process of acquiring a digital certificate from Thawte and signing midlets using this certificate myself, I can recommend this article. It does a good job of clearly outlining the major steps involved in the signing process. One of the most confusing parts of the process for me was the fact that Thawte uses the rather outdated term "JavaSoft" to refer to code signing certificates for Java. Little (and on some pages no) mention is made of midlets at all, so developers would be forgiven for being a bit anxious about whether they were choosing the correct option. I was pleased to see this mentioned in this article. The links provided are useful, and I uncovered many of these links myself while figuring out the signing process. It was also nice to see a discussion on how to perform signing in NetBeans. This feature really simplifies the process nicely. Most of the process described in this article is the same, whether one uses Thawte, Verisign, or

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						another Certification Authority (CA).
Talk:How to get cell information in Java ME using CBS	20090916	Vkmunjpara	This article is good for understanding pushregistry class which is used for maintaining inbound connections. This article is used for obtaining brodcasted cell information and it will be helpfull to every one.So where ever you are, your cell information like Cell tower information is easily gotton through this code. Easy to Learn....			
Talk:Compiling Symbian context-sensitive help fails with recent versions of Perl (Known Issue)	20090922	Kamalakshan	This article highlights the issue of context-sensitive help file creation failure, when using a newer version of perl. This article provides a good solution to overcome this issue.			
Talk:How to launch other applications in Qt	20090913	Deepikagohil	Generally we need to use one application from the other which is currently running. The article presents the same in Qt. It shows to launch another application from the current one. Moreover, the article also shows the code snippest to lauch web browser, real player and e-amil client. The APIs used in this article for achieving this are QDesktopServices and QProcess. The article is well-explained and can be useful to beginners as well as intermediate developers.			
Talk:S60 application views	20090907	Kamalakshan	S60 Applications widely make use of views for displaying application data and UI controls. This article describes the view Architecture briefly. Concepts like activating and deactiving view, passing messages between views and activating views from other applications has been described properly.	20090907	Deepikagohil	The article portrays the construction and importance of views in a S60 application. Views are the most widely used feature of a GUI application. Views are mainly related with the display of your apllication. How your application will look like and How lucidely user can interact with your application is related with views only. views are responsible for dislaying application data and UI controls. The article representsa all the key concepts of views in a S60 application. This application can beneficial to everybody who are developing applications with GUI. Beginners will find it a useful article.
Talk:Playing audio files using Symbian C++	20090906	Kamalakshan	This article provides very well written classes for playing audio files using both CMdaAudioRecorderUtility or CMdaAudioPlayerUtility. Any one beginning to play audio files will find this article good enough to suite their requirements - whether its playing it from a file or from the buffer.			
Talk:Using the Symbian C++ Sockets API	20090918	Sunil.shetty	A good article for developers wanting to understand the basics of socket-communication and its implementation in symbian. Each line of code is theoretically explained in detail and hence is very helpful especially for beginners having minimal knowledge of socket-communication.	20110526	Khamsasa	Receiving data Using unconnected sockets - the second overload: `void RecvFrom(TDes8& aDesc, TSockAddr& anAddr, TUint flags, TRequestStatus& aStatus, TSockXfrLength& aLen);` actually DOES NOT return the amount of received data in aLen. It is also stated in the SDK help.
Talk:Understanding the Symbian C++ Helloworld project	20090905	Warjan	Mhm, yummy. I'm very happy to see this article. It presents quite detailed description of roles of file constituting S60 project. I myself like to learn from samples and learning-by-doing. I know that reading docs is important (I've read and liked How do I start programming for Symbian OS?), but this article is shorter than whole SDK docs :). Being excited about the contents (as an absolute beginner to Symbian C++) I'd like to see this article improve its look - especially the end could use some editorial love (some code fragments, dividing text in paragraphs). Overall I give it thumbs up, but it is because I think it is a big shortcut to understanding all those files in Symbian projects. Hoping article will get someone to polish it. Myself included.			
Talk:Theme usability design guidelines	20090902	Warjan	Author outlines essential rules for theme creators - theme should have consistent style, readability in theme is high priority, don't abuse colors. I'd like to see more examples of course and all sections filled and maybe some anti examples - to learn from errors of others. I also see animation in theme as an interesting subject - introducing it in a subtle and thought out way improves user experience, but overdoing animation can harm theme badly. So it would be nice to see some tips in this area also. I really like the topic of theming - what I can see on the screen is usually the thing I can change easily in my mobile and what's on display says a lot about me. I've yet had to fire up Carbide.ui and see what can I do for my 5220, but I am getting closer as I'm reading articles like this one.			
Talk:How to show city locations in a map using Qt and Google Maps for JavaScript	20090920	Ikipou	QtMaemo provides fast prototyping and programming in the Maemo environment. This article shows some city locations in Google map using Qt for Maemo. Before studying this article, developers need to install latest Qt for Maemo.Here, the installation guide for Qt is also provided. A basic knowledge of the Maemo and Qt for Maemo are required for developers to study this article. In this article, the author has used Google map API for the purpose of showing city location. The author has used Qt designer to build GUI's and to create the application form which contains various Qt components.Basically,the Qt components are QwebView and QPushButton.A Qt component of Qwebview is used to show city location in the Google map using API.The author has also explained how to implement this Qt component to show the city locations in a map, how to compiling this application and how to execute this application with code snippet. This is a good article for developers who wants to develop Qt applications using API for Maemo platform.	20090914	Deepikagohil	The article presents step-by-step implementation to show city location in a map using Qt for Maemo. The article uses google map's API to accomplish this task. Qt APIs used in this article are QWebView and QPushButton. A component of QWebView is used to show city locatons in the map using Google API. The article contains code-snippest for some essential methods. Moreover the information about compiling and screen-shots are also given. The article can be beneficial to intermediate and Experienced developers who are working on Google Map.
Talk:Obtaining GPS fix using Java ME	20090924	Yashwanth.krishnan	This article is very useful for those people who use their phones as their travel guide. GPS fix is one of the main problem found with positioning. The author instructed well to make some codes for Location API (JSR-179) to overcome timeout of GPS. The author describes several ways to get position in short time with some tweaks to Location API (JSR-179). He also metioned a way to get more accuracy.			
Talk:Regex in Java ME	20090928	Lamp101	Using REGEX is very important for users to achieve in only 1 or 2 lines of code perform a complex operation that in most cases requires a huge number of lines of code, saving time, effort and cost. This article discusses the use of regular expressions in Java ME. Java ME does not provide built-in support for regular expressions. The article links to a third party regular expression for Java ME which can be downloaded. The majority of the article is devoted to outlining the notation in which regular expressions can be written. The notation should be familiar to those who have used regular expressions in Java SE. Finally, a code example is given,			

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Talk:Regex in Java ME	20090928	Larry101	showing how to import the regular expression library and a basic example of its use. Because of its lightweight nature, Java ME does not provide any support for regular expressions. This API therefore provides a useful extension for applications where regular expressions can save a lot of time and simplify code. Without regular expressions, code for parsing text from files or downloaded via the Internet can get rather messy and difficult to read and maintain. The article doesn't spend a lot of time explaining the API, but it is fairly simple and straightforward to use. All the reader really needs is to know how to write regular expressions to match different kinds of patterns.			
Talk:Parsing XML files with NanoXML	20090926	Kalki	One of the most crucial thing when we want to communicate with multiple type of applications and want to share data among them. To accomplish this important task we have XML technology which makes it possible to do above.To Do that we have to store data into .xml file then we can transfer it to any type of applications. But after storing data into xml files its becomes critical to access that data. We have Kxml parsre and Nanoxml, using that we can parse the received data and can display it in our application. This article has complete example on Advantage of using NanoXMl and ease of coding to parse xml files. Code has been tested fully and its works as written in this article. Best things about this article is the good attempt to introduce NanoXml Technology compare to Popular KXML technology.			
Talk:Carbide.c++ Tutorials	20090911	Skumar rao	A must read and view for beginners to quickly start developing using Carbide.c++ IDE.	20090911	Rahulvala	carbide provides us powerful environment for making C++ ,UI and Qt related programs So, the beginner want to know the design procedure and developing steps for their first program inside carbide.C++. So, this article is the best for the beginner to work with carbide, Also sample hello word program is given for the user's ease. In sort this article is short tour to the carbide C++.
Talk:How to export a complete folder structure by PRJ EXPORTS	20090927	Jluisn	This is a very useful tip about prj_exports macro usage.			
Talk:Carbide.c++ Tutorial 4 - Creating a Settings view	20090921	Deepikagohil	This article is the 4th serie of "Carbide.c++ Tutorial" series. This artilce demostrates an example simple setiings view using UI Desgner. It necessary to refer Carbide.c++ Tutorial 1 - Helloworld to know creating and running a new GUI application with UI Designer and Carbide.c++ Tutorial 3 - Using List view to know to create view based application. You can also refer Carbide.c++ Tutorial 2 - Getting Input from user to know how to get input from user. This article illustrates a step-by-step implementation to creat a settings view with Carbide.c++ UI designer. All the reqired image-implementations and screen-shots are given to help beginners with their explaination. Theses seies are very beneficial to beginners to understand these primary things and help them for their further progress and I really appreciate the developers who help beginners.			
Talk:Carbide.c++ Tutorial 6 - A dialog example	20090929	Deepikagohil	This article is the 6th article of "Carbide.c++ Tutorial" series. You can refer the full series at Carbide.c++ Tutorials. This article represents step by step implementation to create a simple S60 3rd edition application with UI Designer, which generates an application with a dialog. All the reqired information is represented lucidly with image-implementations and screen-shots to help beginners in their initial stage. This article also provides a demostrated code example to understtand it more clearly. If beginners want to learn the basics of creating and running a new project with Carbide.c++, Carbide.c++ Tutorial 1 - Helloworld is best article for them. This article can be helpful to beginners to create a wait dialog in their S60 application with UI Designer.			
Talk:Carbide.c++ Tutorial 3 - Using List view	20090909	Deepikagohil	The aricle represents step by step implementation to create an GUI application with listview with the use of UI Designer. The image implementaton given is very good so that the beginners can easily understand the soul concept. Moreover the articles named Carbide.c++ Tutorial 1 - Helloworld and Carbide.c++ Tutorial 2 - Getting Input from user are also for developer's reference. This article is the 3rd serie of these mentioned articles. A beginner will require to refer the Carbide.c++ Tutorial 1 - Helloworld article to know abot how to create an apllication with UID and run it. To create GUI application with User Interface Designer(UID) makes it simple to create an user-interface in your application. The UID provides ready-made views for your application. The article simply represents how to create an application with List veiw with UI designer.			
Talk:Carbide.c++ Tutorial 5 - Creating a Settings view - II	20090922	Nayan trivedi	This article is very well explained By author.This article is very useful For developer of Symbian and other S60 developer.Author described whole thing about Creating a Settings view in Carbide.c++. Carbide.c++ is very useful for debugging program made for mobile means for debugging mobile applications.This article describes very important things about Carbide. Author described whole things about carbide step by step by using Different snap shots.This article will be useful for beginner and intermediate.			
Talk:Reading messages stored on SIM card using Symbian C++	20090908	Deepikagohil	this article is used for reading the messages stored on the sim card here that it can be used to read the SMS messages stored in the SIM card. and for that the class should be derived from the The class should be derived from MMsvSessionObserver. and this is good example for the begineers who are working on reading messages stored in sim card The article represented here has described the process of reading messages stored in your SIM card. The code represented here includes all the basic information to be included in your MMP file i.e. capabilities and libraries, the header files to be included and source code. The article also mentions that our class which performs this task should be derived from MMsvSessionObserver, so that we can get access to the useful methods of the base class. The simple method to read messages from sim card illustrated in the article find its importance to the beginners who are more interesed in messaging applications.			
Talk:Simple Java ME Canvas loading bar	20090902	Warjan	The article provides code for displaying a bar while loading application. Code presented is out of larger context so understanding of JavaME programming is needed to create a working demo out of it. Author concentrated on the displaying aspect - code that animates bar is not "aware" of loading progress. Nevertheless it is a useful technique to give user something moving when waiting for an app to run. I've seen it several times and it is a good practice IMO, because user has the			

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			feedback that app is starting fine, and it helps to hide slowness. Although this is arguably good for user, better make an app faster if possible. Time when app is loading might be also used for displaying useful tips or ads to user, so don't make your app too fast ;). I'm a little worried about draw class name - I am accustomed that all Java classes start with capital letters.						
Talk:Remove HTML tags from input text using Python	20090920	Nayan trivedi	This article shows that hoe to remove HTML tags from an input text in python.Code snippet shown in article is well described by the author. How HTML tag used it shown belove. <body> - This is where you will begin writing your document and placing your HTML codes. </body> - Closes the HTML <body> tag. If you want to remove this type of tags in your application or in your text than you can directly use this application. This article is useful for beginner as well as intermediate.						
Talk:Design Pattern for Java ME Canvas based applications	20090922	Vkmunjpara	This article solves the problem of flicker when anybody redirects from one form to any other form. This article is good explained with good example.Self generated **BaseCanvas** class is good explained.and solution for this problem is also explained with brief.						
Talk:Carbide.c++ Tutorial 1 - Helloworld	20090906	Deepikagohil	This article is well explained and step by step image explanation to make a new GUI application with UI Designer.It explains the basic process of building and running an aplication on IDE- Carbide C++. It also explains how to launch the emulator-the fundamental tool of all Symbian OS SDKs.Image Explanation of how to run an application on the Emulator is very useful for a Beginner. The traditional start of building an project with the "Hello World" Application and a must read for a beginner to carbide.c++ apart form the video tutorial.						
Talk:Carbide.c++ Tutorial 2 - Getting Input from user	20090909	Deepikagohil	this article is well explained and shows step by step image based explanation to be followed. But if tit had coupled and showed the output in a label control, then might be a great article. The article well-explains the step by step procedure to create an application with UID with gets input from user. The article explains the one of many ways to get input from the user i.e. Single Line Data query input dialog. The article also contains image implementation to simplyfy the description. The article is the 2nd series of Carbide.c++ tutorial. You are supposed to refer the first serie i.e. Carbide.c++ Tutorial 1 - Helloworld to get an idea about creating a new project with UID and runing it. The article simply takes input from user using UID and displays on the screen. Beginners will find it very useful for their further progress.						
Talk:How to use QKeyEvents in Qt	20090919	Nayan trivedi	This class describes key event.This is basic article of Qt.It shows the use of QKeyEvents class.code snippet shown describes that whatever key you are select from key board written in red color is done function as written in that event by the widget. Using this Key event any can make functionality of Widget simple.This article is very useful for doing different functions using key board.event sent to widget when you press the key from key board. This article is very useful for beginner as well as intermediate.						
Talk:How to take snapshot in Qt	20090912	Deepikagohil	The article seems very intereating. The application presented here grabs the photo-snap of the whole window of your device. The platform used is S60 5th edition and the application is in Qt. The representation od the content is in a systematic manner. The source-code given is in a simple manner. Moreover hte screen-shot of the application is also given. It is useful to the beginners and intermediate developers for their further progress.	20090921	Vkmunjpara	This article is good explained with snapshot so every one can imagine what it will look like.In this article we can take snap shot of a diaplay of an application so that every one can take snapshot of their application displays and they can put this snapshots to their application. i want to ask a question that can it be possible to run this application in background mode? then every one can take snapshot of the second running application.	20090926	Savaj	Taking screen-shot in smart-phone is equally important to taking screen-shot in desktop system. Developer find it more useful to show initial layout of application during development phase. Qt have powerful API, called QPixmap::grabWindow(), to capture screen-shot of device. This article describes how to take screen-shots using QPixmap::grabWindow() API. Source code with source and header file will helps developer to create similar application. Although article have less explanation, but it does not reduce importance of article.
Talk:Publishing to Ovi Store FAQ	20090911	Deepikagohil	Ovi store is the place where a developer can publish his applications and games. The article describes basic information a publisher should know about Ovi store. The article is in a FAQ manner and queries presented here are also very frequently asked. The answers for these queries are also explained lucidly. The quries about how to publish your application on Ovi store, the payment mode etc are given in more detail. The article contains the basic queries about an Ovi store and it can be helpful to every mobile-application developer.						
Talk:Clipboard operations using Qt	20090913	Deepikagohil	In General terms, Clipboad is a softwaree facility that can be used for short term data storage and/or data transfer between documents or applications. Simply it is used to copy and paste data between applications. This artilce covers the clipboard application in Qt for Symbian. The artilce provides the source-code for the clipboard application in Qt and a short guide to explain the same. The screen-shots are also added in the article. The source-code is in arranged and proper manner, so easy to understand. The main API used in the article is QCliboard. The article shows the basi clipboard application, which can be useful to beginners as well as intermediate developers.						
Talk:Tips for debugging MIDlet startup issues	20090930	Larry101	This article provides advice for fixing problems surrounding installation of midlets. The article is divided into various sections, each section discussing a separate class of problems. The article identifies symptoms, and then for each symptom discusses possible route causes and how these might be addressed. Quite a wide range of possible errors/problems are discussed, ranging from problems downloading a midlet, to application errors (exceptions), to the dreaded "invalid jar" message. I think this is a useful article, especially for beginners who may find installation problems very confusing. It is nice for newcomers to the Java platform to be able to lookup the causes of common installation problems. Even as someone who has been programming for the Java ME platform for years, I still occasionally run into errors like invalid JAR. It's useful to have a central repository which contains common installation problems and their underlying causes. These errors can easily creep in for so many reasons. Even just renaming a Midlet class file can result in problems if you do not update						

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			the midlet name in your JAD file. Through the contributions of others, this article can be even more useful. A useful section to add might be one related to signing and installing signed midlets, as this can often introduce a whole new set of problems before a midlet can get installed and running successfully.			
Talk:Ovi – Opportunities for developers	20090912	Deepikagohil	The article shows opportunities and progress for developers in Ovi-maps. How a developer can use Ovi-maps, What facilities do Ovi maps provide, How can we develop Ovi maps applications- all these basic things are illustrated in detail. It contains external links to demostrate examples, which can be very useful to a beginner. Ovi maps help us to make our application more dynamic ans effective. This article is specially meant for beginners and intermediate developers who want to get started creating application with Ovi maps. You will find detailed information for the same in this article.			
Talk:Mobile Web Design : Password Strength Meter	20090912	Deepikagohil	The password is a secret word or string that is used for authentication, to provide identity and gain access to hidden resource. Password should be enough strong so that nobody can crack it and get your secrert information. To check the strengh of passwird, password strength meter is used. The article merely gives introduction to the password strengh meter. There are many aspects that should be kept in mind while creating password strengh meter. The article mainly deals with it. What is password strength meter, when to use, what is a strong password etc. are described in detail in the mentioned article. The article also contains image-implementations for our ease.The article also contains external links, if we want to go in more detail. The article has covered a very important aspect related to password. It can be helpful to beginners as well as intermediate developers.			
Talk:Information Visualization: Rapid Serial Visual Presentation (RSVP)	20090928	Deepikagohil	As stated in the article -RSVP is a presentation technique of displaying information (usually text) dynamically in a limited space, in which each piece of information is displayed at a fixed point on the screen and briefly in a sequential order. Research is under progess to use this technique in devices with small displays like mobile-phone device. One research states that- this technique benefits to read at faster display rates than scrolled text by *low vision observers* when the text is quite large relative to their acuity threshold. This article represents a introduction to RSVP with the possible benefits and limitations of this technique and also provides guidelines for Design usability. A shot and precise article for developers to understand Rapid serial Visualization. And as research is being done to aquire the advantage of this technique in mobile devices, it gets essential for every developer.			
Talk:Information Visualization For Mobile Applications	20090921	Nirpsis	Information visualization is the method of representing large number of data using different techniques. By using this information visualization, the users can easily understand and analyze large number of data properly. The author has explained when and how to use information visualization for mobile application. In the article, the author has given step by step instructions for understanding visualization. The author has given some guidelines which would help designers for developing effective mobile visualization applications. The following guidelines are described here such as selections, data and visual mapping, presentation, innovative screen usage, user interactivity, ergonomic consideration etc. One of best article for people to analyze large number of information in a convenient manner.			
Talk:Threading in Qt	20090912	Deepikagohil	Multitasking is a very important aspect in a programming language. The article presents one of the ways to achieve multitasking in Qt. The article contains code snippest which shows an example how two treads can be used for multitasking. Qthread is a seperate thread and how these two threads share data and execute independently is shown in this example. A screenshot is also given for our ease. Multitasking is a imortant feature of Qt. This article can be very beneficial for beginners.	20090920	Vkmunjpara	Nowadays threading is necessary for upcoming phones because market is going on and on and progressing. Qt provides Threading concept. And this article shows how you can implement threading. Currently Opera 5 Beta provides threading so that in browser you can have multiple tabs. So this article has good example for understanding threading and it is explained with good example and with 2 snap shots. That's good thing.
Talk:Enhancing phone messaging application	20090916	Deepikagohil	SMS is the very basic feature of our mobile. The world has changed, but the basic SMS application is the same. Many improvements can be done on the basic messaging application and the article provides some of them. The article provides ideas to enhance the normal message dialog and inbox of the basic SMS application. I really appreciate author's ideas. This article can be useful to each and every developer to get motivated to create innovative applications.	20090918	Sangramp@cybage.com	It's an effort to make the smart phone even smarter. The new ideas suggested by the author are really innovative and the manufacturer should give the due consideration on improving the SMS functionality. I only have some concerns what will happen in the Inbox Message View when the text in the SMS is scrollable. Stiking to the design, it does not allow scrolling as scrolling buttons will high-light the next/previous message. Also in case of touch devices where there are no keys to scroll the Up/Down messages, it soley depends upon the screen area and hence when the Preview mode on, user can not select the next SMS. Even though above are some implementation issues, there could be some valid solutions depending upon the target device criteria but yes, its very necessary to smart the SMS functionality.
Talk:Mobile Design Pattern: Master Detail	20090928	Larry101	This article discusses a mobile design pattern which is fairly common in mobile applications – the Master Detail design pattern. It begins by describing the design pattern, illustrated through the use of a contact phonebook example, showing how the design pattern splits sets of information into two views. The first view lists the separate items and allows an individual item to be selected. The detail view shows more information for a particular item in the set. Advantages and disadvantages of the design pattern are also provided, along with a discussion of when and how to make use of master/detail views. The article is nicely written and is clear and concise. The choice of example (phonebook) is one that most readers will be able to relate to. The discussion of advantages, disadvantages and design advice is well-motivated and shows a good understanding of the use of this design pattern. The author also suggests a useful alternative, fish-eye menus, which are appropriate where detailed information can be shown as part of the master view. Several useful tips are also provided to improve user efficiency (such as searching and sorting) and ensure users are able to navigate the			

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			information set as quickly as possible. A useful design pattern that will be applicable in a wide range of applications.
Talk:Optimizing battery life	20090905	Savaj	Life of battery usually depends on standard of battery, but this is the not true always. User of a phone and developer of an application, that is installed on phone, can contribute a lot to increase life of battery. User of phone increase life of battery by turning off feature that is not required, for example turn off bluetooth if not required longer. Developer can increase life of battery by optimizing code in such a way that use less resource, like disconnecting GPRS connection when no longer needed. This article described many ways by which developer can minimize draining battery power. Most common battery-draining culprits are Bluetooth, GPRS and WiFi. So turn off them in your application when no longer needed.
Talk:Changing profile programmatically in Qt	20090921	Vkmunjpara	This article shows how you can change profile using widget.Here XQProfile class is used and a method setActiveProfile() is used.The source code addresses two types for setting profile. one is generel and the other is silent. As mentioned in this article that to run the application , a developer certificate is needed and this application required WriteUserData capability.So that is good thing to mention it.
Talk:Information Visualization: Times Square Method (TSM)	20090922	Larry101	This article discusses a useful method of presenting information known as the Times Square Method (named after Times Square in New York, where this technique of presenting information has been used for a long time). This method displays information to the user by scrolling text across the screen, usually at the top or bottom of the display. This method has in recent times becomes popular in news broadcasts. In terms of mobile applications has the advantage of allowing us to overcome limitations in terms of screen size, but scrolling large amounts of text across the same piece of screen space. Despite the advantage of allowing lots of information to effectively share the same screen space, this technique does have some potential drawbacks, which this article does well to identify. Probably the most significant problem is that this way of displaying information requires quite a lot of visual attention. Furthermore, the movement of the text across the screen can be distracting. In addition, not all users will be comfortable with the same scrolling speed and care needs to be taken to localize the direction of scrolling according to the user's language. While it is common for Western languages to read from left to right, this is not true for all languages. The article provides some useful advice for addressing the potential usability problems of the Times Square Method. Providing customization options is extremely important, as users need to be able to adjust attributes the speed, directionality, font and color according to their personal preferences. This will help to ensure that users are comfortable using the "ticker" as it conforms to their requirements. Another common problem with these sort of ticker controls is that users will often only catch the last few words of a sentence which might grab their attention. It is important, therefore, that users be able to scroll back to read the full sentence if they so desire.
Talk:Memory leak repeatedly adding elements with Image in List item, "refreshing List" (J2ME, S60)	20090913	Deepikagohil	The article contains a very good problem related to memory-leak and shows the solution to it. Memory leak is the very often problem which developers find in their way creating aplications. The article contains one of the possible ways responsible for memory leak, which can be useful to every developer. The author has made deep research in this problem and concluded the solution. The article contains the way and source-code by which the memory-leak problem occurs in all S60 devices for a java application mentioned. Also contains an image which can be added to the list(where memory leak occurs) and used to study the problem. The article contains very good information which can be useful for every developer.
Talk:How to create animated images in Web Runtime widgets	20090912	Deepikagohil	The article presents step-by-step implementation to create animated images in web run time widgets. Web Run-Time is a Web application development environment, enabling the development of widgets and integrated Web applications for mobile devices with familiar standards-based Web technologies, such as Ajax, JavaScript, CSS and HTML. The tips described in this article provides flexbility in using GIF animated file for first web Run-Time release, which has limited acces to GIF files. The article has representes an examplary source-code for the same. The article is in organized manner and it can be benefical to beginner and intermediate developers to understand some basic aspects.
Talk:Enhancing spam feature on device	20090918	Sangramp@cybage.com	I will really like to see the features in the coming mobile devices. Surely the SPAM mail facility will facilitate the user to remove the unncessary messgages to SPAM folder and save the attention of checking the SMS. Similarly the blocking of SPAM calls should be provided as the device functionality, even though the same is avilable from the service provider. The approach for SPAM mails/calls is very well elaborated with the images in the article and deserves the appritiation about the innovative thinking.
Talk:How to deploy applications on Maemo	20090912	Deepikagohil	The article illustrates the basic steps to deploy your application on a Maemo device. The article shows this in a step-by-step implementation. The beginners might find it difficult to do it, but this article makes it easy. Maemo uses the Debian package management system for installing and managing applications. This article illustrates how to create Debian package and install it on your device. All fundamental aspects that should be kept in mind during deploying your application on Maemo are covered in this article. The article is specially meant for begnners who are deploying their first application on Maemo.
Talk:How to create GIF animation Screensavers for S60 3rd Ed FP 1 devices and above	20090912	Deepikagohil	Animated screen-saver are high now. The article describes a simple way to create a GIF animation. The tool used here is Adobe Photoshop CS. An example is given in this article which creates a simple GIF. It also contains image-implementations to make it understandable. The article is in orderly manner and it is meant for beginners only.
Talk:User-data security design guidelines	20090930	Larry101	This simple article provides a checklist regarding user data security in mobile applications. Mobile phones are uniquely personal devices, and users often store and interact with all kinds of highly personal information. As a result, it is extremely important that mobile applications do not misuse or alter this information without the user's permission. Several important points are highlighted in this article. A common theme running through many of the suggestions is that whenever any operation involving user data is being performed, the user should be informed and confirmation should be requested. It is also important that when sensitive information is sent over the internet, it should be encrypted, and when this is not the case, the user should be informed. Backup facilities should also be provided if large volumes of sensitive data are stored.
			An excellent example on how to subclass the standard list

