Code snippets table for common use cases

This table lists common mobile application use cases in some of the more important development frameworks supported by Nokia devices: Qt, Symbian C++, Java ME, and Web Runtime. For each use case, links to corresponding code snippets (CS) are provided. This way developers can more easily find snippets in different programming languages and runtimes.

If you notice that a relevant use case is missing from the list, or a snippet is mapped to a wrong use case, please let us know by adding a Comment at the end of this article. Currently only the code snippets published in the Nokia Developer Wiki are linked to. If you know that a use case is documented somewhere else, you may add your suggestion. We will then evaluate if the resource can be added to the list.

Legend

CS123456	Use case possible (link to a snippet provided).	-	Use case should be possible (no code snippets available).
S60 MobileExt	Use case possible with Mobile Extensions for Qt.	N/A	Use case not possible.

Telephony | Messaging | Networking | Base/System | System information | Profiles | Hardware | Files/Data | PIM | Application Framework | UI | Personalisation | Graphics | Imaging/Camera | Audio/Video | Browsing and Download | Games | Localisation | Help | Location | Development process | Testing/Debugging | Installation

Use case	Development Framework			
Telephony	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
making a phone call programmatically	S60 MobileExt	CS001026	CS000956	N/A
making a phone call (user intervention required)	S60 MobileExt	-	CS000955	N/A
hanging up a phone call	N/A	CS001383	N/A	N/A
retrieving information on a phone call	S60 MobileExt	CS001063, CS001032	N/A	N/A
retrieving log events (e.g., calls)	N/A	CS000849	N/A	CS001231
Messaging	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
sending an SMS message	CS001616	-	CS000976, CS000977	CS001242
sending an MMS message	CS001616	CS001379	CS000978	CS001239
listening for incoming SMS messages	CS001617	CS001381	CS000981, CS000980	CS001236
listing messages in inbox	CS001618	-	N/A	CS001246
removing a message	N/A	CS001380	N/A	CS001241
changing the read status of a message	-	-	N/A	CS001365
providing a "send via" functionality	N/A	-	N/A	-
playing a message	N/A	CS001119	N/A	N/A
Networking	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
opening a network connection	CS001619	-	-	-
filtering internet access points	-	CS000837	N/A	N/A
using an already active connection	CS001619	CS000825	N/A	N/A
Bluetooth	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
using a device selection UI	N/A	CS000910	N/A	N/A
discovering devices	N/A	CS000936	CS001211	N/A
discovering services	N/A	CS000937	CS001213	N/A
service advertising & listening to connections	N/A	CS000938	CS001212	N/A
defining the transfer protocol (RFCOMM/L2CAP)	N/A	-	-	N/A
opening multiple connections	N/A	-	-	N/A

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opening a socket	N/A	CS000939	-	N/A
closing a socket	N/A	-	-	N/A
sending data	N/A	-	-	N/A
setting discoverability mode	N/A	CS000838	CS001310	N/A
prompting to switch on Bluetooth	N/A	-	N/A	N/A
deleting bluetooth device from the registry	N/A	CS001064	N/A	N/A
retrieving bluetooth device's local name	N/A	CS001064	CS001323	N/A
communicating with remote targets	N/A	CS001034	-	N/A
Base/System	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
using software installer programmatically	S60 MobileExt	CS000817	N/A	N/A
exception handling	-	CS000882	-	N/A
reading and writing persistent settings	S60 MobileExt	CS000908, CS000909	N/A	CS001374
scheduling delayed execution	N/A	CS000986, CS000987, CS000988, CS000989, CS000990, CS000991, CS000992	-	-
creating parallel execution paths (threads / active objects)	-	CS000867	CS001321	N/A
synchronizing resource access (Symbian:mutex, semaphore; Java:synchronize)	-	CS000969	CS001320	N/A
splitting execution to asynchronous blocks	-	CS000982,CS000983, CS001010	-	N/A
cancelling an asynchronous function call	-	-	-	CS001177
custom cleanup	N/A	CS000985	-	N/A
using plugins	CS001391	CS000834, CS0000835, CS000836	-	N/A
generating random-value integers	CS001350	-	-	-
using arguments	-	-	-	-
using string conversions	S60 MobileExt	-	-	-
sorting data types, classes, structs	-	-	-	-
System information	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
checking battery level	S60 MobileExt	CS000902	CS001201	CS001247
checking network strength	S60 MobileExt	-	CS001202	CS001234
identifying platform version	S60 MobileExt	CS000933	-	-
getting cell id	N/A	-	CS000947	-
retrieving product information	S60 MobileExt	-	-	-
checking APIs	N/A	-	CS000960	-
feature discovery	S60 MobileExt	-	-	-
checking runtime version	-	-	CS001357	-
checking machine id at run-time	N/A	-	N/A	-
checking machine id at installation-time	N/A	-	N/A	N/A
checking product (=platform) id at run-time	N/A	-	-	-
checking product (=platform) id at installation-time	N/A	-	N/A	N/A
retrieving memory information	S60 MobileExt	-	-	CS001232
checking memory card existence	N/A	CS000827	CS001200	CS001232
Profiles	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
checking current profile	S60 MobileExt	CS001024	N/A	-
changing profile	S60 MobileExt	-	N/A	-