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Talk:How to implement fisheye view in Symbian C++	20090903	Kamalakshan	box and in this case use it as a fish eye list box. The sample project can be compiled and studied. On further exploration you should be able to customize the list box to a great extent. This example was very useful and I was able to successfully create a double line list box with some effects.			
Talk:Font usability design guidelines	20090922	Larry101	This article provides some useful advice regarding the usability of fonts in mobile applications. Fonts differ in terms of font face, size and color and this article provides advice about choosing the correct options for each of these attributes. The article points out several pitfalls and usability problems relating to fonts which can occur. These include: custom fonts which don't render correctly; fonts that are rendered too small or too large for the current screen resolution; and fonts that are difficult to read because the font color is not sufficiently different from the background color (resulting in text which gets lost in the background). This article helps to highlight the important effect that font choices can have on the usability of an application. A general theme running through the article is to keep your font choices as simple as possible. Use plain backgrounds as much as possible. Make sure that there is a sufficient contrast between the font color and the background color. Make text large enough to read, without making it so large that it doesn't fit comfortably on the screen. And finally, where possible, stick to the standard system fonts for the sake of consistency. The easiest way to check whether your font choices are ok is to do some simple usability testing. Check whether users can distinguish text, and that it does not detract from the usability of the application in question.			
Talk:Image usability design guidelines	20090921	Larry101	This article provides some useful advice regarding the use of images in mobile applications. It raises several important points regarding the use of images both from a general usability perspective and also with respect to mobile applications. Several useful points are mentioned which are particularly relevant in the mobile domain. It is extremely important that images are scaled according to the aspect ratio of the mobile phone in question. Distorted images look very unprofessional and can result in a major degrade in the quality of the image. Another important point which the article raises and which is relevant in the mobile domain is the need to consider different lighting conditions. If the user is outside, it may be difficult for him/her to distinguish detail in images. As a result, the mobile application designer/developer should always ensure that if detail needs to be distinguished, there is sufficient contrast to distinguish between information in the foreground and the background. Finally, the point regarding not over-doing the use of images in mobile applications is very important. Besides the fact that images can clutter the display, they are also computationally expensive to render and consume a lot of space in memory. Furthermore, scaling images is not efficient in Java ME, as this typically needs to be done by processing the underlying pixel array (unless SVG images are used).			
Talk:Mobile Design Pattern:ShortCuts	20090923	Deepikagohil	Shortcuts makes a device more user friendly. The article represents the importance of shortcuts and what are the possible extentions that can be done on them. The existing usage of shortcuts are also mentioned with the highlighted ideas for extentions. All these ideas are very well explained. The issues that should be kept in mind during designing are metioned. The article can be useful to intermediate developers.			
Talk:Mobile Design Pattern: Extended audio functionalities	20090923	Deepikagohil	This article represents some possible mobile design patterns with the use of audio functionalities. The author presents some good advices that can be used to make the device more attractive and more user-friendly. All the highlighted advices are really well-explained by the user and the advantages are also mentioned. The author has represented creative and innovative ideas. And according to me-Creativity should always be awarded. I appreciate author's ideas. The article motivates beginners and intermediate developers to think creatively.			
Talk:Games usability design guidelines	20090904	Warjan	Short and instructive. Read it and code away with all of that in mind. Oh, why developers of Blox didn't consider the point about disabling sound? Doesn't he ever played a game in library? Links work. Thumbs up and if you want to write a game, please obey :).			
Talk:Sensor based interactions with home screen Web Runtime widgets	20090930	Nirpsis	This article represents the best thinking and solutions to a sensor based interaction patterns with home screen web runtime widgets. Home screen widgets allow users to view data from multiple widgets. In the article, the author has well explained two types of interaction patterns such as user interaction and sensor based interaction which shows two possible way of interactions. In the article, the author has also described sensor based interaction patterns such as shake pattern and flip pattern which is used by the users to interact with home screen widgets. The screenshots are also available in the article. The author has also described how these patterns is implemented by using the JavaScript sensor service API. This article is very useful for developers. The article also provides some attention while implementing sensor based interaction patterns.	20090919	Rahulvala	Currently new devices are developing in this world are based on accelerometer sensor. This article gives idea about the sensors used in the Nokia devices. There are two kinds of interaction in the devices, user interaction and sensor based interaction. The accelerometer detect motion of phone in the axis and it will change the orientation. This article aware about the sensor used in mobile phones.
Talk:Getting Host's IP addresses and Interfaces	20090910	Deepikagohil	At sometimes in web-based applications, we need to know the listing of host's IP address and network interfaces. This article simply represents the code for the same. The aricle contains introduction of the article and also presents about basic platform and APIs it has used. The class here used for doing this task is "QNetworkInterface". You should note that all the methods in the class are reentrant. "allAddress()" method of this class is used to obtain the IP address and "allInterface()" method is used to get the network interface. The article has represented the code in a systematic manner. The article can be useful to beginner as well as intermediate developers.	20090918	Fasttrack	Article shows the use of the QNetworkInterface and QHostAddress. Header and source file code shows complete mode of application. Merging this to another application make that application very grand.
Talk:MIF format internals	20090912	Deepikagohil	An MIF file is an important aspect in Symbian OS. It is used to group or packge .png and .svg files in one file and then it can be used by your application. The article deals with MIF files. It represents a abstract information about .mif files and how they can be created. The article mainly illustrates the format of MIF files. It is preferable to know the format before using them.The article has shown format for three types of .mif files i.e. MIF type1, MIF type2 and MIF type3. At last article presents how to load an MIF icon in your application using Python. The article contains rare information about .mif files and it can be beneficial to beginners as well as intermediate developers.			
Talk:Guided Tour	20090921	Sangramp@cybage.com	Anyone(rather everyone) who knows genie will come to know what Guided tour is all about :-) The article very nicely explains the need of a guided tour in case of application usability. The usability tips provided in the article will help to come up with more use-centric guided tours.			
			Qt is a cross-platform application development framework, which is widely used for developing GUI application. Qt has portability for desktops and embedded systems. Appication in Qt adds high efficiency and high run-time performance on our device. This article merely represents an approach to auto-start an			

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Talk:Autostart Qt applications at boot on Symbian devices	20090920	Deepikagohil	application on boot-up in Qt. Some applications need to get started when we switch on our mobile for e.g. an application which asks for the security password. The way to acheive this is well-explained in this article with related code snippest. The concept is explained in step-by-step manner. You should also read the NOTES, which are mentioned at the end of the article. These notes are also important to perform this task. The article also provide a examplary code to explain this concept in detail. The article can be useful to intermediate developers who need to add this feature in their application.			
Talk:Advanced Package File Options	20080225	Davidmaxwaterman	This article describes a comprehensive list of advanced package file options. Recommended to be read by anyone who want to maximize the benefits provided by the package file. It describes how to show text notices, localization support, running executables on install or uninstall. It also describes options like how to add requisite lines or limit application to support only some device along with conditional installation.			
Talk:View usability	20090925	Nirpsis	This interesting article describes fundamental aspects of the view usability. Basically, the view is the basic part of any applications so, it should be design very carefully with its all functionality. The author has mentioned various types of views like fly in out view, grid style view, list view, tabbed view, detailed view and setting view with attractive screenshots. The screenshots illustrated in the article, makes it easier to understand this view usability. The author has explained some common usability guidelines. In the article, he has also mentioned various functionality supported by views and implementation of view on Symbian. This is a nice article in usability categories. The author has also given some references for understanding view usability in a suitable manner.			
Talk:TouchScreen Usability	20090916	Larry101	This article addresses the design of usable touch-screen interaction. With the recent release of several touch-screen models, this issue is particularly topical and relevant for developers hoping to target touch-screen Nokia devices. The article highlights several of the key issues that designers need to consider when designing for touch-screen devices. In particular, designers need to make sure that user interface controls are as easy to select as possible in order to prevent errors and user frustration. Input also needs to be as simple as possible, as repeated input on touch-screen devices using awkward interaction controls can lead to user frustration. The article is simple, yet provides several important tips for touch-screen design. The following link provides some useful information on the pros and cons of designing for touch-screen interaction: SAP Design Guild			
Talk:Navigation Usability	20090916	Larry101	This article highlights the importance of intuitive and well-designed navigation in terms of the usability of a mobile application. The article describes several useful design guidelines regarding navigation to be kept in mind when designing mobile applications. Perhaps one of the most important is that menu item labels should accurately describe their functions. Users should not have to guess what action will result from selecting an option. The labelling of the option should make this clear. The provision of an exit function on every screen is also very important, as it allows users to always have an "emergency exit". Navigation design should also ensure that sensitive menu options such as "Save" are not placed directly next to an "Exit" option, as users may then accidentally exit instead of saving. The article provides several useful tips that would benefit the usability of any mobile application. The following link provides a range of good information regarding designing the navigation of mobile applications for the Series 60 platform in particular (Select Usability Guidelines) -> Navigation: Forum Nokia library			
Talk:SettingList Usability	20090925	Nirpsis	This interesting article discusses the Settinglist usability. It is used for displaying and giving the choice of editing customizable or pre-populated settings to the users. By using the setting list, we can logically group all the related settings. The setting list is created by either from resources or dynamically. In the article, the author has provided links for the example of how to create setting list from resources and how to create a setting list dynamically. The author has given some common guidelines while using the setting list like how to grouping logically of setting lists, how to include help options for the setting lists, how to grouping menu options and how to add tab for setting lists. The various correct or incorrect screnshots are also available for understanding usability guidelines in a conventional manner. One of the nice article for usability for providing information regarding setting list usability.			
Talk:Silent installation/uninstallation of application in Qt	20090914	Deepikagohil	The article contains important information to install/ uninstall an application in Qt silently i.e. without user intervention. The application presented here will install or uninstall a sisx or will show message according to the error occured during installation if installation fails. The API used is QInstaller. The code snippest contained will install/ uninstall HelloWorld application silently. Moreover the code was also tested on Nokia 5800 XPressMusic. A good article for beginners and intermediate developers to use QInstaller class and study installation/ uninstallation of sisx application silently.	20090922	Fasttrack	Article shows the way of install and uninstall from the mobile. It uses to install new application in mobile. At the time of update of application in mobile there is a need of uninstall the last version and install new version. It's a very common procedure of install and uninstalls application. As it's a very common but its very vital thing.
Talk:Ergonomic Design	20090905	Warjan	Article provides dos and don'ts for usability of mobile apps. Good clean examples. Maybe a little rough visually. Just keep your designs on close to the ones on the right :). I'd also like to see how orientation affects ergonomic of an app. One thing I've heard is that when going to landscape you can display less items in the list, but there are surely other things to consider. I'm not sure if title well describes the content of the article.	20090918	Sangramp@cybage.com	The article scratches the surface of Ergonomic aspect of mobile design. It touches and pictorially depicts some of the design considerations for mobile applications.
Talk:Fisheye List	20090924	Nirpsis	This interesting article demonstrates the Fisheye list mobile design pattern. The fisheye list is used to display more information to the users for the selected items. By using the fisheye view, users can easily focus more content for the items. In the article, the author has well explained how and when should we use this fisheye view. Here, the author has also demonstrated the comparison between a normal list and a fisheye list with the help of screenshots. The screenshots illustrated in the article, makes it easier to understand the fisheye list design pattern. In the article, the number of design tips are also available. The author has also explained about how the list box looks before the fisheye view implementation and how the list box looks after the fisheye view implementation with attractive	20090919	Sangramp@cybage.com	This does not work on the 5th edition SDK touch UI. Scrolling can not be implemented. It's a good article explaining the baiscs of Fisheye menu. The article comprehensively explains the need of Fisheye menu, comparing it with normal list view. The details as when to use the Fisheye menu, the design tips and the pictorial comparision of normal list and Fisheye list makes the article unique to understand the Fisheye menu implementation. The only limitation of the menu could be in new 5th edition touch-

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			and understandable screenshots. This article is good for users who want to display more information for the focused or selected items.			based devices, as the list can be scrolled using keys in touch based UIs. Yet the menu could be best used in other non-touch based devices.
Talk:Mobile Design Pattern: SMS Form	20090916	Deepikagohil	Sometimes we need to send SMS from our running application. Some applications provides the mechanism for the same. This article presents the basic overview and design guidelines to integrate SMS forms in our mobile application. The advantages, disadvantages and when and how to use it are well-explained. The article also contains image-implementation related to the content. The article can be benefical to beginners as well as intermediate developers.			
Talk:Get private path in Qt	20090918	Fasttrack	Article shows how to get a private path from the system and transferring it from Qt to Symbain and Symbain to Qt. using this article application can get the path where to install the application.			
Talk:Tabs Usability	20090927	Deepikagohil	The main function of Tabs is to move between different views. Tab is one of the basic element for User interface in Symbian. This article describes general and simple rules that should be kept in mind during designing tabs in your application. The rules are very well-explained with image implementations. This article is specially meant for beginners. Beginners can also refer Custom tabs to make the tabs more attractive in their application.			
Talk:Options menu Usability	20090923	Nirpsis	This article explains a deeper meaning of options menu usability. The option menu provides a list of command to the user. The option menu allows user to perform some actions of key press event in non touch devices in a convenient manner. The author has illustrated some common options menu usability with the screenshots using correct or incorrect application design. The step by step instruction is given in such a way that designers can easily understand and implement this. The author has well explained various usability tips for options menu like logically group the menu items, dim background content,use short and meaningful text, provide scrollbar, add sub-menu, hide menu items, loop the option menu and provide help options with details. This is one of the best article for providing options menu mobile design pattern.			
Talk:Get list of installed applications and its UID in Qt	20090923	Vkmunjpara	This article shows how to get installed application names and it's UID. And there is also mentioned that this widget requires TrustedUI Capabilities and needs a developer certificate. And this article is also tested in nokia 5800. This article is explained with a code snippet and also with a snapshot so that is the good thing. It uses a XQInstaller API and a method applications() of that class. Fine Explained with snapshots…			
Talk:How to use Mobile Extension APIs in Qt for Symbian	20090916	Deepikagohil	Mobile Extentions add extentions to your applications and adds source code to your application. So they become very benefical to the developers. The article contains important information about how to use mobile extentions. There are two ways of using mobile extentions: Using Mobile Extension APIs by copying files Or Using Mobile Extension APIs through Carbide.C++ templates. The article describes both of these and contains image-implementations for the later one to ease us during actual implementation. The article also contains an external link called "Mobile Extentions", which provides all the basic information about Mobile Extentions. The article can be very benefical to beginners as well intermediate developers who wants to deal with mobile extentions.			
Talk:Widgets Usability	20090924	Deepikagohil	Moderators note Numering not needed numbering makes difficult to add points to the article. the * make bullet points easier to read and does not need to BOLD. Widget is a code that can be installed and executed in any seperated HTML web page by an end user with out requiring any additional compiling. It is generally used to show live contents and are widely used these days. This article provides basic and essential information about widgets usability. The fundamental information that can help beginners to understand the concept of Widgets are lucidly explained in this article. Beginners will find this article very beneficial in their initial stage of study to create an web based application.			
Talk:Splash screen usability design guidelines	20090928	Deepikagohil	Splash screen is the screen with an image when the application is loading. This article covers a quick introduction to splash screen with image implementation. It also covers very useful guidelines for designing a splash screen. The article also provides a link to an demostrated example, which contains code snippests to create an splash screen. This article can be useful to beginners to create a splash screen. The guidelines highlighted can be very beneficial to them.			
Talk:How to build a Web Runtime layout with Header and Buttons Bar	20090911	Rahulvala	Layout is important property of widget. While working with widget the design and layout must look good. In this article author has discussed the design issues of layout and how to add header and buttons in the layout is also given. The other issues are discussed in this article are button and soft key generation, managing display rotation, and setting the main window. Also discussed how to use layout object. This article is useful for the widget designer and beginner of widget development.			
Talk:Measuring usability of a Web Runtime widget	20090923	Deepikagohil	While creating an application using Widgets, there are multiple aspects that should be kept in mind to make our application efficient and effective and more attractive. This article provides useful tips that will help you to measure the usability of widget and let you know if it needs improvement or not. The article helps in well-designing a widget application. The author has made good research and highlighted these points. The author has also mentioned further improvement in these measuring techniques. The article explains all these with related code snippests and article also contains the whole examplary code attached to study. This article can be useful to every developer to achieve effectiveness and efficiency in their widget based application.			
Talk:Automatically save and load user input in Web Runtime widgets	20090920	Deepikagohil	Widget is a code that can be installed and executed within any seperate HTML webpage by end-user without additional compiling. Widgets are used in many application to bring live contents from third party and are used heavily these days. This article represents how to save and load user input from 2 text fields automatically. User doesn't need to do any extra action for this. The article presents this approach with a detailed description and code snippest. The article presents this in a step-by-step manner and with screen-shots. The article can be useful to beginners who wants to start			

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			creating applications with widgets.			
Talk:Mobile Design Pattern: Live Scrolling	20090927	Larry101	This article discusses a relatively recent arrival in the domain of web design (and indeed mobile web design), known as live scrolling. This design pattern is typically used on content-driven websites, where users scroll through data downloaded via the web. The technique is clearly explained, with appropriate example images used, that many readers are likely to be able to relate to (GMail and Facebook). The article includes a good discussion of the advantages and disadvantages of this design pattern. A useful set of design tips are also provided, suggesting that data be downloaded in small increments, that users be made aware of downloading, and that the system should attempt downloads more than once before presenting an error message. The article is well-written and professionally presented.			
Talk:FleConnection Example - JSR 75	20090925	Larry101	This article describes how to use the FileConnection API (JSR-75) in Java ME. A code example is provided, showing how to save data to a text file stored on the mobile device, and also how to read from the text file. The article gives a nice overview of some of the things to watch out for when using the FileConnection API, such as the importance of exception handling. Another useful tip is the use of system properties to retrieve file paths, rather than hard-coding these into an application. Using system properties can help avoid errors which occur because of differences in the file paths used by different devices. The code example is nicely commented to aid reader understanding. This article would serve as useful reading to anyone reading or writing to a file for the first time in Java ME. One thing to remember – the device must support JSR-75 in order to use this API, and not all devices do! The alternative is the make use of the Record Management System if persistent data storage is required.			
Talk:Customizable Call Screen	20090921	Rahulvala	Can anybody design a customizable design model for Incoming or Outgoing calls' screen ? Answer is **Yes**. This article gives **idea that how we can change the call screen**. If we want to add some parameter or remove, we can do this. There are many contact data are given.There can be many other data user wants to be shown on call screen or might also want to hide some data, obviously can do this.			
Talk:Generate XML programatically in Qt	20090915	Deepikagohil	XMLL is "Extensible Markup Language". It is set of rules for encoding documents electronically. XML is commonly used in interchanging data over internet. XML conains tex data supported by Unicode. The artilce presents the applicaton to generate XML programatically in Qt for Symbian. The API used in the article to acheieve this is QXmlStreamWriter. The artice contains quick overview and code for the application. Working of each function is explained and code contains comments at various places to let us understand. The article is well organized. XML is widey used over internet. So the article has its imporance for the beginners who want to start developing applications which have use of internet.			
Talk:News Ticker JavaScript component for Web Runtime	20090905	Gaba88	Its always good to represent something in form of Animation, let it be marquee or any sort of simple animation but it makes our representation very attractive. Ticker is a form of representing some information in a animating way. This article explains how to add a Ticker to our web Runtime widget. This article explains all the steps in a very clear and cut method starting from how to construct the ticker, taking through how to add the news item and completing with handling the speed of the ticker. This article can really be very helpful if we want to port some website as Web Runtime Widget as this will make it very attractive.			
Talk:How to implement Live Scrolling in a Web Runtime widget	20090924	Deepikagohil	Scrolling is one of the ways to handle large related content which can not be accumulated in one page/ screen. scrolling is referred as sliding the text, image or video which can not get fit to the limited screen size. The article provides quick overvie wand the implementation for Live Scrolling in Web Run Time.The implementation is representes in a step by step manner with image implementation and explaination. How the whole concept works, the basic and essential tasks- all are lucidly explained. The article also provides the provision for downloading the demostrated exapmle for our study. Scrolling secures its importance in handling/ arranging large data, and thus this article also secures its importance to the developers. This article can be very beneficial to beginners and intermediate developers to create Live scrolling in their application.			
Talk:Mobile Design: Listbox Usability	20090921	Nirpsis	This article demonstrates a fundamental knowledge of list box usability. Basically, the list box is used to display more than one items. A list box allows the user to select one or more items from a list. The author has mentioned some basics of list usability with the screenshots by comparing some ideal or poor application design. In the article , the step by step instruction is given in such a way that designers can easily understand and implement this. The author has given some common guidelines while using list box like how to display a logically related set of items, how to display entire content on the list itself, how to scroll the list up and down , how to customize the search options,how to present the long list contents. This is a very useful article for designers who focuses on list box.	20090909	Warjan	Very nice and useful article. It provides essential suggestions for using lists in apps, which are commonly and frequently used so they have to be carefully implemented for good user experience. Almost all rules are illustrated with correct and incorrect ui examples and there are numerous references in sections. One aspect of lists I miss in this article is how orientation affects real estate and displaying of lists - in landscape there might be less item showing, but more text of individual items is on the screen. How to deal with that? Is multicolumn a solution? Is horizontal scrolling any option? I am quite surprised nobody have picked this article for review. Thumbs up from me.
Talk:Progress Bar JavaScript component for Web Runtime	20090924	Deepikagohil	Progress Bar is very commonly used these days to convey the progress of task e.g how much downloading has been done. The article presented here contains the code-snippests to create a progress bar with Progress Bar JavaScript component for Web Run Time. This article merely illustrates how we can use the Progress Bar Java Script component. The component's constructor, DOM structure and some methods are clearly and lucidly explained with code snippests. The article also let us to download the source for performed example for our study. The article can be very beneficial to beginners to study the Progress Bar component for WRT. Moreover beginners can also refer Popup JavaScript component for Web Runtime and Battery JavaScript component for WRT for their study for initial stage.			
			A very good article to study Popup JavaScript component for WEb Run Time. This article represents all the required information to implement a Popup JavaScript component. The Popup constructor, building and showing up an popup, hiding an popup all the topics are very lucidly explained with			

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Talk:Popup JavaScript component for Web Runtime	20090924	Deepikagohil	code snippests. The code presented also contains comments at various places for our ease. The image implementation provided are also good. Popups are widely used to give alerts and messages to the user. And this article explains this basic concept which can be useful to beginners. This article also provides a provision for downloading the demostrated example for beginners study.			
Talk:Mobile Design Pattern: Scrolling	20090917	Nirpsis	This article demonstrates a deeper understanding of mobile design pattern: Scrolling. Basically, this article focuses on how to show the list of items on a linear scrolling menu. Generally scrolling is used as sliding the text,image or video. The author has explained twp types of scrolling designs in details with screenshots. In the article, the author has used the Opera software to illustrate both type of scrolling. In Continuous scrolling, the page moves upward when the users scroll by pressing the downkey and similarly the page moves downward when the users scroll by pressing the up key. In page by page scrolling , when the users scroll the downward key, the screen moves upwards. This article is very useful for minimizes users action by arranging or handling large data with the help of scrolling.	20090916	Deepikagohil	Paging and Scrolling are the two different ways to handle large related content which can not be accumulated in one page/ screen. To choose one from paging or scrolling is depended on developer only. Generally scrolling is referred as sliding the text, image or video which can not get fit to the limited screen size. And Paging is reffered as to move frequebtly between pages/ views. The article deals with quick overview and basic types of Scrolling. Both types of scrollings are well-explained with image implementations. Scrolling secures its importance in handeling/ arranging large data, and thus this article also secures its importance to the developers. The article can be useful to beginners and intermediate developers to study Scrolling.
Talk:Themes:Home Screen	20090919	Nayan trivedi	Themes are very interactive part of any Multimedia system.Themes are very important for changing appearance of the system.This facility make any system stylish and visible for viewer.Themes have very important role in Mobile. There is advantage of UI theme that it Dose not change any other system of the Multimedia system.It will change the wallpaper and icons of the system. This article is useful for beginner.This article is well-explained using different screen shots.Screen shots tells all the things about theme.			
Talk:Mobile Design Pattern: Application Layout	20090917	Nirpsis	This article demonstrates a deeper meaning of mobile design pattern: Application Layout. Basically this article focuses on selecting the layout design for mobile applications. The author has explained this pattern with number of examples and screenshots. The design component illustrated in the article makes it easier to understand the mobile design pattern. The author has also explained how to choose a layout design with the various type of components like tabbed view or horizontal scrollbar and varoius type of layouts. whenever the size of layout is not recommended, an attractive background image is also used as shown in screenshots. Sometimes layout involves animations which would be changed corresponding menu button as shown in screenshots describing in details in this article. In further, the designer can try to implement this for a different attractive layout for mobile applications.			
Talk:High performance Widgets: Optimize your JavaScript	20090924	Deepikagohil	This article is the 3rd serie of the "High Performance Widgets". You can also refer the first two which will help in improving performance of your widget based application: They are: High Performance Widgets: CSS Sprites and High performance Widgets: Combine your JavaScripts and CSS in external Files. The serie 1 article discussed about the way to improve the performance of WRT widgets by useing CSS sprites in our application and how we can use CSS sprites. The serie 2 article represents how we can combine JAVA scripts and CSS in exterfiles. This article highlights the tips and tricks to optimize the JAVA script code make the application faster with more efficiently and effectively. These tips are tricks are explained with ease and in a simple languge. Also the article is in an organized manner. Every technology always has the scope to improve. Web based applications are used widely these days and this article gets very useful in improving the application performance. This article can be very helpful to beginners and intermediate developers.			
Talk:How to use sensors in Java ME	20090923	Larry101	This article discusses the use of the JSR-256 Mobile Sensor API. This API has only recently been available for use on Nokia phones and devices such as the Nokia 5800 and Nokia N97 were among the first to support its use. The API provides access to a wide range of sensors, depending on the implementation of the API and the sensors which each device provides. The article splits the process of accessing and displaying sensor data into its constituent steps, namely finding the sensor (sensors can be searched for by name), selecting the sensor from the returned list, connecting to the sensor and implementing the dataReceived method. These steps are nicely illustrated using a simple code example. The code example illustrates how to check for a battery level sensor, charger sensor (is the charger plugged in or not) and network intensity sensor. A connection is then opened to these sensors (if found) and the dataReceived method is implemented. The values of the different sensors are then displayed on the screen. The code example is nicely documented as serves as a useful introduction to the use of the Mobile Sensor API in Java ME.			
Talk:How to take pictures, record videos and play music using MMAPI	20090930	Larry101	The article presents a nice overview of the API, demonstrating the main classes and how these can be used together to perform multimedia-related functions in midlets. The article contains a nice figure to explain the different stages a Player object can be in. The code examples are well explained and any complexities are outlined before the code is presented. The code examples aren't particularly in-depth, but they do help illustrate the most common use cases of the MMAPI. The article manages to cover a wide array of topics in a very short space, and is therefore very useful. For readers wanting to know how to incorporate more advanced multimedia functionality in their midlets, the Advanced Multimedia Supplements API allows us to do more complex thing with cameras and sound playback. Unfortunately, many of the nice camera features such as focus and light settings are currently not supported by Nokia devices.			
Talk:Network Signal JavaScript component for WRT	20090924	Deepikagohil	Network signal indicator is a very important featre of any mobile device. This article well explains how we can create Network signal with Network signal JavaScript component for web run time. All the required information for the same is in step by step manner with explaining each step with their relative code snippests. The article makes itself interesting by including image implementations. This article also provides the attached source files which performs this mentioned task. The article can be beneficial to beginners for their further			

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			progress.
Talk:Mobile Site Example	20090928	Deepikagohil	The rate of users using mobile internet has increased drastically in last few years. And the need for mobile-friendly web site have also increased with it. More over Mobile Web Servers are also widely used these days. Mobile Web Server makes your device accessible in the Internet with a browser. You can create your blog on your device, you can share your data with the entire world with Mobile Web Servers. This article provides .CSS code for creating a mobile site. CSS code provides to add /create themes for your mobile sites. The article doesn't contain any explaination but the code is easy to understand if you have a bit of CSS knowledge. The article also provides image implementations for the same. A good article for beginners, which provides CSS code for developing mobile sites.
Talk:Create a contact group using Symbian C++	20090915	FireSwarog	You could use this code snippet for creating a contact group. It is a useful operation in different cases, for example in your own backup manager, or in your own phonebook application. With the help of the example like this, you could easily manage phone data.
Talk:Mobile Design Pattern: Auto Complete	20090921	Larry101	This article discusses auto-complete, a useful design solution for situations where users must enter text information. Auto-complete can improve efficiency in such tasks by looking at what the user has already typed and trying to infer the rest of the string they wish to enter. These options can then be presented to the user, rather than him/her having to complete entering the full text. Because text entry is fairly difficult given the small, unergonimic keypads and touch-screen input provided by mobile devices, the use of auto-complete can be very useful. The article also includes useful advice for improving the usability of auto-complete implementations. It is important that auto-complete implementations are as accurate and non-intrusive as possible. It should be just as easy to ignore the options provided as to select one of them. Auto-complete is widely used in mobile browser applications, because the punctuation and URLs in web addresses often makes it awkward and time-consuming for users to enter web addresses on their mobile device. Implementing auto-complete in mobile applications will usually mean that the programmer will have to create custom UI components to implement this functionality. But in cases where text entry is lengthy and repetitive or long lists of options can be filtered, the efficiency gains for the user should be well worth it. A well-written article about a design pattern which is probably even more useful on mobile devices than it is in the desktop environment.
Talk:Mobile Design Pattern: Site Index	20090925	Nirpsis	This interesting article explains a deeper meaning of site index mobile design pattern. The site index shows all web pages in an alphabetical index. Typically it is used for the users who are not familiar with the information architecture of the web pages. The author has demonstrated this mobile design pattern with number of attractive screenshots. The scrrenshots are presented in the article, makes it easier to understand this site design pattern for beginners as well as designers. The author has well explained when and how this site index should be used. Typically, the site index is used foe providing all the links on a single web page in which links are either horizontally or vertically. The author has also mentioned some designing tips for enhancing the site index. This article is good for users as well as designers who want to focus on site index.
Talk:Mobile Design Pattern: Paging	20090916	Deepikagohil	Paging is systematic and organized way of arranging related content in different pages/views if the content is too large to accumulate in one page. Paging navigation control is used to navigate these pages. This article presents the overview and basic design pattern of paging i.e. when and how they should be used. Some good tips for creating paging application are also given. The article provides effective image-implementations for let it be more understandable. The article is well-arranged and contains basic but important information about paging which can be useful to beginners as well as intermediate developers.
Talk:Mobile Design Pattern: Home Screen	20090903	Warjan	From the article you can learn about the role of home screen - a place where most important shortcuts to apps and information are displayed. Author starts with presenting the existing home screens of S60 devices (except for N97), then present a concept of cube with different home screens on each side. Very attractive, but I am not sure if very useful. Then author gives some snippets for creating widgets for N97 style home screen. Anyway, my favorite part is when author puts N97's, iPhone's and G1's home screen. N97 has all user cares up front. It is an eye opener moment for me - showing content to the users the way N97 seems for me perfect, because it: 1. Involves user immediately. 2. Give immediate feedback 3. Uses fully screen's real estate. It was an inspiring read.
Talk:High performance Widgets: Combine your JavaScripts and CSS in external Files	20090924	Deepikagohil	This article is the 2nd of the series of "High Performance Widgets". It would be beneficial to beginners if they first refer Mobile Design Pattern: High Performance Widgets: CSS Sprites and then come to this article. The serie 1 article discussed about the way to improve the performance of WRT widgets by useing CSS sprites in our application and how we can use CSS sprites. This article represents how we can combine JAVA scripts and CSS in exterfiles. The article presents code snippests for 2 different ways to display JAVAScripts and CSS and also mentions some aspects that should be kept in mind in performing this. Web based applications are widely used these days. This series really help to improve the performance and efficiency of a widget based application and can be helpful to the beginners who intend to create a widget based application.
Talk:Mobile Design Pattern: High Performance Widgets: CSS Sprites	20090924	Deepikagohil	This article discusses about one of the ways to improve the performance of WRT widgets. It tells if we use CSS sprites in our application, then it really helps in increasing the performance of the widgets. CSS is Cascading Style Sheets. CSS sprites allow you to create a single file that contains all the images laid out in a grid, requiring only a single image and only a single server call. This increases the efficiency of your web application. This article represents how CSS sprites works and also illustrates how we can use CSS sprites with their relative code snippests. In the end, article also mentions the advantages of using CSS sprites in our web based application. Apart from that article also contains an demostrated example to let it understandable to beginners. Web based applications are widely used these days. This article is the 1st one from the series of "High Performance Widgets". You can refer High performance Widgets: Combine your JavaScripts and CSS in external Files and High

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			performance Widgets: Optimize your JavaScript to improve the performance of your Widget based application. This article gets beneficial to beginners and intermediate developers.
Talk:Mobile Design Pattern: Notifications	20090917	Nirpsis	This article explains a deeper meaning of mobile design pattern : Notification. Basically, this article is one of the best article for showing how to use notification mechanism. The author has demonstrated this design pattern with the number of screenshots. These screenshots illustrated in the article makes it easier to understand this notification pattern. The notification gives user easy and fast access to various events like call ,messaging,e-mail,Bluetooth and Infrared request. The author has explained different way of presenting notifications events like Symbol based Notification in which any event's notification is presented with displaying symbols, Menu based Notifications in which event's notification is shown on main screen, Pop-up based Notification in which events want to need urgent services and quick response via notification. This article is good for users who wants to focus on event's notification.
Talk:Mobile Design Pattern: News Ticker	20090918	Nirpsis	This article demonstrates a concept of News ticker mobile design pattern. News Ticker uses a box with scrolling text to display the latest information and place it at the top part of the page. The author , croozeus , has explained this news ticker in details with attractive screenshots. He has also demonstrated how this News ticker places the information of interest (News, stock quotes, football scores etc) in a box and separating items using dots. The author has also explained how and when news ticker pattern should be used. The author has given some design tips like search box with screenshot. One of the best article for developers who want to show constantly updated various items.
Talk:Guide To Designing Mobile Widget	20090921	Sangramp@cybage.com	The article mentions some of the primary/generic things about the widget development. The article is useful for the beginners to know what are the fundamental principles behind the widget development.
Talk:How to assign speed dial	200909	FireSwarog	You could use this example for assigning speed dial in your own application. It allows to select contact and to define phone number from this contact for particular cell of speed dial [1;9]. There are a lot of cases then you could use this feature. For example you could use it in your own realization of phonebook, also it is necessary to support such features in own backup mechanism. Important note: this code snippet required WriteDeviceData capability, so self-signed procedure for signing is not suitable.
Talk:How to draw complicated rounded rectangles in Symbian C++	20090927	Deepikagohil	It seems like author has worked hard for this article applying good maths concepts and innovative ideas. As we know the default rectangle drawn is the normal rectangle with sharp corners by the method provided by CWindowGc in Symbian C++. But to make our application more attractive, we need to do something creative from the default. This article presents the way to create a rectangle with asymmetrical rounded corners. A deep maths calaulation is done for the same. The article well-explains the approach with code snippests and image implementation. The code snippest is in organized manner to let it understandable and contains comments at various places. This article can be beneficial to intermediate and experienced developers to give their application a creative touch.
Talk:How to get accelerometer sensor values in Java ME	20090912	Larry101	The article provides a concise overview of how to obtain accelerometer data using the Java Mobile Sensor API. The basic steps involved in accessing the accelerometer data are outlined. These steps are then demonstrated through the use of a code example which demonstrates finding the accelerometer sensor, getting its URL, opening a connection and receiving data (both as integer and double primitive types). The code examples are clear and to the point. The use of buffers to store accelerometer input and the subsequent averaging of the data stored in the buffers demonstrates a simple, yet effective means of smoothing accelerometer data (which is generally very "noisy" data). Such smoothing is essential in order to make effective use of input from accelerometer sensors.
Talk:Mobile Design Pattern: Menu	20090917	Nirpsis	This article demonstrates a concept of mobile design pattern: Menu. Typically, Menu allows users to select a menu items by selecting an image. The author has explained this pattern with variety of menu interface design with diagrams. These diagrams explained in the article makes it easier to understand this pattern for developers. In the article, the author has described various types of menu interface design like Conventional menu, Grid menu, List menu, Softkey menu, Standby menu, Game menu and Task bar menu.All type of menu interface design are well explained with screenshots. The author has also explained when to use these various menu interface design. This article is good for beginners as well as developers who wants to focus on various menu interface design.
Talk:Mobile Design Pattern: Carousel	20090918	Nirpsis	This article demonstrates a concept of Carousel mobile design pattern. A Carousel is a list , which displays a sequence of visible items in a circular sequence. The author has explained use of carousel in media or application selection and navigation with understandable screenshots. A Carousel is used to provide better on screen real estate and it also provides flexibility. The author has also explained how and when should be used the Carousel design pattern.The author has also explained some design treatments when displaying carousels on mobile like Flat , 3 dimensional, manipulation models and Platforms with suitable screenshots. This is very useful article which demonstrates a variety of approaches to Carousel design for developers.
Talk:Mobile Design Pattern: Drop-down menu	20090928	Deepikagohil	Menu is basic UserInterface element for the user to effectively interact with the mobile device. This article provides an introduction to the Drop-down Menu, which is widely used in mobile devices from any other Menu type. The article provides a quick introduction to the Drop-down Menu with their benefits and drawbacks and also provides some very useful guidelines for designing and applying in our application. This article can be useful to beginners for understanding the concept and understanding how to use it in an application.
Talk:Mobile Web Design Pattern: Vertical List	20090903	Kamalakshan	The article demonstrates a deep understanding of Web Design Patterns : Vertical List, the examples and diagrams provided reflect well the authors thoughts. This article is recommended for reading by everyone who wants to have their webpage stand out from the crowd as well as make the developer understand when and where to apply a specific pattern. The different real world examples referred in the article makes it easier to understand the applications of the pattern described.

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Talk:Mobile Design Pattern: Contextual Prompt	20090921	Nirpsis	This article explains the contextual prompt mobile design pattern. A contextual contains a group of actions, options or information. A contextual offers a limited set of choices that are available in the current state, or context of the application. The author has explained this pattern with the number of attractive screenshots. The author has given step by step information on how and when Contextual prompt is designed. The author has described several types of contextual menus on mobile like Softkey-mapped menus which are triggered by pressing left softkey , Contextual pop-up menus which are triggered through selection of on screen prompt, Temporary contextual pop-ups which contains contextual information and hardware mapped pop-up menus which is used to trigger a contextual pop up menu. This design pattern works perfectly if the precondition are satisfied i.e. the contextual prompt can interact with the visible elements behind menu.			
Talk:Mobile Design Pattern: Slider Control	20090903	Kamalakshan	The article demonstrates a deep understanding of Mobile Design Patterns : Slider Control, the examples and diagrams provided reflect well the authors thoughts. This article is recommended for reading by everyone who wants to design or implement this pattern. The advantages, disadvantages, when and how to use has been explained properly. It aslo mentions some design tips which could be handly when designing custom control applying the above pattern.			
Talk:Mobile Design Pattern: Radio Button	20090903	Warjan	Articles introduces Radio button talking about name origins, use cases and things to remember when using those. I especially like the example at the end - those show that radio button can be really attractive. I can't think of any aspect of radio buttons that could be added here.			
Talk:Mobile Web Design Pattern: Horizontal List	20090903	Kamalakshan	The article demonstrates a deep understanding of Web Design Patterns : Horizontal List, the examples and diagrams provided reflect well the authors thoughts. This article is recommended for reading by everyone who wants to have their webpage stand out from the crowd as well as make the developer understand when and where to apply a specific pattern. The different real world examples referred in the article makes it easier to understand the applications of the pattern described.			
Talk:Mobile Design Pattern: Sorting	20090903	Kamalakshan	The article demonstrates a deep understanding of Mobile Design Patterns : Sorting, the examples and diagrams provided reflect well the authors thoughts. This article is recommended for reading by everyone who wants to implement this design pattern. The advantages, disadvantages, when and how to use has been explained properly. It also mentions some design tips which could be handy when designing.			
Talk:Mobile Design Pattern: Specifying or Detecting Location	20090916	Deepikagohil	This article provides design approaches which can be used in creating location based applications. Location based applications are being used widely these days. This article provides three different design approaches which can be used. All the three approaches are well explained with image implementations. The article provides detailed information about when to and how to use them. This article can be useful to beginners and intermediate developers.			
Talk:Mobile Design Patterns: Interaction Models	20090923	Nirpsis	This article explains a deeper meaning of interaction models mobile design pattern. This article describes the interaction of users with a devices and its user interface. The author has well explained two types of interaction models like indirect manipulation which is used for mobile devices for achieving interaction with special set of controls and direct manipulation which allows the users to interact through on screen controls. The author has mentioned number of screenshots in the article which makes it easier to understand the interaction model mobile design pattern. The author has described common uses of custom touch events. In the article, various types of interaction is given while using the sensor. This is one of the nice article for users who want to focus on various interaction models.			
Talk:Mobile Web Design Pattern: Tabbed List	20090927	Larry101	This very nicely written article addresses the use of tabbed pane controls in mobile web applications. In keeping with it's classification in this Wiki, the article sticks to the standard format of a design pattern article, discussing the solution, when the use of tabs is appropriate in the domain of mobile web applications, and the rationale behind this. The article identifies two situations where tabbed controls are appropriate in mobile web applications. Firstly, as top-level navigation, and secondly to show and hide small amounts of information. The author demonstrates a thoughtful appreciation of the domain and does well to identify a few possible pitfalls of using tabs in mobile web apps. These include the fact that scrolling all the way back to the top of the page might be required to select a different tab. As a result, a useful suggestion is to provide a "back to top" bookmark. The author also makes a good point that tabs are particularly well-suited to be used in widgets, whose small size eliminates the scrolling problem. Tabs are indeed particularly useful in this domain. I enjoyed reading this article. It had a very professional feel to it and the figures complemented the text nicely.			
Talk:Mobile Design Pattern: Progress and Wait Indicator	20090928	Larry101	This article discusses the use of progress and wait indicators in mobile applications. The article begins by drawing a distinction between progress indicators (which are used when we can measure progress) and wait indicators (when the task time is indeterminate). Their use is motivated by outlining advantages, and the author goes on to explain when each of the two is the appropriate choice to be used. Several points are then outlined regarding how to make use of wait and progress indicators and finally design tips are provided. I found the article to be interesting reading. The role of progress and wait indicators can play a very important part in ensuring that usability is not compromised when potentially time consuming operations (such as downloading data) need to take place. With more and more mobile applications now relying on internet connectivity in some way or another, the use of these indicators is only likely to become more important. Users need to be kept aware of what is going on. If the application simply freezes when waiting for a download, the user may think there is a problem and shut down the application without realizing what is going on. The discussion on how to use the indicators contained several useful tips. There are few things more irritating that being unable to cancel an operation that could go on for minutes. The article helps highlight the point that progress and wait indicators need to be carefully designed and thought through, rather than simply slapped on the screen in the simplest way possible.			
			The article demonstrates a deep understanding of Mobile Design Patterns : Applying Focus, the examples and diagrams provided reflect well the authors thoughts. This			It a good introduction to focus topic. Article is indeed well equipped with examples and it reads well. It explains the difference in focus on non-touch

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Talk:Mobile Design Pattern: Applying Focus	20090903	Kamalakshan	article is recommended for reading by everyone who wants to implement this design pattern. The advantages, disadvantages, when and how to use has been explained properly. It also mentions some design tips which could be handy when designing. The article also explores the focus handling of list items in S60 5th Ed.	20090906	Warjan	and touch devices and shows importance of having default focus. I'd like to see improved is Design Tips section - it seems too short, lacks examples. I wonder whether there's some more article on subject of foucs - it'd be nice to have some references.
Talk:Porting BlackBerry Storm applications and services to S60 5th Edition	20090923	Nirpsis	Developers are needed some references for porting mobile applications from one development environment to another development environment. This article explains how to port application from the BlackBerry Storm device to the S60 5th touch interface devices. Here, the article compares the BlackBerry storm and Nokia XpressMusic devices. Basically, the main programming language which is used in BlackBerry is Java, so this article explains porting a Java application form BlackBerry Storm to a Java application on S60 5th Edition. The author has explained various BlackBerry Storm and Nokia 5800 XpressMusic features. In the article, the author has illustrated the capturing screen events in BlackBerry storm and S60 5th Edition devices. He has also compared the capturing events for both devices. This is a good article for developers who want to develop the touch UI applications for both BlackBerry and S60 5th edition devices. This article is also very useful for porting BlackBerry Storm applications to S60 5th edition devices.			
Talk:Porting BlackBerry applications and services to S60 platform	20090923	Nirpsis	This article explains a basic concept of how to port BlackBerry applications to S60 Platform. The BlackBerry supports full CDLC, MIDP, RIM with additional libraries for specific functions, cryptography and phone API which is useful for developing applications on the BlackBerry devices using Java ME. First thing which is required before application development in Java ME , is to know the supported APIs. The author has explained the supported configuration, profile and supported optional packages in Java ME for both BlackBerry and Nokia S60 devices. The author has given some common points which is considered while porting the BlackBerry application to S60 platform. In the article , the author has illustrated samples of code which shows the difference regarding classes, interfaces and methods. The author has also explained APIs in categories with its original functionality. This article is very helpful for developers who want to port the BlackBerry application to S60 platform.			
Talk:Import a project into Carbide.c++ from a Qt Creator workspace	20090913	Deepikagohil	symbian C++ is widely used platform for mobile application development for S60 from the times when Qt was not in picture. Qt is new mobile application development platform which has portability for desktops and embedded systems. Appication in Qt adds high efficiency and high run-time performance on your device. The article contains critical information to import a project into Carbide.c++ from Qt Creator. Carbide.c++ is IDE used for application development in Symbian C++, whereas Qt Creator is IDE for application development in Qt. The article is useful to the developers who have knowledge in both--Symbian C++ and Qt and uses above mentioned IDEs. It can be useful to beginners, intermediate as well as experienced developers.			
Talk:MIDlet icon size	20090918	Kalki	MIDlet Icon size matters most when we want to publish it to the users. its always good practice to keep the icon size specification in mind or handy when selecting icon for your application. All the Nokia Series 30,40,60,80,90 application icon size is given in very tabular way that is easy to read and find for specific model. This articles helps a lot for every developers and publishers before they can distribute their application. Given information is not available elsewhere. It reduces the chances of icon size scaled out and not being displayed correctly or clearly.			
Talk:Stray signals in Symbian Active Objects	20090904	Kamalakshan	This article provides very good cases to debug why a stray signal panic (E32USER-CBase 46) was thrown when using AO. For anyone working with AO, chances are more that he/she may encounter this panic. When encountered this article provides reasonable clue where to look for to fix it.	20090928	Savaj	Improper use of Active Objects may cause panic E32USER-CBase 46. Documentation says **This panic is raised by an active scheduler, a CActiveScheduler. It is caused by a stray signal**. But for beginners it is difficult to understand what is **stray signals**. This article describes possible case which may generates stray signals. Although article is very small, it is very useful to understand how stray signals are generated.
Talk:Closing a dialog after a timeout using Symbian C++	20090909	Kamalakshan	This is a very well explained article on how to close a dialog after a specified amount of time. This could be useful to show some messages or notifications you would like to have it closed after displaying it for a set amount of time; It could be modified to have it closed, after some tasks have been completed.			
Talk:Create Floating Text DialogBox	20090909	Kamalakshan	This article provides code snippet to create a custom floating text control box. This control can be easily implemented within your project after placing the .h and .cpp files and making a call to this as suggested. This could be very helpful if you need to show user some tool tip kind of information in your application.	20090909	Skumar rao	This Code snippet works for both UI & Non-UI applications. But the author has taken pain to make show color features that might not be required for basic functionality .
Talk:How to calculate hash for a text using QCryptographicHash in Qt	20090916	Deepikagohil	Encryption is the process of transforming information to an unreadable data to anyone except those possesing the Key. The encrytion is done using an algoritm and the study of information which is hidden/ encrypted is called Cryptography. The Key is used to decrypt the encrypted data. Encryption is broadly used to transfer data privately. The article presents the way to encrypt data using QCryptoGraphicHash class in Qt for Symbian. The article contains an application to encrypt a predefined string in to encrypted data. The code snippet and sceen-shot are provided in this article. Encryption is very important aspect in transfering data securely and this way the article has its importance. It can be useful to beginners to study encryption.	20090928	Savaj	Encryption is the most effective way to achieve data security. To read an encrypted file, you must have access to a secret key or password that enables you to decrypt it. Sending a plain text, Unencrypted data, over internet Or saving plain text in a file (which is located in public directory) is risky, anyone can tap the channel and use data directly. Cipher text, encrypted data, is more secure compared to plain text. The QCryptographicHash class provides a way to generate cryptographic hashes. Currently MD4, MD5, and SHA-1 hash are supported. The article is useful to generates cryptographic hashes using QCryptographicHash class. A beginners find it useful to generate cryptographic hashes.
Talk:How to use QGraphicsProxyWidget in Qt	20090917	Nayan trivedi	This article illustrate the all information about the QGraphicsProxyWidget class Which copies the state from the widget into the proxy.This article useful for getting informations of different Things. code snippet shown in article in which there are plenty of informations are shown in the box->addItem that all informations you can get by using scroll Bar shown in screen shot.QGroupBox class used for this operation.			

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			This article is useful for intermediate.This article can also useful in different application.			
Talk:How to conform with Unified Testing Criteria	20090923	Vkmunjpara	**Type**: *Basic and Important Information* This article represents a documentation regarding how to conform with unified Testing Criteria that conform java verified testing criteria And also describes about some APIs like FN, PIM, Security, LO, UI etc… Every body can obtain good knowledge from this documentation..			
Talk:Getting started with PyQt for Maemo	20090908	diegodobelo	This article shows how to start developing Qt applications for maemo using Python programming language. Python is an easy to learn and intuitive language, which is ideal for new developers. Thus, this tutorial is very important to increase the quantity of mobile developers. This article is very simple but, at the same time, complete. It starts showing how to prepare the environment by configuring repositories and installing required packages. Then, it shows an example with several screenshots to complete the explanation.			
Talk:How to get notification when screen orientation is changed in exe (without CONE)?	20090906	Savaj	Usually console exe does not have graphics, thus does not require listen to change in orientation switching initiated by window serve. If application is GUI application than we can easily get notification orientation switching by CoeControl::HandleResourceChange() method. In rare case console exe also require notification when orientation of device changes, for example, if exe have some graphics to display on desktop of device. But for console exe listening change in orientation is quit difficult. This article describes how to listen change in orientation in console exe using Active objects. So basic knowledge of Active objects is required to implement this code. Article is very useful to those who show graphics in console exe.			
Talk:How to get ReDraw event in exe from window server?	20090906	Savaj	CONE environment will pass the redraw event to the application which is in foreground. By default exe in symban does not have CONE environment in it, So if your exe have graphics in it than it require redraw events issued by window server. It is required when your application is overlapped by some other application, for example call dialog overlapped your application and then disappear after some time, so your application need invalid rect overlapped by call dialog. Thus we need to implement listener to get redraw event issued by window server. Article describes basic steps required to implement redraw event listener. This require use of Active Objects, so basic knowledge of Active objects is necessary. Article is useful to both beginners as well as experienced developer.			
Talk:How to convert HBufC to QString	20090916	Fasttrack	Source file and introduction explain every thing about the article. In many application TBuf are used. Article helps in while writing a code of a particular application. Link this article with Tbuf may help to introduce the user with that Tbuf.			
Talk:KAsteroids for S60	20090920	Nayan trivedi	This article is about how to make Asteroids Game using Qt.This article is well described by using different screen shots. For further information about asteroid game you can visit the hand book of this game from given link.You can see one more example of Asteroid Game using QCanvas on belove link http://doc.trolltech.com/4.5/graphicsview-portedasteroids.html For the sources of This game download .Zip file at given link.This is an example of Qt Gui programing.At the end of article control keys are shown.			
Talk:How to handle individual bits using QBitArray in Qt	20090914	Nayan trivedi	This article illustrates the basic fundamental of Digital electronics.you can handle individual bits using This article.so Using this article you can make plenty of other applications. Hear that is shown that hear we are using QBitArray for the array operation.This operation is same as C or C++. using This article you can perform different logical operation like AND,OR and NOT.THis three are Universal GATE.so using this three operation you can make any logical operation in QT.According to me This article is very useful.	20090929	Vkmunjpara	This article demonstrates a great use of QBitArray API. And This class creates an array of bits and is used to perform some logical operations on those bits and also puts flexibility of using QBitArray Class. This piece of writing also explains some basic functions of QByteArray like replace, setNum, size etc.. And also a code snippet is given and it will be very much constructive to beginners.
Talk:How to Compile Qt(.cpp) file from command prompt	20090916	Fasttrack	This article helps to create a pkg file for any application. Article help when application is on tested mode. With this we can compile our application without opening an QtIDE. Line to line process helps very effectily. To improve this article image of the cmd with the response of every command should added.	20090926	Savaj	Although Carbide C++ provides way to build project, create SIS file from package file and sign SIS file using certificates and keys, you can also build project from command line. You have to run few commands from current directory of project. Article describes various commands that need to be executed to compile and build project from command line, which is useful to those who want to build project from command line.
Talk:How to create a dictionary in Qt	20090913	Deepikagohil	Qt is a cross-platform application development framework, which is widely used for developing GUI application. Qt has portability for desktops and embedded systems. Appication in Qt adds high efficiency and high run-time performance on our device. This article merely represents an application to create simple dictionary in Qt. It has made two applications for a dictionary by using QHash and QMap APIs. Both have similar functionalities. The article gives detailed description, code snippest and screensot for the applications. The article is in organized manner and it will help beginners to learn QHash and QMap APIs in Qt for Symbian.			
Talk:How to use QString in Qt	20090920	Elicec12	This article is very good. It presents some common methods of QString and systematically mixes an example and a small explanation. The final example might be a bit too complicated for a beginner but the comments describe everything so I think it is ok. I like this final example because one can easily play with it in the simulator. There is one thing I really miss for a introduction to QString: an explanation of the method QString::arg(). This method is very useful, while QString::append() or QString::prepend() are mostly useless in real applications because of internationalization. This article is still "Reviewer Approved" for me. It is good even without QString::arg().	20090911	Fasttrack	A string operation is fully described in this article. It's a good to learn how to perform a particular operation on the string in Qt. at the start the method is described very well. A small image says everything about the article.
Talk:Understanding Signals	20090928	Savaj	Signals and slots are one of the powerful feature of Qt. It enables communication between objects, irrespective of type of object. Other frameworks achieve this type of communication by callbacks, but they are not type-safe and the callback is strongly coupled to the processing function since the processing function must know which callback to call. A signal is emitted when a particular event occurs. A slot is a function that is called in response to a particular signal. The signals and slots mechanism is type safe: The signature of a signal must match the signature of the receiving slot.The signals and slots mechanism is type safe: The signature of a			

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and Slot in Qt	20090928	Savaj	signal must match the signature of the receiving slot. Signals and slots are loosely coupled: A class which emits a signal neither knows nor cares which slots receive the signal. This article explains in the concept of signal and slots in brief. A code shows how sender will send signals and receiver receive that signals using slots, for example sender object,spinBox , will emit signal valueChanged() which receiver object ,slider , will receive in setValue(). Although this article does not have detailed explanation of signals and slots mechanism, the example given explains how this mechanism will works. Before starting programming in Qt one must learn this mechanism.			
Talk:Which S60 SDK should I use?	20090904	FireSwarog	Nokia has developed so many smartphones in recent years that it is sometimes difficult to determine which version of the SDK should be used for particular device. This article contains a good picture, which can help you clarify the version of SDK for your device. I completely agree with the author, that currently you should use the S60 3nd Edition MR SDK for maximum compatibility.			
Talk:Full-screen mode on touch UI	20090930	Deepikagohil	This article represents How to use the Full-Screen mode in S60 5th Edtion for touch UI. The code snippests for the same is covered by the article with required comments. This article can be useful to the beginners who are developing S60 5th Edition applications.			
Talk:Showing supported languages in a device in WRT	20090905	Gaba88	Making an application support all languages is one of the best customization. To provide this sort of customization the developer should aware of the languages supported by the device for which he/ she is developing. This article guides the developer on how to get the list of supported languages of the device using Web Runtime technolgies. Using this you can customize you WRT Widget and make it more attractive and effective. This article has very clearly mentioned each and every code with a good explanation.			
Talk:TouchUI: Event from hardware to software	20090930	Deepikagohil	Touch User Interface is a new technology which is, now-a-days, being widely accepted by mobile lovers. This article represents the idea behind the this technology i.e. how it works. The entire approach is very lucidly explained with images. The two types of sensing used by touch-Screen are described with detail. The article also provides the architecture for the information flow from hardware to software. Moreover this article also contains a demostrated example code which explains the whole concept of generating events by touch screen and handling the events. Also an attached example is there for our further reference. This article can be useful to beginners to understand the concept of touch UI in S60 5th edition devices.			
Talk:How to get current environment font using Symbian C++	20090930	Savaj	This is basic article demonstrates the use of font provided by environment. Instead of creating your own font it is better to use font provided by environment. Note that if your application does not use CONE environment approach, for example by default console exe does not have, then you can not use this method to get font. The article is very useful to beginners.			
Talk:How to use GCCE 4 with Symbian SDKs	20091002	Deepikagohil	A good article, which represents a short overview about GCCE(GNU Compiler Collection for Embedded) 4 for Symbian OS, the fundamental requirments about it's installation, the information about it's versions and much more; which can be essential to know before using it. It provides useful material for beginners to study before getting started.			
Talk:Listening a specific accessory connected/disconnected notifications	20090930	Deepikagohil	This article represents a brief overview to *The Accessory Monitoring API*. It can be used to find if a specific accessory is connected/ disconnected. This article also provides code snippests which shows- how we can use this API for detecting the accessory. The code snippest contains comments for making the code more understandable. This article can be useful to beginners and intermediate developers who need to use this fuctionality/ this API in their application.			
Talk:Parsing XML using JSR 172	20090924	Larry101	This article provides a fairly simple example of how to parse an XML file using JSR 172 (Web Service) API. The code example demonstrates how to read in an XML file via an HTTPConnection and parse this file using the web service API. The example demonstrates the use of the different classes within the API, without actually doing anything with the contents of the XML file (most of the methods for parsing the XML file are left blank). In some respects, the simplicity of the code example could be criticised, because it doesn't actually show how to do things like identify the current tag, retrieve an attribute or retrieve the contents of a tag containing text. However, other examples exist to show this functionality. This article is merely intended to show which objects to use to create a parser object and initiate the parsing process. Code to perform the actual parsing requires an illustrative example to be meaningful. The code example shows how a SAXParser object is created using the factory design pattern, with an instance being created using the newSAXParser() method of the SAXParserFactory class. A useful follow up article would be to demonstrate how to use the methods such as startElement, endElement and characters to retrieve specific information from an XML file. These methods are generally used in conjunction with a stack data structure to process data in XML format.			
Talk:Using basic touch gestures	20090929	Deepikagohil	The article very well explains- how to use the touch User Interface for S60 5th Edition. The basic touch gestures are lucidely explained with image implementations and the article presents the code snippests to how to detect them, handle them and use them in your application. S60 5th Edition is fully a touch UI device. So it is very necessary to get aware of the basic touch gestures and how to use them. The presented code snippests can be useful to create new touch gestures for your applications. It provides the basis for doing the same. Code snippests are very well explained with comments. This article also provides a demostrated example for further reference. This article can be very beneficial to every developer who is working on creating S60 5th edition applications.	20090929	Vkmunjpara	This article explains all about touch gestures and how it works in touch phones. Basically touch gesture means moving finger on touch phones in a particular direction. When we moves our finger in a left to right direction in a music player, song going forward. This is effect of gesture. So here this article is a complete documentation about touch gesture as it provides vast information of it with code and snapshots. Mobile Application developer for S60 5th Edition can get a vast knowledge from this document because touch phones' application requires need for touch gesture concept.
Talk:WRT Service API Synchronous and Asynchronous calls	20090930	Nirpsis	This article provides fundamental knowledge about how to control synchronous and asynchronous calls and explains how these both call types differ from each others and when to use these both call types. In the article, the author has well explained various methods like behavior, returned value and callback method for both synchronous as well as asynchronous calls. But, There is some exceptions for supporting both calls in all these methods for example , the IMessaging.GetList() method from the Messaging service API supports only synchronous calls, while the IDataSource.GetList() method from Media Management service API supports only asynchronous. Here, the author has also given sample user case which shows how to retrieve contact list with both synchronous and			

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			asynchronous calls. One of the valuable article for handling synchronous and asynchronous calls.			
Talk:Working with SingleColumnStyleTreeList with Hierarchical Lists API - S60 Touch UI	20090921	FireSwarog	Article demonstrates how to use new API of S60 5th - Hierarchical Lists API with the help of class CAknSingleColumnStyleTreeList. This new GUI element of S60 is a very convenient to use on large touch screens for displaying hierarchical data. Many standard applications of devices based on S60 5th were actively use this API - your application with the such component will be easy to understand for users. This article contains code snippets with detailed comments - it helps to quickly grasp new opportunities. Also in this article you could find the link to the demo project, which can be used as a base for developing own applications for S60 5th.			
Talk:Check whether keyboard backlight is on	20090923	Fasttrack	Article shows How to check whether keyboard backlight is on…. In major application without any interrupt we have to keep backlight on. For that we have to continue check. Putting the image of the mobile which run this application may improve this article. And linking this article with "How_to_keep_backlight_on" may also be good improvement.			
Talk:Creating custom Music Player with S60 Touch UI APIs	20090921	FireSwarog	There are a lot of new APIs in S60 5th. This article is very useful because it demonstrates how to use several new APIs of S60 5th for creating such advanced applications as music player. Author provided necessary comments that were very usefull, also the article contains a link to demo-project which is very convinient to use for starting new development. You can download it and use as a base for own project.			
Talk:Working with Generic Button API - S60 Touch UI	20090921	FireSwarog	The touch screen provides a number of new features that previously were not available on smartphones based on Symbian S60. S60 5th contains a lot of new public APIs, that allow to use the new features. This article demonstrates the possibility of one of the new APIs: Generic Button API. This API demonstrates how to create and how to customize screen buttons, as well as how to process events from such buttons. The article contains several screenshots and code snippet with detailed comments, which facilitates understanding. Also article contains link to a working demo-project, which is useful for further experiments with new possibilities.			
Talk:Working with SingleStyleTreeList with Hierarchical Lists API - S60 Touch UI	20090929	Deepikagohil	Hierarchical List is a type of list to represent data in a structured, systematic and tree-style manner. And it is widely used for standard representation of data. This article mainly deals with Hierarchical Lists API and shows the use of its *CAknSingleStyleTreeList* class to create the list in S60 5th Edition. The article first gives a brief overview for the same and then represents the code snippests to create the list with *CAknSingleStyleTreeList* class. The code snippests are presented with necessary explainations and well-describing comments. Basic functions like adding nodes/ leaf, deleating nodes/ leaf/ the whole tree etc. are all covered by the given article. Some useful functions of the mentioned class are also mentioned in the ned of the article. Apart from that, the article also provides a demostrated example to study the API in more detail. This article can be very beneficial to the developers who are intending to create a Hierarchical List in their application. It can specially benefit beginners.			
Talk:Working with Hierarchical Lists API	20090929	Deepikagohil	This article mainly deals with the API for S60 5th Edition for presenting data systematically in Hierarchical Lists. This is a type of Tree list. And author has illustrated to create lists with CAknSingleStyleTreeList and CAknSingleColumnStyleTreeList classes. The code snippests for the same are represented with a well-describing comments and highlighting the necessary libraries and capabilities required. Basic functions like Adding items to the list, Removing items from the list etc. are also covered in the given article. This article also provides image-implementations for our ease. This article gives primary and brief overview about Hierarchical lists API and it can be very beneficial to beginners.			
Talk:How to set the initial value for the selection list query dialog	20090930	Kamalakshan	This article provides code snippet and corresponding resource file demonstrating on how to create a selection list query dialog and then set its initial selection index. This will be helpful for all those who want to implement a selection query list dialog (One like you see while selecting access point).			
Talk:How to Enable/Disable Pointer Repeat Events	20090930	Savaj	In some scenario we need to enable/disable repeated pointer events. This article demonstrates how to enable/disable repeated pointer events. Basically we need to call RequestPointerRepeatEvent() and CancelPointerRepeatEventRequest() method of class RWindowBase to enable and disable pointer event respectively, as explained in this article. The article is well explained and useful to beginners as well as experienced developer.			
Talk:How to Enable/Disable Drag and Move Events in a Control	20090930	Savaj	In some scenario we need to enable/disable drag and move event in control. This article demonstrates how to enable/disable drag and move event in control. Basically we need to call PointerFilter() method of class RWindowBase to enable/disable drag and move event, as explained in this article. The article is well explained and useful to beginners as well as experienced developer.			
Talk:How to get System.out output from a MIDlet and save it to a file in S60 devices	20090927	Vkmunjpara	Here in this article, it shows how to get String output on to screen of mobile and how to store output into a file. So that we can get it later on. Here it explains that when you are using emulator or on device debugging features, you can't use System.out.println() statement. For that Input stream is used and output data is directed to text box or store it into text file via Input Stream. To redirect, InputConnection API is used. The source file(.java) file is also given fully so we can test it by ourself. This is an important concept and it has basic APIs also so that every body can obtain good knowledge by learning it in intensely.			
Talk:Monitoring Tactile Feedback Vibration Mode	20090930	Savaj	This article demonstrates how to monitor touch screen vibration mode change. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments. The article is well explained and useful to beginners well as experienced developer.			
Talk:Delete item from a listbox	20090930	Kamalakshan	This article provides code snippet on how to delete item from the listbox control. There are many examples around in the wiki and DiBo on how to create a ListBox. However, when it comes to deleting an Item and then updating the listbox in runtime, this code snippet comes to a great help as reference. The author has also specifically highlighted to call DrawNow() to view the changes. This is many a times missed by beginners.			
			Another useful example that demonstrates the new features of S60 5th. The article shows how you can use classes from ChoiceList API to provide user a choice from several			Apart from CAknPopupField, CAknChoiceList is considered as a alternative to drop-down list box of desktop system. As class

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Talk:Working with ChoiceList API - S60 Touch UI	20090921	FireSwarog	alternatives. The code snippet shows how to create a list to choose how to respond on the user's choice. You can realize own event handler with the help of observer pattern and interface MCoeControlObserver, such approach is very popular in Symbian C++. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.	20090928	Savaj	CAknChoiceList is introduced in S60 5th edition, it is important to understand how to use CAknChoiceList efficiently. Article describes a way to implement CAknChoiceList and useful methods that can be used to enhance functionality of choice list. A working code example will be useful for more detailed study.
Talk:Title Pane Touch Observer API	20090930	Deepikagohil	S60 5th Edition devices supports full touch UI. This article demostrates an example which uses the Title Pane Touch Observer API for S60 5th Edition and which can be useful to detect the tapping on the title pane. The main API used to achieve this task is *MAknTitlePaneObserver*. The code snippests presented generates an event when the tapping occurs on title pane and also provides a function to handle it. This article can be useful to beginners to understand this soul concept.			
Talk:Sensors Service in WRT	20090930	Deepikagohil	This article represents that- how we can use sensor service in WRT (provided by platform services extentions) on S60 5th Edition devices. Note that this service is introduced for S60 5th edition, thus they do not work with older devices. The detailed description about the Sensor Service API is lucidly explained. The functionalities provided by this API are very well-explained with the related code snippests. Finding possible sensors on the device and Retrieving the sensor Data are clearly explained. Moreover the article also provides an attached simple example, which makes us to understand the Sensor API more clearly. This article is specially created for developers who intend to use Sensor Service in WRT for their application.			
Talk:How to Handle Pointer Events in a Custom Control	20090930	Savaj	Handling pointer events in custom controls is often require during developing custom GUI applications. This article demonstrates how pointer position will validated against the control rectangle and the pointer events will be routed to appropriate control. The article is well explained and useful to beginners.			
Talk:S60 Sensor Framework	20090929	Nirpsis	This article provides fundamental knowledge about S60 sensor framework. The S60 Sensor framework is a set of API for accessing the sensor hardware. The S60 sensor frameworks utilize the sensor data provider plug-ins. In the article, the author has explained three main API that is used in the S60 sensor framework such as sensor plug-in API, channel finder API and sensor channel API with including their functionality. Here, the author has also provided sample of code which shows how to recover a list of all sensors presented in devices and how to recover data from the sensor data provider. Here, the author has given all probable types of sensor that is found from the S60 5th edition SDK version. The download link is also available which is included various class template and a carbide C++ plug-in providing sensors. This is valuable article for providing basic aspects of S60 sensor framework APIs.			
Talk:How to generate Import Library (.lib)	20090930	Kamalakshan	Many beginners often face difficulty in generating a .lib file. Most of the time its a missing .DEF file or not defining EXPORTUNFROZEN in the mmp. This article explains why a .DEF file is required and its purpose properly. Since most developers use Carbide.c++ IDE create a .LIB project, they miss to Freeze the build or add EXPORTUNFROZEN to the mmp. These minor but important details have been properly highlighted in this article. It is very helpful for all those who wonder why their .lib file is not generated.			
Talk:How to check whether Pen Support is Enabled	20090929	Vkmunjpara	When any application is made for touch phones, every display or layout may have touch capability. Means when any persons touch to any button but that layout doesn't have pen support then button will not be clicked. So this article solves this. It uses a method PenEnabled() of AknLayoutUtils Class. This method returns true if the layout is pen supported other wise returns false. So this is basic and useful information for the developer who wants to develop for S60 5th Edition touch phones.			
Talk:Working with LongTapDetector API - S60 Touch UI	20090924	FireSwarog	This article illustrates how to utilize important feature of S60 5th: Long Tap Detector API. With the help of this API you can implement long tap detection in own application, it is especially important if you are using own GUI-components. The article contains code snippets with detailed comments which help to understand the main idea. Also article contains link to the demo-project, it is a convinient approach, because working example is a good point for starting own project.			
Talk:Working with Toolbar API - S60 Touch UI	20090923	FireSwarog	This article illustrates how to use one more new API of S60 5th: Toolbar API. With the help of this API you can orginize buttons on the screen and easy process events. The code snippets contain detailed comments - such approach is a very convinient for newbies. Also author provides demo projects - it is a useful thing for experiments with new features.			
Talk:Working with Stylus Pop-up Menu API - S60 Touch UI	20090922	FireSwarog	The article demonstrates how to use new API of S60 5th: Popup Menu API. This API contains several classes with the help of which you can activate popup menu for stilus. A convenient and user-friendly approach is to display such menu as a result of long tapping on the screen. This article demonstrates such approach. The code snippets contain detailed comments, as a result sources become clearer. The author also provides demo project, which is useful for various experiments with new possibilities.			
Talk:Working with Tactile Feedback Client API - S60 Touch UI	20090922	FireSwarog	Tactile Feedback improves the usability of the touch screens. With this feature, user better understands the reaction of GUI elements, interface becomes more friendly. Also this feature is particularly important for resistive touch screens which are widely used in devices based on S60 5th, because such screens require some effort when pressed. It should be noted that most of standard GUI elements support this feature. In case of creating your own GUI also encouraged to support this feature. You can use this article, which shows a simple example that demonstrates how to use Tactile Feedback. This article also contains a link to the demo project, which is useful for experimenting with new possibilities.			
Talk:Working with Adaptive Search feature - S60 Touch UI	20090921	FireSwarog	Adaptive Search - new useful feature of S60 5th through which you can quickly and easily find the required elements of lists and grids. Standard application "Contacts" on the new devices based on S60 5th, widely uses this approach. If your application displays a large number of information through lists - this opportunity will be very useful because it allows to quickly find necessary data. The article contains detailed code snippets, how to use this API. Furthermore, author added demo project through which becomes easier to learn how to use the new functionality.			
Talk:Eshell on S60 5th edition	20090930	Deepikagohil	EShell is a command shell implemented entirely in Emacs Lisp. EShell is by default included in S60 5th Edition. This article provides a brief introduction to EShell and the soul purpose of EShell in S60 5th edition devices. It also provides introduction to basic EShell commands and provides some			

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SDK	20090930	Deepikagohil	Introduction to basic EShell commands and provides some screen shots for ease to understand the concept. This article provides the primary information about EShell and can specially benefit to developers who have never come across EShell and want to create application by using it.
Talk:How to load images dynamically on WRT Widgets	20090930	Nirpsis	This article gives an overview of the improvement of mobile web technologies such as WRT widgets. Basically, the widgets use the internet technologies such as HTML, JavaScripts, AJAX, CSS and Flash as web pages. In this article, the author explains how to load images dynamically on WRT widgets using JavaScripts, HTML and CSS. Before studying this article, you should basic knowledge within the area of web development such as JavaScripts, HTML, CSS, etc. Here, the author has illustrated sample of code for showing how to load images, how to display animated GIF , how to handle keyevents and how to use intervals in WRT widgets. In the article, the technical references are also provided for developing more widgets. This article is very helpful for beginners.
Talk:Ecom vs Polymorphic Dll	20090926	Savaj	A small but very useful article to understand the difference between Ecom plugin and Polymorphic Dll. From Symbian OS v7.0 onwards, the ECom plug-in architecture can be used as an alternative to polymorphic DLLs. I will always recommend to use ECom plugin instead of Polymorphic DLL.
Talk:How to Create a Stock Widget using Webservices	20090926	Deepikagohil	This article represents code snippests to create a stock widget using webservices. How the whole process works is well explained here with image implementation at the top. This article contains code to create form, CSS- Style sheet and code in JavaScript for the mentioned application. The source code is also attached for our reference. This article can be beneficial to beginners to understand how a widget based application can be created and how it works.
Talk:How to create a mp3 player in Maemo	20090915	Nayan trivedi	This article is one of the simple article of Maemo applications in python.Code snippet shown in this article.This article contains multimedia in This application. The simple player using python for Maemo is shown hear. Maemo multimedia applications - Part II This article is very useful for the Maemo Multimedia developer.This may be useful for beginner of Meamo application developer.
Talk:WRT Widget Logging Example	20090930	Larry101	This article demonstrates how to integrate logging functionality into WRT widgets through the use of Yahoo's YUI logger. The article primarily consists of a fairly simple code example showing how to integrate the logger into your own WRT widget. The code examples demonstrate how to link to the YUI logger stylesheet and JavaScript files, either locally (if you download and save them), or via their URL. A code snippit is also provided to demonstrate how to perform logging via JavaScript. Finally, the code of the html page demonstrating the use of the JavaScript logging function is provided. The YUI logging component can be used for a variety of purposes, not least of which is debugging. Alternatively, it can be useful for tracking user activity.
Talk:Open C Sockets Overview	20090925	Fasttrack	Article does not contain any code or any thing, but its contain a basic function. Article shows the overview of socket module. Article shows all the function of the socket module. Here all function is linked with its own categorized article is a good thing. It's good for learner of socket connection.
Talk:How to get protocol entry	20090927	Fasttrack	Article shows the use of netinet/in.h ,arpa/inet.h, netdb.h, header file. Article shows how to get list of network protocol. Here shows the both method to salvage the list of protocol. One is gethostbyname and second is gethostbyaddress. For both methods, structure class is same. To getting the list via both methods, code snippet for that is also written. Putting image or snapshoot that shows the list of network host is also a good improvement. Setting this code in Network Application may create grand application.
Talk:How to get network host entry	20090926	Fasttrack	Article shows how to get list of network host. Here shows the both method to salvage the list of network host. One is **gethostbyname** and second is **gethostbyaddress**. For both methods, *structure class is same*. To getting the list via both methods, code snippet for that is also written. Putting image or snapshoot that shows the list of network host is also a good improvement.
Talk:How to port Adobe AIR to WRT	20090926	Deepikagohil	Adobe Integrated Runtime (AIR) is a cross- platform environment, which is use to create internet applications. This article represents step-by-step process to port a simple AIR application to S60 WRT(Web Run Time). The article highlights the required information in an abstract, short and organized manner. The article provides the fundamental steps to port an AIR application to S60 WRT and can be very useful to intermediate developers whose soul subject is creating web applications and it also can be beneficial to beginners.
Talk:Explode effect for Java ME Images	20090925	Larry101	This article provides a code example for a nice "exploding image" effect in Java ME. The code example demonstrates how to create an animation which makes it appear as if an image is exploding, with the image splitting into pieces, which are shown to be "blown" outward from the image center. The effect makes use of the translate and setClip methods of the Graphics class to split images up into pieces and move these to create the desired effect. While the code example probably doesn't have very many potential use cases, it does nevertheless serve to show how to create impressive graphical effects using the low-level drawing operations provided by the Graphics object used by low-level drawing classes such as the Canvas. Using similar techniques, programmers can create all manner of interesting graphical effects for use in games or simply for creating impressive screen transitions. The code example is nicely commented and clearly laid out, making it easy to understand and follow.
Talk:Using the Easy API	20090917	Nirpsis	This article provides the basic level of API knowledge of the Maemo platform. Easy is a python based API designed for the development of Maemo applications. Basically, it provides high level Python modular API. Before studying this article, installation of Easy and Python for Maemo are required. A basic knowledge of the maemo and PySymbian are pre-requisite for developers to study this article. In the article, the author has explained an architecture of Easy which contains seven modules:camera,audio,radio, e-mail,contacts,blue tooth and UI. In the article,the Easy architecture is illustrated with a brief description of each modules with code snippet. The article is useful to the developers who wants to develop Maemo application using Python API.
			This article demonstrates a nice animated effect for transitioning between images in Java ME. It shows how an image can be split into slices, which are then shown to "slide" on or off the screen. The code example is well commented and easy to follow because of the use of meaningful property and method names. Various parameters are also provided which are customizable, such as the number of slices an

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Talk:Adding a sliding effect to Images in Java ME	20090926	Larry101	which are customizable, such as the number of slices an image is split into, the direction the sliding takes place, and whether the image slides in or out. While the technique demonstrated probably only has limited application, it shows the kind of professional looking image effects that can be created in Java ME with a little effort. Using similar techniques which make use of the setClip and translate methods of the Graphics class, many interesting and professional transition effects can be created.
Talk:How to obtain and save current location	20090907	Deepikagohil	This article is explained about the how to obtain and save current location this is very good example for the beginners who are working on location based application Class CPositionReader allows to obtain current location. The following code snippet demonstrates, how to obtain location and save it as landmark into default landmark database CPositionReader this class used to read the current location from the map it is very good article.
Talk:S60 View Architecture with UI Design	20090906	Deepikagohil	**Featured article, August 31st 2008 (week 36)** The article describes a basic S60 view architecture with User Interface Design. The IDE used for the same Carbide.C++. A step by step process to make a new S60 project with UID is given in this article. To help us, complete image representation is given. An example which creates a menu is used to explain us the concept. This is a good article for beginners who wants to develop application with UID.
Talk:Create your own email editor or viewer	20090908	Deepikagohil	The article wee-explains about creating an email-editor. It describes inserting email address from phonebook, Resizing the editor control and making line in the editor. The article contains code for inserting e-mail address from phonebook. The header files and library to be included are also mentioned. The capability used for the apllication is "ReadDeviceData ReadUserData WriteDeviceData WriteUserData". Moreover the code is also tested on E70. The article can be helpful to both beginners and experienced people.
Talk:VoIP Audio Service API	20090906	Kamalakshan	This article briefly mentions the use cases for the VoIP Audio Service API (Which has evolved as an alternative for Audio Proxy Server (APS)). Looking at the use case one can easily judge on its usefulness in implementing it in the project.
Talk:Available positioning modules	20090926	FireSwarog	With the help of the code snippet from this article you can obtain list of availbale positioning modules and also you can identify which module is currently used by default. This is an important and useful information in many cases, especially when you are developing LBS-application. You can apply fine-tuning of your LBS-application depending on the default module type.
Talk:Drawing Collapsible Trees in Java ME	20090926	Larry101	This article presents a tree UI component for Java ME. Such components are commonly used in desktop applications as they are useful for presenting hierarchical information. However, no standard tree UI component is available to programmers as part of the MIDP classes. The author presents a tree component which allows programmers to display hierarchical data in a tree format which allows users to expand/collapse nodes and scroll through the tree. While the code is not very well commented, the tree component is nicely organised into two classes, one which contains the logic for a single tree node and the other which contains the logic and presentation code for the entire tree. The code is well written and the use of meaningful method and field names make the code easy to follow and understand. It should be easy for another programmer to make use of this component and customize it as necessary. A link is also provided to see the component in action, showing it to work as specified. Perhaps one shortcoming of the component is that if node labels are too long, the component does not appear to provide logic to wrap text or provide horizontal scrolling functionality. This article presents a useful UI component which will allow designers of Java ME midlets to present hierarchical data in an intuitive format.
Talk:RSS Parser with KXML in Java ME	20090930	Larry101	This article describes how to parse an RSS feed using the kXML library. The article consists of an example which shows how to read the title, description and link fields of items in an RSS feed. The example is kept fairly simple to help illustrate the concepts. The main parse method is broken down into different parts which are explained individually. A link is also provided to download a sample midlet containing the code outlined in the article. The article demonstrates a useful concept. Quite often, midlets download RSS feeds and display this information using some sort of ticker control. The code example is nice and simple and useful explanations are provided for the elements of the parse method which are not obvious (such as reading the "rss" and "channel" tags at the beginning of the feed). The code demonstrates how to open an HttpConnection, retrieve an InputStreamReader object and pass this to the KXmlParser which the kXML library provides.
Talk:Python Hildon Widgets - Part 1	20090917	Nirpsis	Hildon is an application framework originally developed for mobile devices. It is a user interface library for the Maemo platform. It is based on GTK which is the base interface library for most applications on the Maemo Platform. This article is a part of two various articles explaining on Python Hildon Widgets. Before studying this article, developers want to install Python for Maemo. The article provides step by step instruction for developers. Basically, this article focuses on developing a Hildon CalenderPopup,HildonFontSelection which provides the user to choose a different fonts and change its attributes, Hildon GetPassword which displays a text field to enter password with a separate code snippet. one of the best article series for developers who wants to develop Python application for Maemo platform.
Talk:Canvas Loading Bar in Java ME	20090923	Vkmunjpara	If some task may take long time then if user will not see any message or instruction or loading bar, he/she will close the application. That's why Loading bar is used that represents to wait for some time until loading bar is filling its portion completely. Here loading bar is drawn in canvas display and for animation timer is used. This article explains all the modules with example and also with snapshot.
Talk:Transparent Icon in S60	20090928	Deepikagohil	Icons makes your application attractive and recognizable from other applications. This article demostrates an interesting example to create a transparent icon for a S60 application. The code steps and code is demostrated in Carbide C++ and steps are explained with image implementation for our ease. The code snippests with the libraries required are describes in this article. This article can be useful everybody who want to make their application's icon transparent.
Talk:Execution of landmark operations	20090921	Deepikagohil	This article demostrates code snippests for how we can use Landmark API and execute landmark operations. Class CLmOperationHandler, Class CLmProgressDialog are very well-expained with their related code. The article is in organized manner with required libraries and capabilities

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operations			mentioned at the top before presenting the code. The code also contains comments to make it much more understandable for beginners. This article is specially meant for beginners to study Landmark API.			
Talk:Celestial Sphere	20090921	Deepikagohil	Celestial Sphere is mainly used in astronomy and navigation and is a very practical tool for positional astronomy. This article demostrates an example which displays the Celestial Sphere and locations of visible GPS satellites with their signal-strength. The examplary code is attached with this article and it is really good and well-explained with comments. A quick overview for this example is also provided in this article. This article can be very beneficial to intermediate and experienced developers who are working on GPS related applications.			
Talk:Retrieving location information	20090916	Sunil.shetty	Very useful example for developers working on LBS applications. Provides the most basic goal of any LBS based application i.e. constantly monitoring the location of the device.			
Talk:Satellite coordinates	20090921	Deepikagohil	This article represents code snippest to obtain coordinates of the GPS satellites. The article show how we can use CPositionReader class. The code snippest contains comments to make it understandable for beginners. This article is meant for beginners and intermediate develoers who intend to find coordinates of the GPS satellite. You can also refer Celestial Sphere for the same, it will also help you in much more detail.			
Talk:How to handle events in custom controls	20090925	FireSwarog	This article contains the link to the source codes of demo project that shows how to orginize custom controls and how to catch events from custom controls. If you want to orginize own GUI then this article helps you a lot. The demo project contains detailed comments and supports such important aspect as current theme of device. The next step is support of S60 5th and sensor screens.			
Talk:How to calculate distance between two landmarks	20090925	FireSwarog	This article demonstrates strong math skills and illustrates very useful calculation - it shows how to calculate distance between two landmarks. It is a very useful task for all LBS-applications especially in some situations when it is impossible to use standard API for calculations.			
Talk:How to detect internet disconnection from application using red key	20090906	Kamalakshan	This article provides a good way to alert the user when a connection is active and the user tries to close the application by using red key. The code snippet provides method to detect the red key. After implementing this the developer can do any action say ask the user if he really wants to close the application.			
Talk:Encryption of data using JSR-177	20090918	Larry101	This concise article demonstrates how to perform encryption and decryption easily using Java ME (and the JSR-177 API in particular). The article demonstrates the use of the DES symmetric encryption algorithm. The String "THIS IS A SECRET MESSAGE" is encrypted using the key "SECRET!!" (which must be 8 bytes in length). The article shows how to convert a message to a byte array, initialize a Cypher object using a key, and perform encryption and decryption.			
Talk:How to select and show a landmark	20090922	Deepikagohil	This article represents code snippests and explaination for mainly three tasks: selecting landmark from database, reading the landmark data and displaying that landmark data through a dialog. All three tasks are very well performed and explained by this article. The article contains the detailed information about libraries and header files and capabilities required to perform these tasks. Code snippests contains comments and make the code easy to understand for beginners. APIs used for the demostrated example are CLmkLandmarkSelectorDlg , CLmkCategorySelectorDlg. This article is mainly made for beginners for their further progress.			
Talk:Custom Text Input in Java ME	20090918	Larry101	When using a low-level screen such as a Canvas, the normal UI controls for entering text are not available. As a result, programmers often have to write their own code to mimic the normal text entry components. For this reason, this article provides a useful shell for doing just that. The code example provided implements basic multi-tap text entry (where multiple characters are assigned to each key). The code handles basic functionality, such as clearing letters, caret positioning and handling the delays between button presses (distinguishing between letter switching and moving onto the next letter). Because this is the type of code programmers often have to write when text entry on a Canvas is required, this article is especially useful. While the code example is far from complete, it provides a useful starting point for programmers wanting to implement similar functionality.			
Talk:Verisign signing - Java ME	20090923	Larry101	This article provides a useful overview of the process involved in signing a Java MIDlet. If anything, the title is a bit of a misnomer, as the steps involved are no different whether you are signing with a Verisign certificate or a Thawte certificate. The article gives a nice step by step overview of the different steps involved in the process, although the steps are more than likely "borrowed" from another source, as cited at the bottom of the article. One small thing to note is that the path to the JDK is usually in c:\program files\java\jdk these days, rather than the path specified in the article. One other thing to remember when signing using the steps described in this article – don't forget the password you use when generating your keystore! You will need this once you have signed your keystore using the digital certificate in order to unlock your key pair. "Step 2" under the heading "Signing the Midlet" can actually be accomplished easily using NetBeans, by right-clicking on the project name, going to Properties ->Build->Signing. You simply need to import your keystore and your installer files will be digitally signed. This eliminates having to enter textual commands using a text editor or command-line interface and speeds up the building process as it only has to be performed once. From personal experience, there is quite a difference in price between the different suppliers. If the devices you are targeting support all the different certificates, go for the cheapest option!	20090924	Vkmunjpara	This article is about signing your application with third party certificate. Because if you want to use some API like JSR-75 , JSR-205 and JSR-135 in your application, you want to first sign your application to a particular certificate. Here in this example VeriSign and Thawte is given. This article briefly explains how you can sign your application to third party. So this is an important information for every application developer.
Talk:How to list files and folders in Java ME	20090929	Larry101	This article demonstrates basic use of the PIM (JSR-75) API. It shows how we can list the files and folders available in a certain file system root using this API. This is a fairly basic article, and mainly consists of a code example, showing how to retrieve a list of all the files and folders in the c:/ file system root (usually the phone's built-in memory). The code example shows how to use a FileConnection object and its "list" method to retrieve an enumeration containing all the files and folders at a particular file path. The code also shows how to navigate through this enumeration, how to distinguish between files and folders, and how to find out file and folder size. The article is very simple, but the code example does a good job of demonstrating several fundamental concepts that that File Connection API is commonly used for. This article is therefore useful reading for those who are new to the API, or who just want to find out how to get a list of files and folders using the API.			
			Client-Server Framework in symbian is bit different from			

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Talk:Client side implementation of a server	20090905	Savaj	client-server framework in computer system. This article describes step by step instructions in creating client side server which connect to server on server side. The author demonstrates how to create R class to use client side API, such as RSessionBase. Author also demonstrates how to check whether server (server side server) is running or not before starting client side server. This article show code example that use synchronous requests to communicate to server. This code example is well designed and followed naming convention, which helps to understand code easily. Comments help easily to navigate in the code.
Talk:How to retrieve e-mail contents	20090912	Narendrachinni	This article they had explained about the how to retrive e-mail contents from the website like gmail,yahoo,hotmail like that so here in this article they had explained about how to retrive the entires and then a seperate program for the retriving for the From and the subject of the e-mail and next program had explained about the retrive the body of the e-mail in this way they had explained about how to retrive the data from the e-mail This is very help full to all the developers who are working on webbased projects in the symbian .Even i got an idea about application by seeing this article
Talk:How to read contacts using JSR 75	20090919	Vkmunjpara	This article mekes us understand very well about PIM api. Easy to understand. Here this article creates a midlet that displays a name and contact numbers in a form.It has a class that is PIMMidlet that has two instances of ReadPIM and Display. First the Display class sets the current display as a form that derives a class that is ReadPIM. readContacts() method creates a contact list and append it into the form.
Talk:Utilizing Nokia VoIP Client	20090919	Deepikagohil	A very good article, which gives overview and essential requirements to start developeing application for VOIP calls. The required APIs and their functionalities are explained with an example. The example is really good. The article is very useful to intermediate developers who wants to use VOIP in their applications.
Talk:How to list extended fields of ContactList	20090925	Larry101	This article demonstrates the use of the Personal Information Management (PIM) API (JSR-75) in Java ME. It addresses an aspect of the API which is not very well documented, namely the use of so-called extended fields for Contact items. The article shows how to add a Contact item to the ContactList on the phone which makes use of all the extended fields which are available. Aside from all the standard fields which are listed as static fields in the Contact class, some devices also support a whole range of other fields. This functionality would therefore be useful for developers working with the Contact database on devices where these extended fields are supported. The code example is fairly simple and therefore largely self-explanatory. The two "tricks" in the code are explained at the end of the article, demonstrating how to identify an extended field, and how to identify the anniversary field, which expects a date data type.
Talk:How to encode URL in Java ME	20090926	Kalki	This article demonstrate an example of URL encoding. When MIDlet send request using get method its become crucial to encode the URL.At the server end the appended data at the end of URL must be converted to meaningful information as sent by client. Code Example is perfectly working and runs successfully.To do URL encoding the given code is ready to be executed.
Talk:How to know features supported	20090907	Savaj	Some device might not support some features, for example some device do not have camera at all. For developing generic application, that can be installed on all device of that platform, need checking of some feature is supported or not before using that feature. Taking another example, before accessing bluetooth API, we must check whether this feature is supported or not. This article describes how to get available feature using API CFeatureDiscovery. This article is useful to both, beginners as well as experienced developer.
Talk:General usability issues	20090919	Sangramp@cybage.com	Even though the article titles 'General usability issues', it describes the General issues in detailed format. Before stating the guidelines, the article tells you what usability is all about and what is the target criteria for usability, the end user. The detailed color selection tips, end user involment in design/development phase, navigation guidelines really make this article useful. The article is recommended for the beginners in the area of usability.
Talk:Focus group	20090918	Larry101	This article provides a balanced and thorough discussion of the use of focus groups as both a formative and cumulative form of usability evaluation and/or as part of a user-centered design process. The article highlights many of the potential advantages and disadvantages of focus groups. Probably the biggest risk in terms of focus groups is the cost involved, in terms of time, money and effort. As the article states, if a focus group is not well-run, it can end up being dominated by a few individuals and the opinions expressed may not reflect the true group consensus. Focus groups are probably most useful to evaluate and discuss prototypes throughout the design process. Particularly in the context of a mobile environment, it is important to provide users with some prototypes, whether low-fidelity paper prototypes, or even flash demos to facilitate discussion of design ideas. The article provides a thoughtful discussion of the issues surrounding focus groups and would be a useful read for anyone considering using a focus group as part of their design or evaluation process.
Talk:How to detect when a charger is connected	20090910	Narendrachinni	This article had explained about the detect when a charger is connected beacuse we will see in every mobile this sort of applications and many peoples are eager to know how to do this so this article will help to the beginners and also its very intresting for the beginners who are started programming on the symbian c++
Talk:How to hold a call	20090905	Kamalakshan	The article illustrates on how to hold a call asynchronously using CTelephony API's. Developers requiring this functionality can directly make use of this class in their project or can implement a similar one in their project referring to this one.
Talk:Preview Pop-up	20090920	Deepikagohil	Pop-up is a small window, which is used to give some information to the user and it appear with the main active window. It can be used for giving alert messages or simple messages to the user. This article clearly presents the approach to create a pop-up in your application with Symbian C++. Contructing, showing-up and hidding-up the pop-up are illustrates with the code snippest. The Pop-up is basic and simple approach of Symbian C++, but I really appreciate the users who contribute on these kind of basic concepts and help beginners. This article will help beginners to learn to create pop-ups.
			This article describes a method which is sometimes used in usability testing, known as the think aloud protocol. One of the goals of usability testing is to identify usability problems in an application. However, one of the problems with many usability testing techniques is that while it may be fairly easy to identify problems, it might not be quite as easy to identify the root cause of these problems. As the article explains, think aloud allows us (to a certain extent) to "read the mind" of the user. This can play an extremely important role in helping

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Talk:Think aloud	20090924	Larry101	us understand users thought processes as they use an application and thereby identify the root cause of usability problems. The article does well to give a detailed overview of what the think aloud protocol is and how it works. I was interested to read about a variation of think aloud, called talk aloud, which I hadn't heard of before. One thing that is missing from this article is a thorough discussion of some of the disadvantages of using the think aloud protocol. The success of this technique depends to a large degree on the test participants. Some participants may be more reserved or shy than others, and prompting may be necessary to get them to speak out loud. Others may worry that they appear inept or stupid and are therefore reluctant to reveal what they are really thinking, and rather say what they think the person running the usability test wants to hear. Nevertheless, this article is a useful addition to the wiki.			
Talk:Error message	20090927	Larry101	This article covers a topic which is important to almost every application – error messages. The author identifies several common problems with error messages (that they are too vague or difficult to understand). Four guidelines are provided for the design of error messages. Each of these is backed up with a thorough motivation and suggestions for how to implement the guideline. The article ends with links to two excellent references on the subject of error messages. The article is written in a nice, informal style which makes for light reading. The example error messages shown are well-chosen and help illustrate the points made in the article. What makes the article more compelling as that these are just the kind of unintuitive error messages that one still often sees in mobile applications. Good motivation is provided for all the suggestions made. An interesting article on an aspect of usability which is often neglected.			
Talk:Dialog usability	20090921	Nirpsis	This is one of the nice article in usability. In GUI, a dialog box is a special window , which is used in user interface to present information to the users. Basically, dialog boxes are classified as model or modeless. The author has mentioned some basics of dialog usability with the number of screenshots by comparing some correct or incorrect application design. The author has given some basic guide lines that is required while using dialog box. The author has explained how to choose right dialogs at the right places and how to choose the right layout and fonts for displaying the content in the dialog. This article provides an excellent knowledge of dialog box usability for beginners.	20090918	Sangramp@cybage.com	A comprehensiv article on the usability of using Dialog boxes in mobile applications. The article is recommended to beginners to keep in mind certain basic usability aspects for using Dialog boxes. The article compares the ideal design with the poor design with help of the images. The distinction made using the images/examples make it easy to understand the Dialog usability.
Talk:FileConnection & PIM API	20090913	Vkmunjpara	This article helps to know that how you can store a file to a mobile or web server.This article addresses a great use of FileConnection (FC) API. So if your application needs to store manipulated data to a file then this concept is definitely helps. Good for beginners.			
Talk:Mobile testing	20090922	Larry101	Testing is an integral part of any software development methodology. This article discusses the unique requirements for testing of mobile applications as compared to testing desktop applications. The article highlights some key factors which are unique to the mobile environment. These are the limitations in terms of hardware and processing power, differing contexts of use, and differing user expectations. Several differences regarding testing of web applications/web sites on mobile devices are also presented, highlighting the relative newness of the mobile platform for browsing the web as a motivation for more thorough testing and evaluation. By highlighting the differences between testing in the mobile and desktop environments, this article supports the widely held view that testing of mobile applications needs to be done differently. Different platforms and contexts of use need to be considered. In short, testing cannot just take place in the laboratory, but also in a natural context of use. This is the environment the application will be used in, so it needs to be tested in this environment. This is a well-written article.			
Talk:Heuristic evaluation	20090916	Larry101	This article discusses a useful method for evaluating applications for the purposes of identifying usability problems, namely heuristic evaluation. The article primarily presents Jakob Nielsen's 10 usability heuristics. While this set of heuristics was originally drawn up for applications on the desktop, the heuristics still provide a useful framework for evaluating mobile applications. Heuristic evaluations are a relatively quick and easy way of identifying usability problems in an application. The list highlights several issues that developers of mobile applications need to remember, such as: - providing an exit option on every screen - minimizing the need for users to remember complicated lists of options; and - letting the user know what the system is doing at all times (visibility of system status) It is important to remember that a heuristic evaluation should not be conducted by a single expert user, but by several experts, in order to identify common problems and in order to ensure that as many usability problems as possible are uncovered. The article includes a useful discussion of the advantages and disadvantages of this evaluation technique. In the context of mobile applications, heuristic evaluations have also been criticized for not considering the context of use of mobile applications. Supplementary techniques such as heuristic walkthroughs and contextual walkthroughs, which consider the intended scenarios and context of use of the application in question have been suggested as a way of overcoming this shortcomings of heuristic evaluation in the mobile environment. For more information see here			
Talk:XHTML Mobile Profile	20090922	Larry101	This article discusses the XHTML Mobile Profile. XHTML mobile profile is a subset of standard XHTML, and is designed to render on small screen devices. The article highlights several differences and similarities between standard XHTML and XHTML mobile. One of the major differences is that tables in the mobile profile cannot be nested and do not have borders. The article is at a very introductory level. For a more detailed discussion of XHTML mobile see: XHTML Mobile			
Talk:How to Create a Scrollable Container	20090919	Deepikagohil	Controls are basic elements of user-interaction in user interface. The control is a rectangular area which can take user input and/ or display output. The rectangular area which contains controls is called container. This article well-explains the way to scroll the container up and down with its contents i.e. creating an scrollable conatiner. Moving the entire container up and down. It can be useful when it is limited screen size and many controls are present in one view only. This article provides the code snippest to do so with comments at varios places to let it understandable. The article can be useful to intermediate developers to create scrollable container.			
			This is a useful and very well-designed article. It demonstrates how to perform long operations with the help			

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Talk:Synchronous operations	20090908	FireSwarog	of another thread and how to synchronize operations on the main thread with operations on additional thread. Author demonstrates the ideas of multitasking via UML-diagrams, also the article contains link to the working example, which helps to understand how to implement multitasking in own project. This article is a very useful, especially for beginners who are trying to use such features as thread and processes at first time.
Talk:How can I find out when the value in the TextField has been changed?	20090925	Larry101	This is a fairly basic article which demonstrates how to listen for changes to Item instances contained in a Form. As the article points out, this can be useful in order to implement functionality such as auto-complete, where the list of options needs to be updated in response to users entering text in a Form component such as a TextField. A simple code example is provided which does a good job of demonstrating how to implement the ItemStateListener interface (and the itemStateChanged method). It also shows how to set the ItemStateListener for a form. Usefully, a link is also provided to download a midlet which demonstrates the use of an ItemStateListener implementation in an actual application.
Talk:How to send particular Event to External application in Symbian	20090920	Deepikagohil	Many times our application needs to interact with some another application/process to use its events or get some information from it or use its data. This article provides the code snippest to send a particular event to external application in Symbian. The code snippest is easy to understand and can be very useful in many situations while interacting with another process. The article is specially meant for beginners to understand this soul concept.
Talk:How to check whether the application is running	20090903	Kamalakshan	Many a times it is required to identify if an application is running or not. This code snippet provides static function for checking the same. It is a very simple and straight forward example and is self explanatory.
Talk:How to Draw a circle in Java ME	20090916	Vkmunjpara	Good for beginners. when we develop any software,Home page designing is first concerned.So to draw circles,rectangles,ellipses etc.. ,This article is helpful to us.How to fill objects are also given in this article..
Talk:How to send message to a specified application	20090920	Deepikagohil	This article presents code snippest to send message to a specified application. Many times we need to interact with some another application. This example code presented here sends a specified message, which is stored in TDesC type buffer, to another application. This article can be beneficial for beginners.
Talk:How to add a video clip to a contact in Java ME	20090929	Larry101	**Review:** This article demonstrates how to set a video clip as a ringing tone for a contact using Java ME. This has only recently become possible with some of the more recent 5th edition firmware releases. The article demonstrates how to add a video clip as part of a new contact using the PIM API (JSR-75). It demonstrates how to get a ContactList object, create a new Contact object, set the required attributes. Most importantly it demonstrates how to assign a video file to a contact, either as an extended field (EXTENDED_FIELD_MIN_VALUE) or as VIDEO_URL field. It also shows how to check whether the VIDEO_URL field is supported. The article demonstrates a nice new feature that allows us to use video files as ringtones. Just beware, as the code provided in this article is only currently supported by very few devices (Series 40 5th Ed. FP1 devices, firmware 5.xx or newer). The code example is well written and pretty easy to understand. Most of the code is the same as would normally be used to add a contact using the PIM API. The new part is checking whether the video field is supported and setting the value of this field. This is a useful article demonstrating a fairly new concept.
Talk:Enumerated Text Popup Example	20090918	Deepikagohil	This article represents how to instantiate "Enumerated Text Popup" control using Carbide C++ UI designer. There are some situations, where we can not add add items to the Enumerated text popup control and it may panic. The solution is to define them in resource file manually. The article well-explains all related concepts in detail with code snipest. The article demostrates a good example for that. Also provides source code for the example for our reference. The article is specially meant for intermediate developers.
Talk:New File Service Client API	20090929	Savaj	New File Service Client API are useful for creating a new service client. The application that is started as file server client is identified by application UID. This article demonstrates the use of New File Service Client API to use camera service client. Note that this API, New File Service Client API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Named Pipes Example	20090917	Narendrachinni	This article had explained about named pipes In computer programming, a named pipe is a method for passing information from one computer process to other processes using a pipe or message holding place that is given a specific name. Unlike a regular pipe, a named pipe can be used by processes that do not have to share a common process origin and the message sent to the named pipe can be read by any authorized process that knows the name of the named pipe. A named pipe is sometimes called a "FIFO" (first in, first out) because the first data written to the pipe is the first data that is read from it. This article is help full to the beginners who are doing programming for inter process communication
			This article had explained about the message queue here before that we have to know about what are message queue overview: Message queues provide an asynchronous communications protocol, meaning that the sender and receiver of the message do not need to interact with the message queue at the same time. Messages placed onto the queue are stored until the recipient retrieves them. Most message queues have set limits on the size of data that can be transmitted in a single message. Those that do not have such limits are known as mailboxes. Many implementations of message queues function internally: within an operating system or within an application. Such queues exist for the purposes of that system only.[1] [2] Other implementations allow the passing of messages between different computer systems, potentially connecting multiple applications and multiple operating systems.[3] These message queueing systems typically provide enhanced resilience functionality to ensure that messages do not get "lost" in the event of a system failure. Examples of commercial implementations of this kind of message queueing software (also known as Message Oriented Middleware) include IBM's WebSphere MQ (formerly MQ Series), Oracle Advanced Queuing (AQ) within an Oracle database, and Microsoft's MSMQ. There is a Java standard called Java Message Service, which has, associated with it,

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Talk:Message Queues Example	20090917	Narendrachinni	a number of implementations, both proprietary and free software. There are a number of open source choices of messaging middleware systems, including JBoss Messaging, JORAM,[4] ActiveMQ, Open Message Queue, RabbitMQ (an implementation, in Erlang, of AMQP),[5] ISectd,[6] Skytools PgQ (created by Skype, runs atop PostgreSQL),[7] and Apache Qpid.[8] In addition to open source systems, hardware-based messaging middleware is a growing trend with vendors like Solace Systems, Sonoa and Tervela offering queuing through silicon or silicon/software datapaths. Most RTOSes, such as VxWorks and QNX operating systems encourage the use of message queueing as the primary IPC or inter-thread communication mechanism. The resulting tight integration between message passing and CPU scheduling is attributed as a main reason for the usability of RTOSes for real time applications. Early examples of commercial RTOSes that encouraged a message-queue basis to inter-thread communication also include VRTX and pSOS+, both of which date to the early 1980s. usage: In a typical message-queueing implementation, a system administrator installs and configures off-the-shelf message-queueing software (a queue manager), and defines a named message queue. An application then registers a software routine that "listens" for messages placed onto the queue. Second and subsequent applications may connect to the queue and transfer a message onto it. The queue-manager software stores the messages until a receiving application connects and then calls the registered software routine. The receiving application then processes the message in an appropriate manner. There are often numerous options as to the exact semantics of message passing, including: Durability (e.g. - whether or not queued data can be merely kept in memory, or if it mustn't be lost, and thus must be stored on disk, or, more expensive still, it must be committed more reliably to a DBMS) Security policies Message purging policies - queues or messages may have a TTL (Time To Live) Some systems support filtering data so that a subscriber may only see messages matching some pre-specified criteria of interest Delivery policies - do we need to guarantee that a message is delivered at least once, or no more than once? Routing policies - in a system with many queue servers, what servers should receive a message or a queue's messages? Batching policies - should messages be delivered immediately? Or should the system wait a bit and try to deliver many messages at once? When should a message be considered "enqueued"? When one queue has it? Or when it has been forwarded to at least one remote queue? Or to all queues? A publisher may need to know when some or all subscribers have received a message. These are all considerations that can have substantial effects on transaction semantics, system reliability, and system efficiency. synchronous and asynchronMany of the more widely-known communications protocols in use operate synchronously. The HTTP protocol – used in the World Wide Web and in web services – offers an obvious example. In many situations this makes perfect sense; for example, a user sends a request for a web page and then waits for a reply. However, other scenarios exist in which such behaviour is not appropriate. For example, an application may need to notify another that an event has occurred, but does not need to wait for a response. Another example occurs in publish/subscribe systems, where an application "publishes" information for any number of clients to read. In both these examples it would not make sense for the sender of the information to have to wait if, for example, one of the recipients had crashed. Alternatively, an interactive application may need to respond to certain parts of a request immediately (such as telling a customer that a sales request has been accepted, and handling the promise to draw on inventory), but may queue other parts (such as completing calculation of billing, forwarding data to the central accounting system, and calling on all sorts of other services) to be done some time later. In all these sorts of situations, having a subsystem which does asynchronous message-queuing (or alternatively, a broadcast messaging system) can help improve the behaviour of the overall system. This help full to beginners			
Talk:Language and terminology	20090922	Larry101	This article covers two aspects of language use in terms of application development, namely localization and terminology. Localization refers to literally "speaking the user's language". If an application is to be used in countries with different languages, then it should be possible for users to customize the language of the application. Sometimes this may even need to extend beyond the language to the meaning of the symbols and icons used. Often different symbols have different connotations in different cultures, which could lead to unexpected usability problems. The article provides some useful links to articles which help programmers address these issues on the different platforms available for Nokia devices (Symbian C++, Java ME and Python). The discussion on the correct use of terminology in this article is very useful and highlights several important issues which should be considered when designing menus and dialogs in mobile applications. Many of Nielsen's usability heuristics (link) come to mind here, including the need for consistency and standards (use consistent terminology wherever possible, both within your application and across applications) and recognition rather than recall (users should be able to infer what a function does from its label, rather than having to memorise commands). Good use of humour is made to demonstrate poorly worded error dialogs. It is important that when an error does occur, the system should (wherever possible) provide help on fixing that error. For example, if the user enters a date in the incorrect format, the system should explain the correct format, rather than saying something like "an error occurred".			
Talk:Java ME FAQ	20090930	Deepikagohil	This article covers most frequently occured queries during developing a JAVA ME application with their solution. The article is organized, well-written, lucid and fully in FAQ manner. It covers the frequent problems occuring during initial stages of development to the last stage i.e. from installation of SDKs to installing the brand new application to the mobile device. The solutions provided by the article are really good and helpful. This article can specially benefit beginners and intermediate developers.			
Talk:Retrieve General Telephony information using	20090905	Kamalakshan	Very handy code snippets for retrieving general Telephony information. The example provides code snippets for retrieving the caller name, number and integrated hands free	20090908	Narendrachinni	This article had explaine about the Retrieving general telephony information it is used to get the hand free status and caller name

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Shared Data API			status. Also included is an example project implementing the same. Beginner can easily make use of these code snippets.			and these is help full for the beginners who are intrested to do the applications in telephony
Talk:DLL	20090909	Deepikagohil	Dynamic Link Library (DLL) is a very useful feature in Symbian C++ as it provides to us its code and data to used in one or more programs at the same time. It provides us a shared library whose methods can be used in our applications by importing and help us by not making us to create those classes from scratch. It accomplishes the task of reusability. The libraries generally have file extention like .DLL, .OCX, .DRV. This article has abstractly presented us the concept of DLL and various types of DLLS in Symbian OS (i.e. Static interface DLL and Polymorphic interface DLL). The article is help to beginners only.	20090926	Savaj	A basic explanation of DLL (static and polymorphic) is very useful to understand the concept of DLL. How DLL is loaded in memory and how it promote code reuse is explained in efficient way. Although beginners may find it hard to digest, this article is very useful to learn about DLLs in symbian. Also note that one line paragraph "Alternative to Polymorphic Interface DLLs" is really important. I will prefer to use ECOM Plugin instead of polymorphic dll, as writing an ECOM Plugin is far more simple than writing a polymorphic dll.
Talk:Using Fast Fourier Transforms in Symbian C++	20090910	Deepikagohil	Fast Fourier Transform is very imortant algoritm in Digital Signal Processing(DSP). The FFT if used in S60, adds many additional features in our application. This article simply explains how to perform FFT in our S60 application.The abstract-expaination and source-code both are given in the article. The article is essential for intermediate and experienced developers which will help them to perform more complicated tasks.			
Talk:Epocwind.out	20090904	Savaj	A log file, file that lists actions that have occurred, is useful to get idea of errors. Usually emulator show Extended panic code, if you enabled them, when application crash. But sometime emulator itself will crash, at that time we need to check logs file from Epocwind.out. Epocwind.out also gives you information for missing capability by raising *PlatSec* WARNING message. This article explained how to find and access this Epocwind.out file. Content of this article is small, but very useful to both for beginners and for experienced developers. This will save time to debug application.			
Talk:Disabling autostart by default	20090904	Savaj	Auto start is an important feature in any platform including symbian. Auto start will start application on reboot of device. But as per Symbian Signed criteria, Autostart at device boot-up (UNI-11), you need to provide a function in your application to enable/disable the autostart or autoboot functionality. For the time being, there is no public API to address this problem. This article explained two workarounds to address this issue, using resource and using separate launcher application. Using this article anyone can disable auto-start by default.			
Talk:Basic Python Elements	20090918	Rahulvala	This article is the best for the beginner who are just starting their development in python programming. This article give information about variables, operators and how to use conditional loops and functions . Also this article gives information how to **use modules**. At last user can develop **simple application** using python programming. This article gives useful application for the beginner.	20090921	Yashwanth.krishnan	This article is must read for all the beginers in **Python Language**. Python is an *dynamic programming language* which have wide applications in mobilaizing applications. The auther described allmost all the syntaxes of the basic python features with some suitable examples. Also can be seen that the key concepts of Python like Variables, Operations, Control structures(Loops & Cond. statments) etc The mobile applications for S60 OS is devoleped using **PyS60** Introduction to PyS60 The PySymbian needs some modules(Standard Library Functions) to imported(linked) to the program. The auther briefly describs the method of importing modules to our programs. He also explains the developing, saving & testing the S60 applications..
Talk:Socket Connection to an IP Address	20090924	Fasttrack	Article shows the how to connect ip address with access point. It's a common thing for all online or internet application. As its a common, but it also a very grand thing in mobile world. Without a socket connection mobile-web applications are nothing. no improvement needed in this article. link of some another article is also a good thing in this article.			
Talk:How to convert TBuf16 to char(buffer)	20090927	Fasttrack	Source file and introduction explain every thing about the article. In many application TBuf16 are used. Article helps in while writing a code of a particular application. Link this article with Tbuf16 introduction article may help to introduce the user with that Tbuf16.and know more clearly of difference way of use.			
Talk:Start new Socket Connection to Access Point	20090930	Fasttrack	Article demonstrates the function of how to Start_new_Socket_Connection_to_Access_Point from the connection. This function is very constructive. Article shows the use of sys/socket.h header file. Article also shows file descriptor "sockfd" from the system.It's a very good way too become skilled at the programming. Adding image may advance the article. It's a common thing for all online or internet application. As its a common, but it also a very grand thing in mobile world. Linking this article with " C_Sockets:_connect_method " etc. is a good improvement.			
Talk:How to get incoming voip call sip uri	20090912	Narendrachinni	This article had explained about how to get incoming voip call sip uri here before that we have know about what is VOIP here VOIP means voice over internet protocal this protocal is used for connecting the pc and mobile while calling we can make a internet calls from pc to mobile by using this protocal this is very use full becuase the charge for this type of calling is very chip This is article had explained how to get incoming Voip call The CTelephony class does not work for VoIP calls. So we cannot use NotifyCall and GetCallInfo to get notification and caller number for VoIP calls. The workaround is to use Logengine to get incoming VoIP SIP uri. This article is very usefull for the beginners and intermediate and as well as experinced developers also			
Talk:How to create SyncML Data Synchronization profile	20090929	Savaj	This article demonstrates the use of SyncML Client API to create SyncML data synchronization profile, display all existing profile and show details of particular profile. Note that this API, SyncML client API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.			
Talk:How-to create self-updating WRT widgets	20090918	Gaba88	A software needs some improvement and to achieve the same it needs a kind of update feature. The update feature should interact with the outer resource and then should decide weather to update the software or not. In the case of WRT Widgets the tasks become quite simple as they are frequently connected withe web. The article is an excellent example of achieving the auto updating task of web, the code explains clearly two functions which checks for updates and versions if new is available it will download that and replace the existing one.			

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			This is an article of Basic level beginners can easily go through it.			
Talk:How-to use the menu object in WRT widgets	20090924	Deepikagohil	Many Beginners may find it difficult to create menu in WRT widgets. This article represents almost all the required information in a quick but precise manner about the same. The article mainly divides the presentation in two parts: first it exlains about JAVAScript Menu object and then JAVAScript MenuItem object. A quick overview about both JAVAScript Menu object and MenuItem object with their relative methods and properties are clearly described. All the most useful methods of the relative objects are very well explained with code snippests. Apart from that article also provides an example to understand this with less efforts. The article is specially for beginners and intermediate developers.			
Talk:EclipseME	20090917	Vkmunjpara	This article shows features of **ElipseME** that is a **plugin for Elipse IDE**.If you are used to with Ecllipse IDE,then it will be helpful.This article also describes what to do after installing EclipseME,and how to create a new project using **MTJ** option...			
Talk:Usability engineering	20090928	Deepikagohil	Usability is the ease by which a developer creates a more effective and efficient application. This article well-explains the term usability in mobile application development. How usability is imporatant in an application development life cycle and which things should be kept in mind in terms of usability is lucidly explained in this article. Author has also suggested a reference book to get get into more detail. This article provides some essential and primary information about usability which can be helpful to improve efficiency of our application. It also provides some links to related imporant articles for further reference. Providing an organized and simple approach about usability, this article can be useful to beginner designers.			
Talk:How to get MAC address of a WLAN device	20090910	FireSwarog	This code snippet demonstartes how to obtain WLAN address of the current device. It works fine, but only if the device is now connected to WLAN. Sometimes such information is very important, especially for identification. This code snippet works fine on my Nokia 5800.	20090909	Kamalakshan	This article provides code snippet for reading the MAC address of a WLAN device. It has provided enough information on both scenarios when the WLAN is on and off. MAC address is sometimes used by applications along with other ID's like IMEI to identify and track users.
Talk:Active Scheduler	20090906	Savaj	Application can have one or more active object and thus it require active scheduler. Active Scheduler is responsible for scheduling active objects. Active objects is considered as parallel to multi-threading in symbian. Active Scheduler schedules Active objects in a non-pre-emptive way. By default GUI application have Active scheduler, but for exe we need to create and add active scheduler before using active objects. This article describes what is active scheduler and how to add it in GUI application as well as exe, which helps beginners to implement Active objects in application.	20090906	Deepikagohil	The most critical feature of Symbian OS multi-tasking. Mainly Symbian OS is designed for limited memory devices like mobile phones. In other operating systems used in the devices with much memory e.g. personal computer, multi-tasking is acheived by multi-threading. But because of limited memory, in symbian there is only one thread and multi-tasking is acheived by active objects. Active Scheduler is used for scheduling of Active objects. Generally in Active objects non-pre-emptive scheduling is used. This article gives us the basic information about the active scheduler and how to create it. The construction of active schedular is described breifly. How to create an Active schedular and add active object in it is well- explained in the mentioned article. For a beginner Active-Schedular becomes a complex topic to study. The simple way to learn this feature is given in this article which can become useful to the beginners.
Talk:Sending an File Attachment using CSendUI	20090914	FireSwarog	This small code snippet demonstrates how to use standard S60 approach for sending data. It allows you to select particular channel (bluetooth, email, irda, etc) and to send file via selected channel. One important note: this approach requires important capabilities, so it is impossible to use self-signed procedure. This example works fine on Nokia N96.	20090928	Savaj	CSendUI is useful class to send files or data via available services. Sending services can be based on the MTM or ECom architecture. You can send data or files using available service like SMS, MMS, email, irda and bluetooth. Usually CSendUI require LocalServices, NetworkServices, ReadDeviceData, WriteDeviceData, ReadUserData, andWriteUserData capabilities, but if DRM protected files are being sent via MMS, then DRM capability is required in application. This article describes how to send file using available services, which helps begginers as well as experienced developers. Also note that you have to use CSendAppUi API for developing application for 2nd edition devices.
Talk:How to Open SMS or MMS Editor	20090919	FireSwarog	This example contains code snippet which shows how to run SMS/MMS editor for creating and sending new messages. The realization is based on SenUi feature. You could insert this feature in your project. There are a lot of cases when such feature is really necessary. For example you could use it in your own messaging applications.			
Talk:Star-hash codes	20090930	Deepikagohil	Star-hash code is used to retrieve useful information from the phone or even reset the phone. This article provides a brief overview about Star-hash codes. What is a number starting from star-hash code, where it is used etc. are very well-explained in a simple language by the author. The functionality of star-hash number in various approaches are lucidly illustrated e.g. how to use it for restoring factory settings. This article is specially meant for beginners, who have just stepped into the world of mobile application development.			
Talk:How to get local Bluetooth Device Address	20090910	FireSwarog	This example demonstrates how to obtain bluetooth address of the current device. You could obtain this information if you type special number *#2820# with the help of keyboard on device. Or you could obtain this address with the help of the code snippet from this article. Bluetooth address of a device could help you in case of identification. This code works fine on my Nokia 5800.			
Talk:How to build a COM object on Symbian OS	20090920	Deepikagohil	COM is "Component Object Model", which makes two software components communicate i.e. it is used for inter-process communication. This article gives basic overview for COM and explains how to build a simple COM object with Symbian C++. The code snippest to build a com object is also given with comments. This article represents primary information for COM and can be helpful to beginners in their initial learning stages.			
			This article had explaine about the getting of IMEI no it			

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Talk:How to get IMEI on 7710	20090908	Narendrachinni	means (International Mobile Equipment Identity number) is a unique number associated with every GSM and UMTS mobile phone and can help you find your stolen cell phone easily. Save your IMEI number today.We could use PlpVariant to get imei in S60 2nd Edition development this example help the beginners to retrive imei no .
Talk:How to create access points	20090909	Narendrachinni	In this article they had explained mainly about how to create a access point ,the access point is internet network to which a mobile can be connected and the set of settings which using for the connection to the internet and this article had explained clearly how to do a program for creating the access point this help full to the beginners.
Talk:Constructing HTTP POST Url parameters	20090912	Narendrachinni	This article had illustrate about how to contruct http post url parameters here in this article they had explained about clearly by taking an example Before that We have to know what is http means hypertext transfer protocal if we want to get or post some thing from the mobile to webserver we are using this protocal and we use some methods like get and post ,get is for getting data in webserver and post is used to make connection with the webserver and mobiles so these article is very help full to beginners who would like to do web based projcets even i am doing web based projects it will help you.
Talk:AppUi::Exit() vs User::Exit()	20090930	Kamalakshan	This article explains very well the difference between using AppUi::Exit() and User::Exit(). Usually it is advised to exit any application using AppUi::Exit() instead of User::Exit(). The explanation on why this is essential has been highlighted very well in this article.
Talk:Introduction to OpenGL ES 1.0	20090917	FireSwarog	This article provides introduction to OpenGL ES - it is a light version of desktop library OpenGL. Currently, only several devices based on Symbian S60 provides access to OpenGL ES. But, it should be noted that very soon support of OpenGL ES will be necessary condition for the creation of popular games. If your aim is to create games for S60 - this text helps you a lot.
Talk:Texture-mapped font for OpenGL ES 1.x	20090118	FireSwarog	This article contains the implementation of the popular approach for rendering fonts in OpenGL. This is a very useful example for Symbian C++ developers, because the source code is transformed to meet the standards of Symbian C++. You could use this example in own games. It should be noted, that currently only several devices, based on Symbian S60, support OpenGL ES. However, it is clear that support this standard will be presented in all major devices in the nearest future.
Talk:Using TResourceReader	20090930	Kamalakshan	This wiki article explains on how to use TResourceReader to read resource files. This is very helpful if you have separate resource files other than the application default. Similarly you can also load resource files from within a dll.
Talk:How to draw and update the screen directly by accessing the screen memory	20090908	Deepikagohil	The article explains one of the three ways of **Direct Drawing**. Direct Drawing is accessing the screen memory directly by editing the memory address. This make the drawing proccess faster, which is very useful in some specific applications. In this article the Direct Drawing is explained by an code example which gets the screen memory address and draws an simple rectangle. The abstrach information about Direct Drawing is given in this article. This article finds its importance in applications which includes faster drawing process. It can be helpful to beginners.
Talk:Message Queue Handler	20090910	Deepikagohil	Message queues are very useful to perform inter-process communication. This article explains the concept of message queue to message from one process to another. Inter-process communications performed by client-server architecture. The article illustrates the implementation of Message queue Handler i.e. how it should be used. The article also contains the code-example to do so. The limitations of the message queue is also given in this article. The article has represented a very important feature for inter-process comunication in Symbian OS. The article is beneficial to beginners and intermediate developers who are studing the advanced features of Symbian OS.
Talk:Detect secure element activity	20091004	Vkmunjpara	This article shows how to detect secure element activity. This article represents a code snippet this is enough to understand the purpose of this article. Here the required classes are imported to the source code that's the good thing and gives portability to the application. This code snippet is also helpful to starters because it also covers some basic APIs' use also. The noticeable thing to this article is the use of the DiscoveryManager API. And its required methods that is necessary to accomplish this task. Overall this is a nice midlet.
Talk:How to get the attachments from an EMail	20090912	Narendrachinni	In this article they had explaine about how to retrive event the attachments also i had commented to the article which had explained about retrivel of the email in that they not explained the retrive of attachments of the mail This article help for the beginners and also the experinaced developers to know about how to retrive email in the account
Talk:How to define a custom separator in TLex	20090930	Kamalakshan	By default TLex uses space as a separator when parsing. However, in many scenarios you might have to use your own custom separator. This article provides a work around for setting custom separator in TLex using the MarkedToken() function.
Talk:Getting Gallery Images Rootpath	20090930	Kamalakshan	This article demonstrates on how to get root path of gallery images. It makes use of the static functions defined in PathInfo class. Using a similar approach VideosPath () and GamesPath () along with many other paths can be retrieved. This is very useful as Gallery path can differ in different editions.
Talk:View Vs Container	20090930	Kamalakshan	A very well explained article, a must read for any beginner to understand the difference between a View and Container. Reading this article will provide a better understanding of the MVC pattern followed by most symbian application. Understanding these differences will help you design and structure your program properly.
Talk:How to separate sensitive code from Application	20090921	Deepikagohil	Many a times, we need to seperate code requiring sensitive capabilities with the code requiring normal capabilities. The article provides a very good solution for the same. The article represents the solution to use client-server architecture for the same with a quick but precise explaination and a code example attached. The demostrated code example is also good and contains comments for our ease. The article presents really good idea to seperate sensitive code from rest of the application. The article can be useful to intermediate and experienced developers who need this aspect in their application.
Talk:Simple timer for games	20090918	Kamalakshan	This article provides code snippet demonstrating CIdle an active object that performs low priority processing when no higher priority ones are running. This can be used to run the Game Loop in game programming. A example good enough for beginners to start with and understand.
			Tab is a User Interface element mainly used to move between different folders of an application. This article well explains simple tab operations with required code snippests.

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Talk:Tab operations	20090927	Deepikagohil	This article illustrates a quick overview for tabs and then describes how we can crate tabs. Then it also explains performing different operations like - adding new tabs, hiding a tab, activating a tab, moving between tabs and many other operations. All the mentioned operations are primary and explained here with code snippest. This article can be useful to beginners to create tab view in their application. Beginners can also refer Tabs example for their further reference.						
Talk:Exchanging messages between two SIP user agents	20090917	Narendrachinni	This article explained about the Exchanging message between two SIP user agent SIP (Session Initiation Protocol) is an IETF standard multimedia conferencing protocol, which includes voice, video, and data conferencing, for use over packet-switched networks. SIP is an open standard replacement for the ITU's H.323. SIP is described in RFC 3621 - SIP: Session Initiation Protocol. SIP is an application-layer control (signaling) protocol for creating, modifying, and terminating sessions with one or more participants. These sessions include Internet telephone calls, multimedia distribution, and multimedia conferences. SIP invitations used to create sessions carry session descriptions that allow participants to agree on a set of compatible media types. SIP makes use of elements called proxy servers to help route requests to the user's current location, authenticate and authorize users for services, implement provider call-routing policies, and provide features to users. SIP also provides a registration function that allows users to upload their current locations for use by proxy servers. SIP runs on top of several different transport protocols. hence this is used for conference applications this article help full to the beginners and experiance developers also						
Talk:Reasons for SIS File Installation Failure on S60 3rd Edition.	20090903	Kamalakshan	A very good reference for someone having issues with installing a sis file. This article mentions some of the reasons why the sis file installation fails. The external link provided in the article below is a very well recommended reference for troubleshooting SIS file installation failure issues.						
Talk:Create new internet access point	20090909	Savaj	Both GUI application and exe may require connect to remote server (Or connect to internet) using GPRS. And for connecting to internet/remote server require access point on device. Usually the operators send a settings SMS that when saved creates the IAP and access point on the device. Although device might have one or more access point, application may need to create a new access point , for example if application want to allow user to connect to internet through that access point only. This article describes how to create new access points, how to set Connection Preferences, how to create IAP and much more things, which helps beginners as well as experienced developer.						
Talk:How to create access point	20090917	Narendrachinni	This article had explained about how to create a access point before we want to know about that Definition: Wireless access points (APs or WAPs) are specially configured nodes on wireless local area networks (WLANs). Access points act as a central transmitter and receiver of WLAN radio signals. Access points used in home or small business networks are generally small, dedicated hardware devices featuring a built-in network adapter, antenna, and radio transmitter. Access points support Wi-Fi wireless communication standards. Although very small WLANs can function without access points in so-called "ad hoc" or peer-to-peer mode, access points support "infrastructure" mode. This mode bridges WLANs with a wired Ethernet LAN and also scales the network to support more clients. Older and base model access points allowed a maximum of only 10 or 20 clients; many newer access points support up to 255 clients so here this artcle is used for the beginners to learn about how to create access point						
Talk:Change screen orientation of UI application	20090918	Deepikagohil	Sometimes our application need the screen to orient in landscape orientation. The article presnts the code to chand the screen orientation of S60 user Interface application from potrait to landscape and vice-versa. The code is simple and made more easy with comments. The article can be useful to intermediate developes who needs to change screen orientation in their application.	20090923	Savaj	Yes, CAknAppUiBase::SetOrientationL() is important API to set orientation of application. Beginners may find hard to set orientation and thus this article is very important for beginners. Also note that you can set orientation of your application using CAknAppUiBase::SetOrientationL() API, not orientation of your device.			
Talk:SW Installer Launcher API	20090928	Savaj	SW Installer Launcher API is useful to access SW Installer UI services in Symbian. RSWInstLauncher is very useful to install/uninstall application silently, that is sometime needed for one or more reason. This article demonstrates the use of RSWInstLauncher API to install application silently. Note that this API, SW Installer Launcher API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Also do not forgot to add TrustedUI capability before using this API.						
Talk:DOs and DON'Ts of Symbian C++	20090912	Narendrachinni	Symbian C++ contains a number of unique features that must be considered in the design. Tho-phase construction, cleanup stack, leaves, panics and numer of other concepts are often not properly understood by newcomers, that leads to mistakes. This article contains useful and actual material, which sets out the basic rules for how to act when solving certain problems of development and how not to do it. The author not only points to the typical errors, but also explains what to do to avoid them.	20090901	FireSwarog	The article demonstrates a deep understanding of the fundamental aspects os Symbain C++, the code examples reflect well the authors thoughts. The article is recommended for reading to the beginners in Symbian C++ development. Practical advices contained in this material will help understand features of this design methodology, as well as better understand the basic principles of software development for mobile devices.	20090906	Deepikagohil	This article presents the complete work of the author. The basic things we should always keep in mind during programming with Symbian C++ are described here. The basic concepts of topics of Symbian C++ like Basic type of classes,two phase construction, Leaves, Cleanupstack ,virtual destructors, error handeling etc. are abstracted and written in this article. While developing your program in first attemp as a beginner, you may find these kind of errors.This article really becomes helpful to make our program efficient and Reliable. The simple and frequently arising errors which should be kept in mind are well explained here.This article is useful to a beginner and of course an experienced person should always keep those things in mind.
			This artcle had explained about the Landmark/webclient example using carbide c++ and UI designer here in this example they had explaine about to create and application in						

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Talk:Landmarks/web client example using Carbide.c++ and UI designer	20090912	Narendrachinni	ui desiner is also very clear so by teacuse his application beginners came to know how to create a application with the Carbide c++ ui designer so this help the developers to create application very fastly because the controllers in ui designers in drag and drop its very easy to create application This application they are getting the data from the www.gpswaypoint.com and placing for landmark this application help to beginners as well as developers also
Talk:Active Object Pitfalls	20090902	FireSwarog	Understanding of how the active objects work, as well as often using of this paradigm - the daily practice of a common Symbian C++ developer. At first time the newcomers often have problems associated with this paradigm. This article contains a list of possible causes and ways to solve the most common error that occurs when using active objects: E32USER-CBASE 46 panic. I think everyone developer faced this panic ;) Content of this article is small, but very useful. Many beginners who are studying the active objects paradigm must thoroughly understand the reason of this error. This will save time and improve the final quality of the code.
Talk:AIW Generic Parameters API	20090920	Deepikagohil	This article provides an overview of AIW Generic parameters API and demostrats an example code to create generic parameter list and fill it with file name and eror code items. This article also provides an example project to understand this API. The article is good and short. and provides essential information. This article can be beneficial to the intermediate developers who intend to use this API because it is not a part of public APIs.
Talk:How to define submenu	20090919	Deepikagohil	Menu is the basic user-interface feature and we can not think about an application without any menu. Menu provides way to navigate and control your application. The article provides the way to create submenu in your menu for your S60 application in Symbian C++. You are just supposed to "cascade" the submenu with the required command in .rss file as the application has done: `command = ECommands;` `txt = "Commands";` `cascade = r_commands_submenu_pane;` The article deals with the bascic requirement of project-Menu. It is specially meant for beginners.
Talk:How to define localization messages	20090906	FireSwarog	Localization is one of the most important condition for creating a truly high-quality software. Symbian C++ supports a flexible feature for creating localized applications. The main idea of Symbian C++ approach is to separate messages from source code. Messages are located in special files (one file for each language). Further work with these messages is based on the use of special identifiers. This article includes step by step guide that demonstrates how to create a message in different languages, how to use this message in source code, which files how to include in the final sis-file. The article contains simple and clear example of code that allows you better to understand the mechanism of localization. It is a good idea to use this example as a template for creating own application.
Talk:Optical Motion Detection as Interaction Technology for Mobile Phones	20090923	Larry101	This interesting article describes an algorithm which detects physical movement of a mobile phone by examining sequences of images captured using the camera of the mobile device. While the article is somewhat dated (it is originally written in 2005 and still refers to the first devices to incorporate accelerometers), it describes an interesting idea. Several other academic papers have been written in recent years focusing on the use of the cameras built into mobile phones to detect device movement. Much similar research has been done in the area of so-called "sensor-based" interaction techniques, which move beyond the traditional interaction techniques favoured for so long by developers and handset manufacturers. While this article may seem rather high-level to some readers, it helps highlight that mobile devices now provide many different possibilities for facilitating interaction. With Sensor APIs now available for all the major mobile platforms, the use of more advanced interaction techniques is only likely to increase in future. Already several applications are emerging which make use of device movement as a form of input, through tilting and shaking gestures.
Talk:Common build problems in Symbian C++	20090906	FireSwarog	Symbian C++ toolchain consists of many utilities and provides sufficiently powerful features to build applications for Symbian OS. However, the diversity of tools and their interaction often produce errors and causes of such errors are rather difficult to understand. In this article you could find list of the most common problems and ways to solve them. The content of this article will be useful for newcomers, regardless of what they use to build applications: IDE Carbide.c++ or command line only. Finding the reasons of the strange errors like `CreateProcess((null), mwccsym2.exe ... failed" or "error: file I/O fault" usually takes quite a lot of time. Thanks to this article, you could use this time for more useful purposes. As a supplement to this article, it is useful to consider the contents of "Moving to Vista" article, because these problems often have a common nature.
Talk:How to get drive size	20090913	FireSwarog	This is a useful code snippet. It illustrates how to obtain information about size of a particular drive. This function could help you to make decision where to save important information. Also it could help you to realize necessary functionality in own file manager. It works fine on my Nokia 5800.
Talk:KAccessoryModeChanged API	20090930	Savaj	DOS(DOmestic Server) Client API are useful to access service offered by DOS server. This article demonstrates the use of DOS Client API to get notification when an accessory mode changed(for example accessory is connected or disconnected), with code example which helps to understand how this API can be used. Note that this API, DOS Client API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Item Finder API	20090929	Savaj	Item Finder API are useful to highlight, select and retrieve items like phone number, URL in text viewer editors. This article demonstrates the use of Item Finder API to find item, scroll down for the found items and retrieve the selected item. Note that this API, Item Finder API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Java ME Mindmap	20090930	Felipepontes	This article presents a mindmap about relationships between configurations and profiles in JavaME. Although the article is incomplete because the mindmap doesn't make reference to CDC configuration (used to more powerful devices), it is useful to a beginner understand the technologies related to JavaME.
			SyncML client API's are useful to manage data synchronization. The article listed various service provided by SyncML client API which can be used for more detailed study. This article demonstrates the use of SyncML client API to retrieve the profile values, using profile management

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Talk:SyncML Client API	20090929	Savaj	service, with code example which helps to understand how this API can be used. Using this code example anyone can easily use other services like setting up of profile values, listing of profiles and create SyncML Data Synchronization profile. Note that this API, SyncML client API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Camera Application Engine API	20090930	Savaj	Camera Application Engine API are useful in image and video capture. This article demonstrates the use of Camera Application Engine API to capture both type of images, i.e. still image capture and burst image capture, with code example which helps to understand how this API can be used. Note that this API, Camera Application Engine API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Sampling Profiler	20090920	Deepikagohil	Profiler is used to investigate program's behaviour and is useful to determine which sections of the code shoud be optimized. It help to increase efficiency and effectiveness of the program and decrease the memory requirements. Sampling Profiler is one of the many types of Profilers and increases performance of the program. This article represents some essential information about Sampling profilers. How we can start the profiler, use the profiler and stop the profiler and how to analyse data- all the required information for increasing performance of our program is mentioned in this article. As mentioned in this article-it can only be useful to the developers who have access to licensee prototypes and certain levels of SDK or are using reference boards. This article is meant for intermediate and experienced developers.
Talk:Audio Routing API	20090923	Deepikagohil	The audio can be routeed to loudspeaker or to handset or to both. The Audio Routing API is used to acheive these tasks in 3rd Edition FP 1 devices. The article represented here well-explains this API with a quick introduction and how to use it. Some example functions are also described with code and relevant explaination. The article also provides an attached example to make it more understandable. This API is not part of the public SDK.So this article is mainly for be developers who intend to use this API.
Talk:Extended Skins API	20090929	Savaj	Extended Skins API are useful to change active skin and to get skin package information. This article demonstrates the use of Extended Skins API to displays current active theme details and changes the active theme. Note that this API, Extended Skins API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Profiles Engine API	20090928	Savaj	ProfileEngine API's are usful to get and set profile and related information about it. This article demonstrates the use of ProfileEngine API to get/set profile related information. Note that this API, ProfileEngine API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Also do not forgot to add WriteDeviceData capability before using thi API.
Talk:Logs Timers API	20090923	Deepikagohil	Logs Timers API provides functionalities of timers and/or counters related to Logs processing. With the help of this API,we can find call logs e.g. how many received calls or missed calls. We can also find the duration of the calls. The article represents an overveiw and example code snippests to demostrate the use of this mentioned API. The demostrated example code snippests will help beginners and intermediate developers to understand this API easily. The article also provides an attached example to let us study this API in more detail. This API is not part of the public SDK.So this article can be mainly useful to the developers who intend to use this API.
Talk:KAlarmClockOne API	20090929	Savaj	Alarm Clock One API are useful to identify whether an alarm in the alarm server is a clock alarm or not. This article demonstrates the use of Alarm Clock One API to know whether alarm is a clock alarm or not. Note that this API, Alarm Clock One API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Logs Client API	20090929	Savaj	Logs Client API's are useful to open logs view, missed calls view and dialed calls view. This article demonstrates the use of Logs Client API to open logs , missed calls and dialed calls view, which helps to understand how this API can be used. Note that this API, Logs Client API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Internet Access Point	20090919	Deepikagohil	This article provides basic overview to Internet Access Point. Web-Applications are widely used these days. So it need beginners to get aware of the basic concepts for web application developement. This article is meant for beginners only.
Talk:WLAN Settings UI API	20090929	Savaj	WLAN Settings UI API's are useful to access WLAN settings view and setting WLAN access point. This article demonstrates the use of WLAN Settings UI API to create a new WLAN access point, with code example, which helps to understand how this API can be used. Using this code example anyone can easily implement other functionality like changing WLAN access point settings. Note that this API, WLAN Settings UI API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:CR Keys To Control Phone Volume API	20090929	Savaj	Central Repository Keys To Control Phone Volume API are useful to control the phone volume of an ongoing call. This article demonstrates the use of Central Repository Keys To Control Phone Volume API to retrieving and setting the ear phone volume and loud speaker volume using publish and subscribe keys. Note that this API, Central Repository Keys To Control Phone Volume API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Browser Launcher API	20090928	Savaj	This article demonstrates the use of Browser Launcher API to launch built-in S60 browser in embedded mode. The browser can be can be launched in synchronous and asynchronous operation with given parameter. The article shows the both way,synchronous operation and asynchronous operation, to launch browser with parameter. Note that this API, Browser Launcher API, is not part of the

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			public SDK. So you have to download it from SDK API Plug-in, before using it.
Talk:Bluetooth Engine API	20090920	Deepikagohil	The class should derive from CBase since it's a C class. This artilce gives an quick overview and approach to use the Bluetooth API. Blutooth API adds some more fuctionalities to use Bluetooth. All the detailed requirements are described in detail. Many functions of this API are presented with code-snippest. Capabilities required, Libraries to be linked, Header files to be included- all details are mentioned in the article. The article simply gives essential information about Bluetooth Enginer API and it can be helpful to intermediate developers who intend to use this API because it is not a part of public SDK.
Talk:Audio Metadata Reader API	20090929	Savaj	Audio Metadata Reader API are useful get metadata information of an audio file. This article demonstrates the use of Audio Metadata Reader API to retrieve the count of metadata fields and fields information of metadata files. Note that this API, Audio Metadata Reader API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:AIW Service Handler API	20090920	Deepikagohil	This article merely represents the How we can use AIW Service Handler API. For that basic requirement is to create AIW service handler object. This article illustrates the code snippest to create service handler instance, initializing menu pane, utilizing the service command and then deleting the service handler instance. AIW srvice handler API is not the part of public API. The article can be useful to the developers who intend to use this API in their application.
Talk:AIW Criteria API	20090923	Deepikagohil	Application Interworking (AIW) framework is mainly used for dynamically adding features and functionality to applications without statically linking to the code. This article describes three main casess for this API with code snippests. All the three cases are very wll explained. More over this article also provides an attached example to let us understand this API more easily. The main class of AIW framework is called CAiwServiceHandler. The use of this class is also illustrated in the given article. This article is meant for intermediate develoeprs to study this API.
Talk:Adaptive History List API	20090929	Savaj	Adaptive History List API are useful in listing browser history and keep track of its activity. This article demonstrates the use of Adaptive History List API to get history of browser activity. Note that this API, Adaptive History List API, is not part of the public SDK. So you have to download it from SDK API Plug-in before using it. Furthermore, the author added a working demo project, which can be used for more detailed study of new opportunities for various kinds of experiments.
Talk:Simple keyboard wrapper for games	20090918	Kamalakshan	TKeyCode enum provides codes for non-ASCII key presses, the author states that their usage in Games can lead to incorrect behavior. This article provides information on how to implement a simple keyboard wrapper class for games. This provides some information on how you can handle key events in Games.
Talk:Recursive mutex	20090912	Narendrachinni	This article had explained about the Recursive Mutex we know about recursive function ,Recursive function means a function which call by it self is called a recursive function a non-recursive mutex cannot be locked more than once, even by the thread that holds the lock. This frequently becomes a problem if a program contains a number of functions, each of which must acquire a mutex, and you want to call one function as part of the implementation of another function assume that f1() and f2() are two functions f1 and f2 each correctly lock the mutex before manipulating data but, as part of its implementation, f2 calls f1. At that point, the program deadlocks because f2 already holds the lock that f1 is trying to acquire. For this simple example, the problem is obvious. However, in complex systems with many functions that acquire and release locks, it can get very difficult to track down this kind of situation: the locking conventions are not manifest anywhere but in the source code and each caller must know which locks to acquire (or not to acquire) before calling a function. The resulting complexity can quickly get out of hand. However, RecMutex implements a recursive mutex: • lock The lock function attempts to acquire the mutex. If the mutex is already locked by another thread, it suspends the calling thread until the mutex becomes available. If the mutex is available or is already locked by the calling thread, the call returns immediately with the mutex locked. • tryLock The tryLock function works like lock, but, instead of blocking the caller, it returns false if the mutex is locked by another thread. Otherwise, the return value is true. • unlock The unlock function unlocks the mutex. As for non-recursive mutexes, you must adhere to a few simple rules for recursive mutexes: • Do not call unlock on a mutex unless the calling thread holds the lock. • You must call unlock as many times as you called lock for the mutex to become available to another thread. (Internally, a recursive mutex is implemented with a counter that is initialized to zero. Each call to lock increments the counter and each call to unlock decrements the counter; the mutex is made available to another thread when the counter returns to zero.) This article help for beginners as well as experinced also
Talk:WLAN Management API	20090909	Narendrachinni	this article had explained about WLAN Management APIs provide the function to scan through the WLAN network and gets various kinds of information By using MWlanMgmtInterface::ActivateNotificationsL to subscribe to WLAN indications. You will then get MWlanMgmtNotifications::BssidChanged notification when the BSSID changes. By using MWlanMgmtInterface::GetConnectionSignalQuality we can get the current signal strength of the established WLAN connection. The instantaneous signal level of the hot spots can be retrieved using the RXLevel() API. We can also scan for WLAN network and get other details as explained in the following some note: it have some problem that The WLAN Management API might rely on periodic WLAN scans performed by the device, and these might have been turned off by the user. In the N95, for example, periodic scans can be disabled in Tools->Settings->Connection->Wireless LAN.You can perform the scan yourself using RConnectionMonitor::GetPkgAttribute (see this example).This is indeed polling. However, WLAN Management API's notifications are probably also implemented by polling.
Talk:Symbian C++ Common File Dialogs	20090904	Kamalakshan	This article explains on how to use Common File Dialogs made available in AVKON. The author shown how the resources have to be declared and provided code snippet showing how to use them.
			Review: Exception handling in Symbian C++ can be very confusing for novices to the platform. The approach used is quite markedly different from most other platforms and as a result

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Talk:Exception handling in native Symbian C++	20090927	Larry101	can be difficult to understand. This article therefore addresses an important subject area. The article is centred around three main "rules" that relate to exception handling in Symbian C++. The first relates to how functions "leave" and the use of trap harnesses. The second relates to the use of the Cleanup Stack. The third covers two-phase construction. All three sub-sections of this article provide a thorough coverage of the subject material, while still managing to remain concise. The section on trap harnesses provides a nice simple explanation of the difference between TRAP and TRAPD trap harnesses and demonstrates their use simply. The discussion of the Cleanup Stack is also very thorough, despite its brevity. The discussion motivates why the Cleanup Stack is necessary, when not to use it (for member variables), and how it works. Two-phase construction is explained through the use of code examples which help illustrate the concepts discussed. The discussion does a good job of showing the use of the different approaches to construction and when to make use of a ConstructL() second phase constructor. The article covers this tricky topic well. The code examples are well-chosen and help make the concepts easier to understand.			
Talk:Navigating through a Symbian DBMS database table	20090919	Deepikagohil	DataBase Management System, one of the essential component of an operating system, is a program which manages all the database. The article provides the way to create a database and to navigate it. The article demostrates an example with provided code snippest. Database and table construction, Table operations and navigation functions are clearly described and explained with comments. This article can help beginners and intermediate developers to understand databast management in Symbian C++.			
Talk:Preventing compatibility breaks in Symbian C++	20090910	Deepikagohil	Compatibility is a major issue in developing any application. There are mainly three types of compatibilities: source-code compatibility, binary compatibility, backward compatiblity. A computer that can run same source-code intended to be compiled and run on another computer is said to be source-compatible. similarly binary copatibility and backward compatibilities are also very important features in developing an application. This artilce illustrates the ways to prevent compatibility breaks, which should be kept in mind during developing. The article has given the points where compatibily breaks can occur and how to prevent it occuring. The language used is simple and manner is also systematic. The article is useful to beginners as well as intermediate developers.	20090911	Skumar rao	A must read for porting developers and developers working on multi-version SDK projects.
Talk:Symbian Messaging Protocols	20090907	Deepikagohil	There are many Protocols used for messeging application which includes BIO messaging, email, sms, obex etc. The article gives us the fundamental information about these widely used messaging protocols. The protocols becomes important when you are dealing with messaging applications. Though the article doesn't provide detailed information, the brief given here is very instructive. The article is beneficial to thos who wants to create or deal with messaging applications.	20090909	Savaj	Understanding messaging protocols is important before using them. Some of well known protocols are BIO messaging, SMTP, POP3, IMAP4 and OBEX. BIO messages are data messages, which suitable for receiving data messages like ringtones, logos, vCards, vCals, e-mails etc. SMTP suited for outgoing email messages. POP3 suited for retriving emails. IMAP4 is useful for synchronizing/access with on a remote server. Bluetooth and infrared use OBEX (OBject EXchange) protocols to exchange of binary objects between devices. A brief introduction of each protocol in this article is useful to understand messaging protocols.
Talk:Symbian Emulator shortcut keys	20090906	FireSwarog	How well do you know the features of emulator ? This article could help you to improve your knowledges. S60 Emulator - is the main tool for S60 developers. You could build and run your mobile applications on your PC with the help of this tool. Emulator has a lot of features that help greatly simplify development and debugging. However, many developers know nothing about really nice features. This article contains list of hot keys that activate certain functions of the emulator. Most of them are used for debugging purposes, some allow you to quickly and comfortable manage the running applications. This article is important and useful for all developers.			
Talk:How to get file system drive information using Symbian C++	20090912	Narendrachinni	This article had explained about how to get drive information Use RFs::DriveList() to retrieve an array of drives. The drive list consists of an array of 26 bytes. Array index zero corresponds to drive A, one equals B etc. The array member value is a bitmap of drive attributes, or 0 if there is no such drive. this article help full to beginners			
Talk:How to play a video file using CVideoPlayerUtility	20090925	Jluisn	This code example article is very useful to show how to play a video file with the CVideoPlayerUtility API.			
Talk:Symbian OS startup	20090920	Deepikagohil	Boot process of Symbian OS is well-explained by this article. The main stages occuring during start-up process is described in orderly manner and with related block diagram. Though it is not essential to aware of the booting process for creating applications, but its good to have knowledge of it if you intend to work on some advenced applications. The article illusrates the primary booting process of Symbian OS. It is good for beginners and intermediate developers.			
Talk:How to use graphics in a non-GUI Symbian exe	20090903	Kamalakshan	In general commandline based exe are expected to run as server or daemons in the background. However, in certain scenarios it might have to shown some sort of UI as well. Say for example a ticker or an icon blinking. This article demonstrates the basic setup for creating a CONE environment from within the exe and using it to render some graphics on to the screen.			
Talk:How to create an alarm using Symbian C++	20090930	Kamalakshan	This article provides code snippet on how to set up an alarm programmatically. It uses system alarm tone and vibrates if the vibration is set On in current profile. Can be easily implemented in to your project.			
Talk:Symbian DEF File	20090906	Kamalakshan	This article has provided a very good explanation on the uses of a DEF file. Provides good information on its usage in building Symbian DLLs. If not understood properly you might spend too much time building and debugging your DLL without any valid reason. This article really helps in clarifying many things one might want to know while building a DLL.			
Talk:How to use the Symbian C++ List Query Dialog?	20090909	Kamalakshan	This article provides code snippet to demonstrate on how to create a List Query Dialog. The code is self explanatory. List Query Dialogs can be very useful, where you need to show a list of options to the user from which he can select one. Say you need to show the available list of available access points to select from.			
Talk:Different application caption strings	20090904	kamalakshan	This article discusses about where and how the caption can be set in Symbian Second ed. series (as it has not been updated to include 3rd ed). However, it is a very good reference for beginners to know in what different ways a caption can be set.			
			Secure handling of sensitive data - one of the most important conditions for the development of successful applications.			

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Talk:Encrypt-Decrypt Messages	20090917	FireSwarog	You should be very carefully while reading or writing personal information, such as SMS-messages. This articles can help you, it illustrates how to manage SMS-messages which were stored in device memory. It also shows how to make encryption/decryption of the data, despite the fact that demonstrated methods are very simple, they very good illustrate the main idea.									
Talk:Settings Lists	20090928	Deepikagohil	Setting list is a special list containg items which can be adjusted by the user for e.g. volume, contrast etc. Setting list can be of different types. It can be single-selection setting list or multi-selection setting lists- depending on our requirements. This article provides a brief overview about setting list and how to use them. What are the key requirements to create setting list and what changes should be made in resource file- all are illustrated in this article. More over it also provides some guidelines to create a custom setting page. Providing a link to demostrated examples, it makes it easy for beginners to understand the whole concept. Setting list is a basic User Interface element and this article provide brief but precise information about Setting list. It can be helpful to beginners to apply this concept in their application.									
Talk:Uikon-Eikon-Avkon-Qikon	20090906	Deepikagohil	The basic framework of Symbian OS, S60 and UIQ are mentioned in the article. Thought it doesn't provide details about them, but the information given in this article seems to be good. The Symbian OS graphics framework is Uikon i.e. User Imterface Kernel on display(Symbian OS) -which provides a UI library layer that is commopn to all symbian OS phones. S60 UI uses an addition layer i.e. Avkon. and in UIQ the framework is known as Qikon. This article mentions the implementation frameworks and becomes useful to beginners only.									
Talk:Reducing code size of Symbian C++ apps	20090906	Kamalakshan	A collection of very good tips in reducing your code size. Most of the time these won't matter to most developers. However, makes a huge difference in bigger projects. And is always good to have an optimized code.	20090911	Deepikagohil	To make your application more efficient, it is necessary that the code of your program is as optimum as possible. It makes the program effective and efficient with less memory-space consumed. The article describes some important ways to acheive this. The article is useful for beginners and intermediate developers who are not aware of code-optimization tricks in Symbian C++.						
Talk:How to uninstall files/directories created by a Symbian application at runtime	20090903	Kamalakshan	The Symbian signing criteria requires that the application on uninstall should not leave behind any files on the device. The article describes on how to remove known or unknown files and folders created by the application. Most applications use the second method of running a cleanup exe on uninstall to do the cleanup job.									
Talk:Symbian Scalable UI Framework	20090903	Warjan	Article introduces concept of scalable ui - the necessity in the world where there are more and more devices with different resolution. Author presents use cases for different resolutions and orientations, than he lists available resolution in devices (it is a little outdated with nHD 640 x 360 on N97 mini, N97, X6, 5230, 5530, 5800 and probably others I don't know :)). After that he lists APIs for building scalable ui. This section I find a little confusing in that heading have somewhat misleading titles - author names an API and then notes that that name doesn't appear in the SDK help. A bit awkward. Then there are section about scalability for icons and for strings. I'd like to see more visual examples of different resolutions and how the look and feel of the ui changes in them. Also how the screen's real estate is affected when changing orientation would be nice to know and ponder about. In summary article nicely presents scalability abilities of S60 (mind it is Avkon, I guess similar article should be created when Qt for S60 will become the dominant ui).									
Talk:Creation of MBM file	20090907	Savaj	This article have less explanation, but very important to create .mbm file dynamically. If you have .bmp file in advance then you can create .mbm file easily by modifying .mmp file. But in some case you need to convert it dynamically, for example when you capture image using camera and then want to convert that image to .mbm file. CFbsBitmap::StoreL() is a key API in creating .mbm file dynamically, this article described it in clear way, so even beginners can understand it easily.									
Talk:Symbian OS Communication Architecture	20090920	Deepikagohil	This article represents the basic architecture of Symbian OS communication structure. The article contains the block diagram for this architecture. The functionality of every block is explained in brief. This article is gives the basic idea about the Symbian OS communication Architecture and it is meant for beginners.									
Talk:Forms in Symbian C++	20090907	Gaba88l	Forms are the basic UI components of an application. Like if you want to make a Login design, Registration page, Settings Page and there are many more examples which we can achieve easily through forms. This article in a very clear cut fashion explained how to make simple form in symbian c++, starting from the libraries, resource files, class definition and the implementation at the last, the articles make us familiar how we can create a simple form.	20090907	Deepikagohil	The forms in Symbian C++ are having a essential importance in many applications including applications which includes to fill an application form or a login form or a registration page etc. Forms are the user interface of your application. Forms can be either in view mode or edit mode. This article artlessly describes the basic concept of forms in Symbian os and how to create them. The article lucidely mentions to create simple forms with the information about the header files, library files, class definition and the implementation code. It can be useful to beginners.	20090924	Vkmunjpara	This article shows a documentation that will help to beginners because forms are essential in every kind of application either is in desktop applications or in mobile applications. Forms can be considered as a container for GUI objects. This article represents all the things very clearly and addresses how many files you need to build to accomplish this task.. well explained.	20090928	Savaj	Form is basic mean of taking input data from user. Taking multi-data part input, with scroll-bar, from user is difficult in symbian. The form implemented in this article made it easy to take data inputs which have a number of fields, with scroll-bars and which can be editable when they are in focus. Article implemented CMyForm class which can be used as form in your application. This class has many functionality like adding menu, adding controls dynamically.
			This article gives a clear idea of on which capabilities would be when developing sensitive applications. It is grouped according to the applications and capabilities it might require.									

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Talk:App types that require sensitive Symbian capabilities	20090904	Kamalakshan	It also list down some applications where in applications might require manufacturer capabilities and can achieve the tasks with some alternatives. And also points out clearly type of requests that might be rejected. The information listed is hardly available anywhere else and hence helps in preparing your self for getting application signed with manufacturer capabilities.			
Talk:Bluetooth GPS Receiver - NMEA Parsing	20090920	Deepikagohil	According to Wikipedia, NMEA 0183 (or NMEA for short) is a combined electrical and data specification for communication between marine electronic devices such as echo sounder, sonars, anemometer (wind speed and direction), gyrocompass, autopilot, GPS receivers and many other types of instruments. This article represents an code snippest to parse NMEA sentence to Bluetooth GPS receiver in Symbian C++. Reading NMEA tokens and receiving the lattitude and longitude of our position on a Bluetooth GPS receiver is described in orderly manner. Both the classes- Nmeaparser and Messageclient are represented in detail with code snippest. The class Messageclient handles/ deals with the NMEA data. All the functions are illusrates with code snippest and comments. The article can be useful to beginners to study parsing NMEA sentences to Bluetooth GPS Receiver.			
Talk:Java Application Descriptor (JAD) essentials	20090930	Larry101	This article provides a useful discussion of the role of JAD (Java Application Descriptor) files in Java ME applications. These files allow us to specify various configuration parameters separately from the JAR installation files. The article gives a brief overview of the role of JAD files. The different possible attributes are categorized according to whether they are optional or mandatory attributes. The article provides a useful resource for looking up the different attributes to be found in JAD files and their roles. Having said that, the article appears to merely be a subset of the information contained in the Javadoc page which readers can link to from the bottom of the article. Generally, it is better for beginners to avoid editing JAD files directly, and rather to edit the attributes through the interface provided by IDEs such as NetBeans and Eclipse.			
Talk:AES Encryption-Rijndael Block Cipher to Symbian OS	20090920	Deepikagohil	This article describes how to use Rijndael Block Cipher to Symbian OS with Symbian C++. Cryptography with this cypher is illustrated in detail. Cryptography is the study of hidden/ secret information. Encryption is the process of hiding information to make it unreadable except those who knows the special "key". And the process of getting the hidden information back i.e. to make it readable is called decryption. The code snippest presents an example which encrypts and decrypts "Hello World" with the mentioned cypher. The code for the class declaration and cpp file is illustrated in this article with required comments-which makes them understandable. The Cryptography presented here can only be performed on S60 platform and not meant for cross-platform. This article can be useful to beginners and intermediate developers to study cryptography.			
Talk:Simulate key events using Symbian C++	20090927	Deepikagohil	The manner of Symbian Programing is event-driven programming. And generally these events are generated through key pressing. Genrally key pressing can also be done in two ways: software generated and hardware generated. In hardware key pressing OS is always waiting for the user to interact with the device and then carries out some operation in response to that interaction. This article mainly deals with- how we can simlulate a key press. Diffrent procedures to simulate a key press are given in this article. The required capabilities and classes used for the same are mentioned. The procedures are lucidly explained with their relative code snippests. This article can be useful to beginners as well as intermediate develoeprs to perform event generation through key events.			
Talk:Platform independent key events processing in Java ME	20090930	Deepikagohil	This article represents a good solution to the problem connecting to the identification of pressed keys. The article provides the solution to create the class called KeyCodeAdapter. Also this class can be used for determining vendor's platform of mobile device where application is launched by calling method getPlatform. The code snippest is given with full description and comments. The problem and the possible solution are elaborately described. Moreover the demostrated example is also attached. This article can be useful to intermediate and experienced developers.			
Talk:Implementing a Singleton using Symbian CCoeStatic class	20090915	Sunil.shetty	A very helpful code-snippet on usage of a very powerful feature of symbian. Shows how we can initialize a singleton class just once and then later use the same instance throughout the project. Data members of a singleton class are maintained globally and any changes made to them are reflected across the project. The code is well commented and describes the concept and its usage briefly.	20090928	Savaj	Singleton pattern is a design pattern that is used to restrict instantiation of a class to one object. It is powerful concept of software engineering. Since singleton class have only one instance at a time, it can also be used as a just like global variable in application. The DLL in EKA1 can not support writable static data and so singleton class can not be usable in DLL of EKA1. The article describes how to create singleton class in symbian. Proper comment on will enable beginners to understand important of each method. Each singleton class must have a unique TUid, so do not forgot to use separate TUid if you have more than one singleton class.
Talk:Using built-in GPS and Google Maps for JavaScript in WRT to display your current position	20090905	Gaba88	Location Based Applications are always interesting to develop and attractive when they are used. Now a days with almost all S60 devices are GPS enabled which creates a new platform for the developers to explore on it. This wonderful article authored by Felipe Andrade demonstrates a step by step procedure on how we can use the our built in GPS of a S60 5th edition device to display our position in the Google Maps. The article start with very basic of how to use javascript api followed by how we can make a icon and update it. Later it takes us in the details of getting the postion and making it display on google maps. This script is very dynamic and updates your position with regards to your GPS inputs.			
Talk:Custom bio-messaging example for Symbian	20090908	Savaj	Basically BIO messages are data messages, it is important for receiving data messages like ringtones, logos, vCards, vCals, e-mails etc. They can also used for sending text message which can be interpreted in a particular way. The standard messaging MTMs is usually used for text messages, but for data messages BIO messages are more suitable. For using BIO messages, we need to define BIF (BIO Information File), which defines the UID of the BIO message and contains information about the parser and BIO control to be used for the particular BIO message type. The articles describes what is the BIO messages and how it works. BIO messages is bit complex topic and might be hard			

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			to digest for beginners, but it is very important for those who is interested in data messages.			
Talk:How to fade the screen using Symbian C++	20090909	Deepikagohil	The article has described the code to add fading effect to your screen. As a devloper you should try different things with your view of your application. The view should be user-friendly and user should get involved during accessing your application. The article shows one of the experiments done with your view. It is good to add different kind of effects in your application to add uniqueness and magnetism to your application. The article will help developers to add fading effect in their application. The aricle presents a simple code for the same. It is useful to everbody who are creating mobile application for S60.			
Talk:Streams - externalizing objects on Symbian	20090908	FireSwarog	Using streams for reading and writing data - a very popular and demanded functionality as the streams provide a simple and elegant way to read and write data. Symbian C++ allows you to use streams to work with files, memory, or any other I/O devices. This article describes the basic principles of how to use streams, how to add support for externalizing/internalizing in own classes. This material will be very useful for beginners.			
Talk:How to use fixed point maths in Java ME	20090918	Larry101	Devices that do not support CLDC 1.1 do not provide support for floating point data types such as double and float. This can result in several problems getting MIDlets to run on older devices (such as many Series 60 2nd Edition phones). In order to overcome this shortcoming, fixed point mathematics, such as are described in this article can be used. Several fixed point libraries now exist for Java ME which also extend the Math functionality available in order to support functions available in Java SE, such as trigonometry functions sine, cos and tan. Float11 is a library which supports this.			
Talk:Midlet basic lifecycle and states	20090923	Larry101	This article gives a brief summary of the basic midlet lifecycle, and shows the different states a midlet can be in, as well as all the possible transitions between states that can occur. The diagram provided clearly shows this information to the reader. Another important piece of information to note in this article is that on some devices, calls to pauseApp() are not made by the system. It may be up to the programmer to programmatically pause the midlet when it is detected that it no longer has the focus (has moved to the background, for example when the user takes a call). An understanding of the basic midlet lifecycle is important to any Java ME programmer, and as such this article provides useful information, albeit information that could easily be retrieved from other sources (such as the Java ME Developers Guide).			
Talk:GPRS	20090928	Fasttrack	Article does not contain any code or any thing, but its contain a basic thing about the GPRS. At now a days, most of the mobile are GPRS enabled. And many applications are developed on web or wap. So to know about GPRS is very important as a developer. And as developer to know just a GPRS is stand for internet. To develop application on web or wap, we must know every thing about GPRS. At here this and linked article explain about GPRS, its protocols and etc. so it's a very good for every developer. Improve this article we should also add the detail of EDGE and 3G,4G. As its enhance version of GPRS. As here EDGE article is available, we should give a quick link of that also. Article shows the whole part of GPRS communication. its a very very good for developers.			
Talk:Direct Memory Access	20090908	Narendrachinni	This article is explained about the direct memory access we have two types of memory access is their they are 1. direct memeory access 2. memory mapped i/0 Direct Memory Access (DMA) is used by Symbian OS to offload the burden of high bandwidth memory to peripheral data transfers and allow the CPU to perform other tasks. DMA can reduce the interrupt load by a factor of 100 for a given peripheral, saving power and increasing the real-time robustness of that interface. this article help full to the beginners to the symbian development	20090908	Deepikagohil	The article mentioned here simply explains the concept of DMA(Direct Memory Access) for Symbian OS. The author has also explaioned various types of DMA engines. DMA engines are used for transfering data between local memory and main memory with less CPU overhead. Without DMA, the CPU would have to copy each piece of data from the source to the destination, making it unavailable for other tasks. This situation is aggravated because access to I/O devices over a peripheral bus is generally slower than normal system RAM. With DMA, the CPU gets freed from this overhead and can do useful tasks during data transfer.In the same way, a DMA engine in an ARM processor allows its processing element to issue a data transfer and carries on its own task while the data transfer is being performed. There are various types for DMA engines which includes Double-buffered DMA engines, Scatter-gather DMA engines, Multi-channel DMA engines etc. Author has explained the importance and working of these types. This article is specially meant for beginners.
Talk:Infrared	20090930	Fasttrack	Article does not contain any code or any thing, but its contain a basic thing about the Infrared. At now a days, most of the mobile contain Infrared. And many applications are developed on Infrared. So to know about Infrared is very important as a developer. And as developer to know just a **Infrared is a communication part** not enough. It is a communication part like Bluetooth. To develop application on Infrared we must know every thing about Infrared. At here this and linked article explain about Infrared, its protocols etc. so it's a very good for every developer. Infrared is mostly used for s**hort-range communication.** Article shows the protocol name and quick introduction about that. Article also describes about the API, which are available for development. And services of the Infrared. Article shows where we can use this port so that developer can make application according to those places.			
Talk:How to swap variable values in Java ME using bitwise operations	20090919	Vkmunjpara	**Level**: basic This is a simple code but it uses a Bitwise XOR operator for swapping the values between two variables. So the extra third variable is not needed for swapping the values between variables.			
Talk:Data caging	20090904	Savaj	Symbian introduced the concept of Data Caging from Symbian OS version 9.1, it is used to restrict access to certain areas of the file system based upon the capabilities an application has. This secure platform offers device users greater assurance about the security of their devices and the data they hold. File system enforce application to have its own private directory, which normally (without AllFiles capability) can not be accessed by other applications. This private directory is defined by the application's SID(Secure Identifier), so if application have SID 0x11111111 then it would have private directory \private\11111111\ This article explain what is data caging and how file system structure works in symbian, which helps beginners to understand the concept of data caging clearly.			

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Talk:Using .ini files in Symbian C++ apps	20090908	FireSwarog	The example shows how to perform automatically initiation of the application ini-file (architectural feature that is disabled by default in the S60 UI). Symbian C++ provides different classes and features for working with files. Symbian C++ streams is a very powerful and elegant feature. This article demonstrates how to use file streams for storing/restoring data. I successfully used this approach in my applications for storing and restoring settings.			
Talk:Display wait note between HTTP response delay	20090923	Deepikagohil	This article represents code to display wait note between HTTP response delay. Sometimes it gets too long to get the response from HTTP for the request issued. The demostrated example displays a dialog with "Please wait" text during this waiting moment. The header file used for doing this task is <AknWaitNoteWrapper.h> and our test class is derived from MAknBackgroundProcess and MHTTPObserver. All the essential libraries that should be added are also mentioned at the top. The mandatory changes that should be done in the resource file are also illustrated in this article. Though the article does not contain any overview, the code presented here contains comments to make it understandable with less efforts. This article can be beneficail to beginners to understand the API for creating display notes between HTTP response delay.			
Talk:Generate JAD from JAR file	20090916	Vkmunjpara	Generating .jad file from jar file is good thing.Because it occupies less space than .jar file. so if some .jar file is larger to download then it can be converted into .jad file. This article shows basic concepts about .jar file and .jad file. and how to convert .jad file from .jar file.			
Talk:Using skins in a Symbian C++ app	20090906	Kamalakshan	Wondering how to enable theme support in your applications (2nd edition FP3 onwards). This single line of code will help you achieve this. This article also provides some pointers on enabling skin support to custom controls.			
Talk:Building Symbian code for ARM Targets	20090908	Deepikagohil	The article simply shows the comparision between GCC (GNU Complier Colection) and WINS compiler and illustrates pitfalls of GCC compilers. The comparision is mainly on the basis of using DLLs and MACROs in the application. The article states that it is normal to find compiler errors and warnings from GCC in first attemp. It deduces that GCC compilers are more strict than WINS compilers. The article is interesting for everybody who are developing applications using GCC compilers.			
Talk:How to display an image in the title pane using Symbian C++	20090909	Deepikagohil	Generally Beginners don't know the way to access the title pane. The article has illustrated the code for displaying an image in the title pane. Though the description is not given, a new commer can understand the code. The libraries needed and header files to be included are also mentioned clearly. Beginners will find this article important.			
Talk:Defining shortcut keys for a Symbian app	20090918	Deepikagohil	Many Beginners are not aware of creating short-cut keys in Symbian C++. This article gives to overview with required information and code snippest to create short-cut keys. In many applications, we require short cut keys as an essential feature. This article can be useful to beginners to create short-cut keys.			
Talk:How to create multi-page dialogs in Symbian C++	20090919	Deepikagohil	Dialog-Box is a special window on your device screen, which can be used to give information to the user or to alert user about some error or to get some input from user etc. Dialog is a basic aspect of any application. The article has represented the way to create multiple dialogs with code snippest which should be included in dialog resource. The code creates multiple dialogs in same page, which can be accessed by navigation pane provided on the top. The code is presented with required explaination. The article deals with the basic aspect of Symbian application and can be useful to beginners.	20090928	Savaj	Multi-page dialogs is useful when user have number of fields that can not be fit to one screen. Here multi-page dialog does not mean the dialog that have scroll-bar to scroll between multiple pages, but framework provides tabs to navigates to each page. This type of dialog can be created using DIALOG resource. Multi-page dialogs define a list of pages instead of items in single-page dialogs. The soft-keys defined in the resource are generic to the entire dialog - not to each page. The article describes a way to create multi-page dialog with DIALOG resource. The code snippet useful to beginners to implement multi-page dialog.
Talk:Display Date-Time in different formats	20090925	Vkmunjpara	As we know that when some application is running and if that application doesn't display time and date then user has to close that application and then and then he/she can see timings. So this code helps to put date and time in a particular fashion in an application. This article is very much helpful to beginners and it also explains the use of basic class CaknInformationNote.			
Talk:Design Patterns in Symbian	20090929	Nirpsis	This article provides starting guide about designing patterns in Symbian . The article presents various basic design categories like architectural design, structural pattern and behavior patterns to provide basic aspects in designing patterns. Here, the author has described the Model view controller design pattern with details. The author has also analyzed how to using MVC pattern in S60, why MVC is important and what is the use of MVC. In the article, the author has also illustrated various pattern like adapter pattern which is used to adapt to changing requirements without changing structure of the initial design, observer pattern which is used in many event based application to separate events and state pattern which is used to provide entity. This article provides fundamental knowledge for beginner as well as designers who wants to make design patterns in Symbian.	20090906	Deepikagohil	The article illustrates the detailed presentation of the various points related to design pattern in Symbian. The developer is supposed to have the basic information about the design pattern befor starting development. The basic aspect of designing in Symbian are is (Model View Controller), Which is clearly expressed here. Moreover the Adapter pattern, Observer patteren and State pattern are also described. The essential feature to know before developing any program is mentioned in this article and thus it becomes important for beginner.
Talk:SMS operations using Symbian C++	20090904	Savaj	This article explained all basic SMS operations like reading and deleting SMS from Inbox, Outbox, Draft, Sent Item folder. Source code of SmsHandler class in 2nd and 3rd edition will help to perform these SMS Operations. Comments in source code will helps the beginners to understand code.	20090908	Deepikagohil	The article has illustrated the code and description of almost all the basic operations regarding to SMS i.e. reading an SMS from messaging folders(inbox, outbox,drafts, sent items), Reading incoming messages(online), Deleting messegesfrom sent item, Disablind "Deliever reprots" etc. The article has described the the code for these operations from scratch. Starting from which file to include in header file, what should be included in the MMP file to the code for all the operations are very will-explained.The class which is used to handel these operations is SmsHandler. The article find its importance to everybody who wants to start creating messaging applications.
Talk:Listbox creation using Symbian resource definition	20090927	FireSwarog	This article explains how to define S60 listboxes with the content in project resources and how to use such resources in GUI-classes. It is an important information because listboxes are most useful elements of the GUI. Author also shows how to send keyboard events to the listbox and how to			

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			process such GUI event as "size changed". This example will be very useful for newcomers.			
Talk:Symbian C++ application start-Up sequence	20090906	Kamalakshan	Anyone starting with Symbian Application development will find this brief article very useful in understanding the flow. It provides information on the sequence of functions called after E32Main() entry point is called. If understood properly can be very helpful in debugging application.	20090907	Deepikagohil	The article explains the breif about the sequence in which the application you have developed will run. The flow of execution is given by an image implementation. Whenever your application starts, first E32Main() is called and then the sequence in which the execution flows is given in a step by step format in the given article. The beginners to Symbian C++ application development will find it useful.
Talk:How to detect if a Symbian device is in offline mode	20090906	Kamalakshan	Very useful tip on how to detect offline mode for 3rd edition devices. It has many use cases like not trying to send SMS or providing any such options to the user in the Offline Mode. The code snippet can be used in identifying the current profile of the device also.			
Talk:How to define folder for application icon while installation	20090903	Kamalakshan	By default most applications gets installed in the "My Own" folder of the device. This article describes how to override this default behavior using group_name and create a separate group for your set of applications. Say all the applications developed by you can be placed in this group. Note: AFAIK on uninstall the group folder is not deleted automatically.	20090928	Savaj	Small but really useful article. Using this article you can install your application in your custom folder, instead of installing it at default location. Defining folder and installing application in that folder is particularly useful when you want to deploy and organize all your applications to one folder.
Talk:FTP Client Example	20090930	Fasttrack	Article does not contain any code or any thing, but its restrain a basic thing about the FTP internet connection. There are many applications are developed on FTP transfer. So to know about FTP is very essential as a developer. And as developer to discern just a FTP is a transfer protocol not enough. To develop application on FTP we must know every thing about FTP connection. At here this and linked article explain about FTP, its protocols etc. so it's a very good for every developer. And in ftp client mobile is a client device, so to make an application for client side is more consistent.			
Talk:Compatibility Overview	20090910	Deepikagohil	Compatibility is a major issue to be considered during developing any application. The main 3 compatibilities are: source-code compatibility, binary compatibility and backward compatibility. The article simply gives the introduction to the concept of comaptibilty and compatibility-breaks. The article has described the points like--source code compatibilty break, binary compatibility break, backward compatibility break, data compatibility and wrapper.The ways of intentional and unintentional breaks in compatibilty are also given. The device-specific issues related to breaks are also described. The article is important to beginners to understand the concept of compatibility and compatibility-breaks.	20090911	Skumar rao	A nice & must read for developers who are working on projects that require porting from v2.x SDKs to v3.x or projects where source code is merged in between platform specific code.
Talk:Bitmap class for direct screen access	20090918	Kamalakshan	Game programming requires faster rendering to the screen help achieving this on can draw images directly to the screen. However, storing the most frequently used sprites in the memory and then drawing it from there can increase the speed even better. Well commented code snippet has been provided showing the usage of TBitmapUtil class to access image data of a bitmap - providing access to individual pixels.			
Talk:Implementing Animation using CAknBitmapAnimation	20090909	Deepikagohil	The article has merely represented how to create an animation in Symbian C++. The API used here is CAknAnimation. The article provides basic information to develop animation in your program. The introduction is given before performing the code. What thing you will require to create the same before starting to create your application e.g. Bitmap Animation data, Array od bitmap, Bitmap images etc are also explained. In the end, the article explains the bmConv tool i.e. how it is used and where to use it. The article is helpful to beginners who wants to implement their first animation application.			
Talk:Macros in Symbian	20090906	Kamalakshan	This article provides a very good reference for Macros available in Symbian. Also briefly describes its usage.			
Talk:Anti-tearing with CDirectScreenBitmap	20090918	Kamalakshan	Direct screen access is a way of drawing to the screen without using the window server. As this avoids client-server communication, it is much faster, and may be useful for games and video. This article provides code snippet demonstrating the usage of CDirectScreenBitmap. A good reference for beginners to start with.			
Talk:Folder handling in Symbian C++	20090908	FireSwarog	This article demonstrates basic operations with folders. There is several classes in Symbian C++ which provides operations with folders. This article demonstrates how to use these classes. Like previouse article of same author ("File Operations") this article is very useful for beginners.			
Talk:How to create a static DLL in Symbian C++	20090926	Savaj	Multiple applications might need to share common code, DLL is useful in that case. The concept of DLL helps to promote code reuse and efficient memory usage, and also eases code deployment and installation. The DLL may be loaded into the memory when it is actually needed, so the memory usage becomes optimized. For using static DLL the functions should be exported that can be called by other code that builds against its header files and links against its import library. This article describes the way to export functions(in source file) and import functions(in header file). The article also describes the way to freeze dll, which is required before building application.			
Talk:File manipulation in Symbian C++	20090908	FireSwarog	APIs for working with files are very important. Many complex applications require such functionality. Symbian C++ provides several classes for working with files, all these classes use specialized application server (efile.exe, UID: 0x100039e3) for the implementation of certain tasks. Each connection to file server is based on the object of the class RFs. This article demonstrates how to implement functions for the basic file operations in synchronous mode. The source code is very simple which simplifies understanding. The class contains special functions that show the information messages as a result of operation execution - such approach will allow beginners quickly understand how it works. This class can be used as a base for implementing of more advanced functionality for working with files.			
Talk:Collection classes	20090903	FireSwarog	Collection classes are very important for storing data. If you already have expirience in development for PC, you could say, that the best realization of collection classes is already presented in STL and Boost. Unfortunatly there is no Standart Template Library in Symbian C++. There are many reasons why it is so. Currently you could use STL and Boost only if your application is based on OpenC/OpenC++. In case of common Symbian C++ you have to use realization of the collections from Symbian. This article contains relevant and useful information about dynamic arrays. What kind of array you could use ? How these arrays store data ? The answers to such important questions are presented in this article.			
Talk:How to check if Bluetooth			Article shows a function to check out whether the Bluetooth of our device is on or off. Function returns *true* for on-bluetooth and *false* for off-Bluetooth. In Bluetooth application			

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Talk:How to check if Bluetooth is on or off using Symbian C++	20090924	Fasttrack	we have to first check that if Bluetooth of the device is on/off. Then we have to give another instruction. At that time this function is useful. Image which shows the use of this application is a good improvement.			
Talk:Comparing Symbian GUI and Console applications	20090907	Deepikagohil	Developing a Symbian C++ application can be developed in 2 ways: either console based or GUI (Graphical User Interface) based application. The article is mainly deals with the comparison of both developing environments. The key points given here are really good. The pros and cons of using both environments are genuinely given here. Both have their own features.e.g. in console Based application, we can have the control over the stack size while in the later it is not. Each and Every feature is described in form of comparison of these two. Beginners will find this article very interesting.			
Talk:How to avoid common Symbian C++ programming errors and make code more efficient	20090921	Deepikagohil	This article illustrates list of common errors which often come accross during programming in Symbian C++. This article makes us aware of these minor and common errors, and also provides some solutions to avoid these. The errors described should be kept in mind during developing an application and should be avoided to make our program efficient and effective. The errors illustrated are very common so this article is also useful to every developer who are creating applications in Symbian C++. But beginners and intermediate developers will find it more interesting.			
Talk:How to use Thread Local Storage	20090928	Savaj	Symbian OS versions 8.1a and earlier, based on the EKA1 kernel, do not support global WSD(Writeable Static Data) in DLLs. Symbian OS Versions 8.1b and later, based on EKA2 kernel, and EXEs of all versions support WSD in DLLs on target hardware. Thread-Local Storage (TLS) is an alternative to global writeable static data. Thread Local Storage (TLS) is a single per-thread word that can be used to simulate global writeable static data. So you can store exactly one TAny* per thread per .dll via using TLS. All the static data in the DLL is grouped into a single struct or class. The article have brief description of Thread Local Storage (TLS), which helps developer to understand the concept of TLS. The source code with proper comments will helps to understand and implement code.			
Talk:SIS	20090908	Narendrachinni	This article had explained about the sis file and how to deploy sis file in the mobiles actually what is sis file sis means symbian installation source so we have to convert exe file to sis file to deploye it in our mobile for that we have to use a command makesis name.pkg file then it genereates the sis file and then we can tranfer the sis file by using nokia pc suite or bluetooth or email also and before installation we have to make sis signed see the example symbian sis signed in wiki this article help for beginners very much	20090908	Deepikagohil	.SIS filename extention is for installation package files for Symbian OS. The article gives us the abstact information about the SIS(Symbian Installation System) files i.e. what it includes. Although the article has not given the description in detail, the fundamental things are given. And from these things you can go into much detail depending on your interest. The article is meant for beginners only.
Talk:Serial communication using Symbian C++	20090925	Vkmunjpara	**Level**: *Intermediate* We are transferring data through Bluetooth or infrared or through data cable. This can be achieved through serial communication. And the steps that are required to perform serial communication are also explained in detail. And how to connect to serial comm port is also explained so it will be used to make real time applications because different classes, required for serial communication, are also explained in brief. So this documentation gives important information related to serial communication.			
Talk:Thread vs Active Object	20090906	Deepikagohil	The comparision given between threads and active objects is genuine in this article. The asynchronous approach of Symbian OS and why to use active objects over threads in multi-tasking in Symbian OS is described clearly. The advantagess are also mentioned for using active objects. This article can get beneficial to beginners.			
Talk:How to read ZIP file using Symbian C++	20090917	FireSwarog	Processing of the zip-files is a very useful feature. It could help you in many cases - especially when you need to process data from desktop PC, because very often such data could be packed in ZIP-format. Also you could store data in ZIP-format with password protection - sometimes such approach is very necessary. This article help you to understand how to retrieve information from ZIP-archive and how to extract files from it. The code snippet contains detailed comments that help you to understand all necessary aspects of working with ZIP-files with the help of class CZipFile.			
Talk:Using Bluetooth GPS	20090928	Deepikagohil	This article represents code snippest, which gives longitude, lattitude, heading and speed information using Bluetooth GPS device. The demostrated example uses the RFCOMM transport protocol for communication. The function is performed asynchronously with the use of Active objects. The article also lucidly explains the use of socket API in the code snippest for beginners . The code snippest presented for using Bluetooth GPS is simple and can be useful to beginners who intend to use use this feature in their application.			
Talk:How to create a MIF file	20090906	Kamalakshan	This article provides step by step information on creating a MIF file. Although the default template provides the mk files, it would be required to make some changes to it depending upon requirements. This article might prove to be a good reference then.			
Talk:Protocol Implementation Layer	20090919	Deepikagohil	For Networkig, the basic model used is OSI(open system interconnection) model; which has 7 layers. Symbian OS communication layer uses the same model. The article shows the main four layers of it. The article well explains the Protocol implementation layer. It describes the various protocol module in breif. The article can be useful to beginners to get overview of Protocol implementation layer.			
Talk:Symbian Hardware Abstraction Layer (HAL) APIs	20090919	FireSwarog	Hardware Abstraction Layer (HAL) - is an important feature that allows you to get important information about device in your programs. This functionality allows you to create your own "Device Info" application. But it is necessary to note, that some devices retuirn incorrect HAL-information. Therefore, you must be very careful to use this feature.			
Talk:How to parse XML files using the CParser class	20090916	Savaj	XML is playing an increasingly important role in the exchange of a wide variety of data on the server. Application may request some data from server in form of XML using predefined protocol, Or send data to server in form of XML using predefined protocol. CParser class, which is used to parse XML, is introduced in Symbian from version 8.1a. CParser is SAX parser. Interface MContentHandler will gives a callback on start of each tag and at the end of tag, which is useful to parse each tags and attribute of XML file. OnStartElementL() get called for each tag, RTagInfo will gives name of tag and RAttributeArray will each attribute and its value. First parameter of method OnContentL() will contains data of tag. You can use class CXmlHandler, of this article, to parse XML in your application. Source code with article helps to understand how to use CParser, comments in article will be useful to understand importance of each function.			

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Talk:Launching default application based on MIME type	20090909	Savaj	GUI application offen require to launching default application based on MIME type. For example opening image or audio/video files, it cane be launched by MIME type. RApaLsSession is right class to launch default application viewer as well as launching other applications. This article described how to launching default application based on MIME type, how to launch other application based on UID, and what are different headers and library require to use RApaLsSession API.			
Talk:Database Example	20090907	Savaj	Creating and using database is important for almost all application that need to save data on client. Symbian also supports flat file system through which we save and retrive data, but retrieving data from flat file is not much efficient. Creating and using database file is more efficient. Symbian support classes like RDbNamedDatabase and RDbStoreDatabase, to create database. This article described use of RDbNamedDatabase to create database. The class CMyDBClass (in this article) illustrate how to use RDbNamedDatabase API to create database. Article is very useful to beginners.			
Talk:Using Clock API	20090909	Deepikagohil	The article provides introduction to the Clock API. Clock API is very useful in Symbian C++ because it is used in widely in most of our applications. The clock API is generally used to create timers in our applications. This article provides the general information of Clock API and three basic aspects of clock API : the clock base classes, Analog clock and Digital clock. from among all the base classes mentioned in the article RClock is mainly used. It is useful to everybody who are creating their application with Symbian C++. The article gets more beneficial to beginners.	20090925	Vkmunjpara	**Level**: *Basic* This article shows some basic APIs related to Clock. This article shows how to display clocks of different types like digital, analog etc. using Clock APIs. It describes about Clock APIs like RClock, RAnalogClock, RDigitalClock. So this is basic information that helps to beginners of Symbian C++ and this information will help to developer to make real time applications.
Talk:Logs monitoring Example	20090912	FireSwarog	This example could help you to monitor events of phone's log. You can use this class in own server application as a base for more advanced features, such as dropping incoming or outgoing calls from predefined numbers. I successfully used this example on my Nokia 5800.			
Talk:Logs Example	20090912	FireSwarog	With the help of this example you could read and modify data from the phone's log. Such features allows you to backup important data, find necessary information, or delete sensitive data. The class is fully self-sufficient, you could simply copy it to your project and implement the interface MLogCallBack. This class works fine on my Nokia 5800.			
Talk:Memory Management	20090906	Kamalakshan	Developing on devices with limited memory and resources needs to take extra care on Memory management issues. This article briefly describes most of details you need to know while developing for Symbian platform. Does give a good idea on Memory Management in Symbian for Beginners			
Talk:Carbide.c++ Plug-ins	20090921	Deepikagohil	Carbide.c++ Plug-ins adds some more functionalities to the standard Carbide.c++. This article mainly deals with standard Eclipse plug-ins for Carbide.c++. It provides the quick overviews and functionalities of plug-ins and provides external links to get into more detail. A good article for those developers who intend to use these plug-ins for Carbide.c++.			
Talk:List box with Search, example	20090927	Deepikagohil	ListBox is a primary feature of an application. List box is a GUI element which is made up of multiple textbox elements and used to select one item form many. To search an item in the list box we are suppsoed navigate the items of the list box. But if the data contained is large, then it would be preferable to create a search box for the same. This article represents the a qucik guide and code snippests to create an List box with search field for your application. The code for all the mandatory methods to create an listbox an search box are clearl illustrated in the article with required comments. This article can be helpful to beginners to understand this primary feature of UI in Symbian.			
Talk:Service Discovery in Bluetooth	20090919	Nayan trivedi	This article illustrate all about SDP in Bluetooth.THis article is well written by the author.Author explained all the things about use of SDP in Bluetooth using block diagram. The service discovery protocol (SDP) provides a means for applications to discover which services are available and to determine the characteristics of those available services. A specific Service Discovery protocol is needed in the Bluetooth environment, as the set of services that are available changes dynamically based on the RF proximity of devices in motion, qualitatively different from service discovery in traditional network-based environments. This article may be useful for beginner.			
Talk:File logger	20090906	FireSwarog	Very good and useful article. It is often necessary to monitor status of important objects during testing complex application on a particular device. This article contains example of a powerful data logger, with the help of this logger you could comfortable store requred data in text files while application runs on the device. The resulting log-files can then be used for troubleshooting application, for optimizing its perfomance. This logger has been successfully used in several projects (one of the projects is based on engine with multiple threads, logger successfully works with each thread). I have significantly reduced the time for finding bugs in my application with the help of this logger.			
Talk:HTTP on Symbian OS	20090911	Deepikagohil	The article contains important information about http on symbian OS. The concept and main features of HTTP client API in Symbian are abstractly described. The key features like sessions, Transactions, Headers, data suppliers and filters are explained in this article. The article also provides an external link which describes HTTP in very much detail. The article is meant for beginners. The beginners who wants to get basic informatin about HTTP on Symabian can refer it. Moreover, if they want to go in more detail, they can refer to the link.			
Talk:How to Make an HTTP Connection Using TCP/IP with RSocket	20090919	Deepikagohil	This article demostrates very good example for beginenrs to study RSocket API and to make an http connection using TCP/IP with RSocket. Socket is used for end-to-end connection between two participants. Its follows client-server architecture. Sockets are useful in applications which uses bluetooth, infrared, internet or any type of connection. The code presented in this article does an asynchronous function and the article shows the implementation for each method. The article first gives the overview and explains the task to be done and then represents the code snippest. The code is contained with comments. All the required methods are implemented. The article can be very useful to beginenrs and intermediate developers to make an http connection using TCP/IP with RSocket.			
Talk:How to use RDebug	20090925	Savaj	Debugging application and checking logs at run-time is important task during development phase. RDebug class is useful to provides way to check debugging value. It provides a way to show messages and line number of current line. Article shows way to view RDebug output at different place, for example in emulator. Explanation with images help user to use RDebug in carbide.			

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Talk:Create Dynamic Settings Pages using Symbian C++	20090918	Deepikagohil	This article contains a good information to create dynamic settings page. It is useful at the times when you want to design setting page dynamically and not designed them beforehand in the Resource file. It is bit complicated but the article makes it easy to understand. The article contains all the required information to add a dynamic setting page i.e. library files and header files required, source code at each level etc. The article explains each topic in detail. Moreover it also discussion about the possible panic situations (You can follow the internal link for that). The article can be very useful to beginners and intermediate developers to study creating dynamic settings page.	20090924	Savaj	Nearly all GUI applications require settings page to allow user to do some application specific settings, for example to set GPRS access point in a application which use GPRS. As mentioned in article CAknSettingItemList is right class to create settings page. You can create settings page either using resource file or you can create dymamically by calling methods of CAknSettingItemList class. The author of this article created class CSettings, which is inherited from CAknSettingItemList, to create settings list. The class CSettings is very useful to beginners who does not know how to use CAknSettingItemList. You can also create settings list by making CAknSettingItemList as a member of your class. Even nothing wrong in creating static settings list using the method described in this article, as i always use this method.
Talk:How to show Table layout data in a MIDP Form	20090925	Larry101	Java ME does not provide a default table UI component. In order to address this limitation, the designers of the NetBeans mobility pack provide us with their own custom component for displaying tabular data, the TableItem. TableItems can be added to a Form using the Visual Form Designer, or can be created programatically. This article gives a nice overview of how to make use of the TableItem class provided by NetBeans. The article gives both a code example and a screenshot of the TableItem from the standard wireless toolkit emulator. As the code example shows, the TableItem UI control uses a Model-View-Designer approach similar to that used for Swing controls in Java SE. The programmer needs to implement the TableModel interface when specifying the data to be stored in a TableItem. Alternatively, a SimpleTableModel class is provided which is a basic implementation of TableModel and allows users to simply pass an array containing the table data to its constructor. While the TableItem UI control is useful, it is not perfect. From personal experience, I have found that the control tends to render slightly differently on different devices, and some experimentation is generally necessary to get the control to look exactly as you want it to. The following article demonstrates how to create more flexibile tables in Java ME which allow multi-line cell contents in a table: Create more flexible table in Java ME			
Talk:Bluetooth	20090925	Fasttrack	Article does not contain any code or any thing, but its contain a basic thing about the Bluetooth. At now a days, most of the mobile contain the Bluetooth. And many applications are developed on Bluetooth. So to know about Bluetooth is very important as a developer. And as developer to know just a Bluetooth is a communication part not enough. To develop application on Bluetooth we must know every thing about Bluetooth. At here this and linked article explain about Bluetooth, its protocols and etc. so it's a very good for every developer.			
Talk:Message Queues	20090928	Savaj	Message Queues is one of important inter-thread communication mechanism through which multiple threads in one or more processes can exchange data. A message queue is either local or global, the global message queue is visible to all processes while local message queue is not visible to other processes. A brief explanation which describes how to create local & global queue and sending & receiving messages from the queue helps in to implement message queue in application.			
Talk:Pop up list example	20090927	Deepikagohil	Pop-up is a small window, which is used to give some information to the user and it appear with the main active window. It can be used for giving alert messages or simple messages to the user. Popup list is used If you have several items for the user to pick from. This article clearly presents the approach to create a simple pop-up list in your application with Symbian C++. A quick guide for the same with the relative code are lucidly explained by the article. Beginners can get a good benefit from this article.			
Talk:Bluetooth API in Java ME	20090917	Vkmunjpara	This article is helpful to beginners about 2 classes that has to be imported in the file for bluetooth handling through application. javax.blutooth and javax.obex This article is good explained through visual architecture.			
Talk:Draw Gradient in Java ME	20090919	Larry101	This article provides a useful class for creating linear gradient paint effects in Java ME. The standard Graphics class used in Canvas and GameCanvas-based applications does not allow for the easy creation of gradients. The code example provided addresses this limitation by allowing programmers to create rectangles filled with either vertical and horizontal gradients. The programmer is simply required to provide the two-colours required for the gradient, the coordinates of the top-left corner and the width and height of the rectangle. The class then takes care of painting the gradient, interpolating between the two colours in order to smoothly transition from one to the other. The code in this class provides for reasonably smooth gradients in Java ME and is very useful given the limitations of the standard Graphics class. This approach is better than using an image containing a gradient as a background, as it is difficult to scale an image correctly for all possible screen aspect ratios. Images also increase JAR file size.	20090922	Vkmunjpara	This article is good explicated with methods and with an example in an easy way. This article shows how to draw gradient on canvas. gradientBox() method addresses some calculation needed for setting gradient on to canvas. And these functions are applied in paint method defined in GradientRectCanvas wrap.
Talk:Introduction to RGA	20090904	Kamalakshan	To overcome the limitation of Open C/C++ of not being able to create UI or access any of the platform specific features, RGA API's were introduced. This article gives a very good overview of the RGA api. It gives brief introduction on the comprehensive list of RGA apis.			
Talk:Memory leaks	20090906	FireSwarog	Memory leaks - one of the most terrible problems for mobile developers. Warning message in emulator after closing the application ... I think that all developers faced with this warning. You must allocate and release dynamic memory very carefully, because it is very important for stable work of mobile device. This article describes the causes of memory leaks, as well as step by step explains how the two-phase construction allows to avoid them. This is a very useful article especially for beginners.			
Talk:Inter-Thread			The article aminly repersents the concept of how threads can communicate with each other. How resources are shared			Inter-thread communication is a set of techniques for the exchange of data among multiple threads in one or more processes. Processes may be running on one or more applications. In symbian there are many ways through which two threads can communicate to each other. You can choose one of them

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Talk:Inter-Thread Communication	20090907	Deepikagohil	between them. The client-server architecture is also mentioned in this article. The article can become useful to beginners only.	20090928	Savaj	other. You can choose one of them depending on your requirement. I will prefer Publish & Subscribe and Client/Server API. A brief description of each inter-thread communication mechanism will helps developer to understand concept of communication. Source code to implement anyone of them is available on wiki.forum.nokia.						
Talk:Volume control in the navipanel	20090920	FireSwarog	This example demonstrates how to use volume control in navipane - it is a useful information because navipane is a standard place for volume control in S60. As author wrote, You could use this code snippet as a base for own media player application for recording or for playing sound files. Do not forget to call OfferKeyEventL(...) method for changing volume settings. It is suitable to call this method from app ui HandleKeyEventL(...) method.									
Talk:Add a Bookmark	20090906	Kamalakshan	This article describes on how to add a bookmark to the browser in both 2nd and 3rd edition. It has clearly listed down the differences between 2nd and 3rd edition. More specifically it has clearly mentioned how to make it work with both OSS and Services Browser.									
Talk:Dynamic menu	20090904	Savaj	Application frequently require change in menu items, thus we need to implement dynamic menu in application. In symbian this can be done with the help of DynInitMenuPaneL(). This article describes how to add dynamic menu and how to add cascading menu dynamically, and very useful to implement dynamic menu.									
Talk:Process and threads, how to find them	20090910	Deepikagohil	The article represents how to find processes and threads in your system. Beginner may find it difficult to perform this task. This article has represented methods to do so. The methods like GetProcessListL() and and GetThreadListL() will show you all the processes and thread respectively running in your system. If you want to find some specific process, we can also find it by process' SID. All the methods are shown with their code representation. At some times, we want to know when our process ends in our application i.e. we need a signal when our process ends, the code for the same is also given. Moreover, the ways and code representation to find processes by name and to find server, mutexes and semaphores are also given. The beginners who are learing these advanced topics will find this article interesting.									
Talk:Simple About dialog	20090919	FireSwarog	This example illustrates how to realize a popular feature of most projects - simple about dialog. Code snippet contains all necessary information - you could just copy this example in your project. Do not forget - you must define "About" message in all supported languages. You could use particular lxx-file (l01 - for English, l16 - for Russian and etc.) for defining this message.									
Talk:Main tools in the Symbian development and build toolchain	20090909	Deepikagohil	A Symbian Project can be built from command-line or with the use of IDE. To build a project from command line is difficult from building a project with IDE(Integrated Development Environment).The article has described the procedure to build a project from command-line. It has described the use of all the important commands like abld, bldmake, createsis etc. The article provides essential information for those who have never used command-line to build a project and wants to do it from command line. The article contains fundamental aspect to build a project and can be useful to beginners. Experienced people who have only used IDE to create their applications can also get critical information from this article.									
Talk:SMS Receiver	20090908	Deepikagohil	The article has well-illustrated the code for receiving SMS on your device and reading it. The class we have used is CSMSReceiver which is derived from MMsvSessionObserver. the class MSmsRecCallCack is used to check if any new SMS is received and the method HandleSessionEventL() and HandleEntryL() are used which are the main mehtod to handle this operation. The comments given in the article are less but the code given is easy to understand. The article can be useful to the developers who wants to start creating Messaging Applications.									
Talk:Tasks (running GUI application), how to find them	20090906	Kamalakshan	Consider you need to find out if some GUI application is running on the device. Say you want to check if the camera application is active or not. You can make use of the code snippets provided in this article straight away. It has clearly mentioned that EndTask should be used if you need to kill any task gracefully. It also illustrates on how to get more information from the Window Group Name.									
Talk:Changing Status pane text and icon	20090905	Savaj	Usually GUI applications require change in graphics in each screen, including icon and text of status pane. Text of a status pane (Title pane text) serve as a heading of page. This article describes how to set icon of status pane as well as how to set text of status pane. Article also describe how to set default status pane icon and text.									
Talk:Monitoring call status with CTelephony	20090909	FireSwarog	One more useful article about CTelephony. This article demonstrates how to use the main feature of CTelephony - how to obtain call status. You could use class CCallMonitor in you own application (the source code is fully self-sufficient, you could just copy it in your project). Common approach for implementing such functionality is realization of server application without GUI. Such application could work as a logger of phone activity.	20090905	Kamalakshan	The code snippet provided in this article shows how to monitor the call status using the CTelephony API. It registers interest for receiving a notification for Voice Line Status changes. The code snippet provided can also register interest for receiving a notification for owned Call 1 and Call 2 Status changes in a similar way.	20090910	Skumar rao	This article have a nice code snippet that can directly be used in any GUI / Non-UI applications by just copying to .h and .cpp files and adding to project. Only thing it lacks is it does not show how to handle more then one call handling for that developers should be referring to SDK Documents. This article need to be re-formatted with headers. But that does not reduce the importance or usability of this article.	20090926	Savaj	Useful article to get notification on change in Voice Line Status like get notification on incoming call, get notification on outgoing call, get notification on disconnecting call. Both GUI application as well as exe can use this class CCallMonitor easily. But do not forgot to create and add active scheduler in exe before using CCallMonitor (which is an active object).
Talk:Monitoring signal strength with CTelephony	20090909	FireSwarog	This article demonstrates how to obtain signal strenght with the help of CTelephony. The implementation is based on the active object paradigm and observer pattern. Such approach for implementation of asyncronous requests is very popular in Symbian C++. The code example is fully self-sufficient. You can simply copy this class into your project	20090910	Skumar rao	This article have a nice code snippet that can directly be used in any GUI / Non-UI applications by just copying to .h and .cpp files and adding to project. works even in v5.x. This article need to be re-formatted with headers. But that						

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			can simply copy this class into your project.			does not reduce the importance or usability of this article.
Talk:Make call with CTelephony	20090913	FireSwarog	With the help of this class you could dial a new call. This is a most important feature of the smartphones. Symbian OS allows you to use this feature in your code, but not all platforms allows such possibilities. For example there is no such feature in iPhone.			
Talk:How to catch a panic	20090917	Sunil.shetty	Very informative article. Every symbian developer knows how priceless a tool YTasks:CrashMonitor(http://www.drjukka.com/YTasks.html) by symbianyucca[1] is. This article gives a brief idea to novice developers of the underlying workings of this great application.			
Talk:Observer	20090904	Kamalakshan	Observer pattern is very extensively used in Symbian C++ for notification purposes. This article explains how to implement an Observer class and have it subscribed to receive notification. It also discusses on how to implement an array of these observers. An example will be to get notification of HTTP connections or say monitor some file creation, or any other such event notification.			
Talk:Reading internet access points from the device	20090917	Narendrachinni	this article had explained about the reading internet access point from the device A wireless (such as Wi-Fi or similar) access point is included in or attached to a device, such as a cellular phone, WiMAX device, other mobile device, etc. One or more wireless units wirelessly access a communication network (and in some cases the Internet) through the wireless access point device. Additionally, such a wireless access point device can receive a transmission from a wireless tag that has been attached to an object to be monitored and can forward information from the wireless tag to a target device along with location information This help full to the beginners as well as experinace developers also			
Talk:MMP file	20090910	Deepikagohil	This article has given all the basic details about an MMP file of our project. The MMP file of an application contains all the properties/ details of our project. The article has mentioned the all the essential parts of an MMP file i.e. what it contains. The details like TARGETTYPE, UID etc. of our project are mentioned in an MMP file. The article has described each of these in detail. The MMP is an essential file of our project and beginners should be aware of what it contains and how to use it. This article represents basic details about an MMP file and thus it makes its importance to beginners.			
Talk:Network name with CTelephony	20090910	Narendrachinni	In this article they had explained about the how to retrive the Network name with class CTelephony and in this example CNwNameCheck class had explained how to read the current networks name using the CTelephony API .This application is only run in the 3rd edition mobiles only here they used the callback interface function in the implementing the class and then construct an instance of the CNwNameCheck .The callback function will be then called with the network name this example help full to the beginners who started programming on the telephony API.			
Talk:Capturing keys in background	20090904	Savaj	Standard symbian framwork will gives the keyevents to the application that is in foreground. So if if application is in foreground then it will receive keyevents by implementing OfferKeyEventL() method of CCoeControl in a class. Listening keypress events when application is in background is bit difficault, but authour of this article explained it here in nice way. The class CKeyCapturer (in this article) will receive key events when application is in background.			
Talk:Capturing all keys in Non-GUI applications	20090904	Savaj	Some time application need to listen key events in background exe (console exe), to perform some background task, for example capturing long press *. Basically the application that has focus will receive keyevents and other applications will receiving any key input. This article demonstrates the basic step for capturing keyevents using custom class CKeyCapturer2. The code example will helps the developer to implement keylistener.			
Talk:How to install Java ME application in mobile phone	20090913	Vkmunjpara	After you have completed a mobile application the next step is to install it in a supported mobile and to get fill for your application. This article shows some methods to install it in a mobile phone. when you download an application,it will be automatically got starting installing.This article shows why this happens. Some phones supports .jad files and some are not. All this kind of information is given by this post.			
Talk:Active Objects in Symbian OS	20090906	Savaj	Active objects is key (and complex) element in issuing asynchronous request in symbian. It uses an asynchronous service-provider to make an asynchronous service available to clients. An active object provides methods to issue a request to the service provider, get a notification when the request completes and to cancel the outstanding request. A beginners will always face problem working with active objects, So understanding active objects is important before using active objects. Article described active objects framework graphically, will helps beginners to understand active objects thoroughly. Although article does not have any code example to understand it, it have enough information to understand active objects.			
Talk:Two-phase construction	20090906	FireSwarog	Using static function NewL(), as well as second phase constructor ConstructL(), a long time were signs of code developed for Symbian C++. Many years ago, when C++ exceptions have not yet been standardized, this approach was very usefull, it helped to avoid many problems (associated with memory leaks). Tho-phase construction remains one of the cornerstones of Symbian C++. Of cource, since in Symbian C++ appeared full support of C++ exceptions, this consept has lost its relevance. However, developers need a clear understanding of this idiom as the approach to create objects of classes. Two-phase construction continues to be used in a variety of system APIs, and likely will be maintained in the future for compatibility reasons. This article describes the reasons for using such approach of constructing, describes the concept, demonstrates the code example. This material will be particularly useful for beginners.	20090906	Deepikagohil	Two-phase construction is a crucial feature of Symbian C++. The two places where the code should never leave are (1)in the constructor (2) in the destructor. In a constructor initialization code resides. Initialization code may leave if the object if not fully initialized because of some reasons(one of the reason is that the resource file can't get accessed). To overcome this problem, in symbian two-phase construction comes into picture. The construction of an object is done in two phases. Where the object is first created with default constructor (the code in it never leaves) and then pushing it on to the clean-up stack and then calling the constructor method which can leave. Then popping the object from clean-up stack. This article clearly describes the concept and creation of two-phase construction. The article can become useful to beginners.
Talk:How to send Binary SMS in Java ME	20090919	Vkmunjpara	Level: Basic This article shows how you can send picture,sound,etc.. multimedia messages to other phones through message Sending. First it converts multimedia things into binary codes and then sends it to destination phones through message sending.			
			From Symbian OS v7.0 onwards, the ECom plug-in architecture can be used as an alternative to polymorphic DLLs. Before using ECom plugin, it is necessary to			

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Talk:ECOM	20090928	Savaj	understand the concept of ECom architecture. The article is very useful to understand ECom architecture. ECom plugin is considered as alternative to Polymorphic DLL. Also writing an ECOM Plugin is far more simple than writing a polymorphic dll.			
Talk:Adding a Contact Item	20090915	Pirosl	This article is very well written, though I think there are some minor things missing: ▪ template usage is not mentioned; when a contact item is created a template can be used (even a golden template) ▪ There is this mention in the article: "This mapping is also needed if the application developer wants the contact to be displayed in the Phonebook application".....is this true for any kind of mapping? Or there is a list of vCard uids that have to be used?	20090927	Larry101	This article demonstrates how to add a new contact to the contact database using Symbian C++. The code example provided is nicely commented and clear explanation of its function is provided. As a result, the code is easy to understand and even fairly novice Symbian C++ programmers should be able to understand its function. The example shows how to create a new contact, how to add fields to that contact and set values for the fields. The example also demonstrates how to associate field values with vCard values. The vCard format is used widely used to store Contact information and has a standard set of fields. In order for the phone contact browser application to show the correct information associated with the vCard fields, the fields must be mapped onto specific vCard fields using the SetMapping Method. Nice demonstration of the use of the Cleanup Stack too. This article is well written and clearly explained.

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