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editing profile settings	S60 MobileExt	CS001294	N/A	
Hardware	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
controlling lights	S60 MobileExt	CS000912	CS001270, CS000957	CS001248
controlling vibra	S60 MobileExt	CS000911, CS001164	CS001258	CS001368
Sensors	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
obtaining the number of sensors	N/A	CS000886	FNWiki	-
displaying information about available sensors	N/A	CS000887	FNWiki	-
displaying sensor data	S60 MobileExt	CS000914	FNWiki	-
listening for rotation sensor data events	S60 MobileExt	CS000913	-	-
listening for accelerometer sensor data events	S60 MobileExt	CS000888	FNWiki	-
reducing accelerometer sensor noise	S60 MobileExt	CS000915	-	-
Files/Data	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
storing application settings	-	CS000967	CS001265	-
using databases	CS001504, CS001505, CS001506, CS001507, CS001508, CS001509, CS001510	CS000925, CS000926, CS000927, CS000928, CS000929, CS000930	-	-
parsing contacts details from informal text	-	CS000931	-	-
managing archives	-	CS000948, CS000949, CS000950	-	-
managing media files	-	CS001036	-	-
opening files, handling mime types	N/A	CS001050, CS001052, CS001053, CS001054	-	CS001371
listing PIM databases	N/A	-	CS000972	-
using resources	CS001503	-	CS000979, CS001006	-
creating temporary files	-	-	-	-
reading and writing files	-	-	FNWiki, FNWiki	-
checking file status	-	-	-	-
encrypting and decrypting	N/A	-	CS001314	-
shuffling data	N/A	-	-	-
PIM	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
Calendar:				
adding a new event	N/A	-	CS001198	CS001233
modifying an existing event	N/A	-	CS001188	CS000942
deleting an event	N/A	-	CS001358	CS001233
showing calendars and events	N/A	-	CS001189, CS001361	CS001244, CS001278
importing an event	N/A	CS001027	CS001197	CS001237
exporting an event	N/A	CS001028	CS001186	CS001237
adding calendars	N/A	-	-	CS0012230
deleting calendars	N/A	-	-	CS0012230
changing calendar settings	N/A	CS001038	-	-
Date/time/clock:				
converting time zones	N/A	CS000847	CS001199	-

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displaying time and date	-	CS001007, CS001008	CS001311	CS001229
changing clock settings	N/A	CS001037	N/A	-
monitoring alarms	N/A	CS001120	N/A	-
Phonebook / Contacts:				
finding/viewing contacts	CS001620, CS001621	-	CS001184,CS001360	CS001235
adding a contact	CS001624	-	CS001183	CS001238
adding a contact to a group	-	-	-	CS001362
managing phonebook groups	-	-	-	CS001373
reading and modifying a contact	CS001622	-	CS001185	CS001240
deleting a contact	CS001623	-	CS001359	CS001243
organising contacts	N/A	-	-	-
importing a vCard	N/A	CS000900	CS001187	-
exporting a vCard	N/A	CS000901	CS001210	-
assigning images to contacts	S60 MobileExt	CS001138	N/A	N/A
Application Framework	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
listing installed applications	-	-	N/A	CS001160
launching an installed application	CS001354	CS000828	N/A	CS001162, CS001518
triggering application launch	N/A	-	CS001387	N/A
pausing application on incoming call or message	-	CS000863, CS000883	CS000975	-
sending application to background	CS001519	-	-	-
detecting focus change	-	-	-	-
exiting application	CS001626	-	-	-
loading libraries	-	CS001009	N/A	N/A
getting UI environment pointer	N/A	CS001057	N/A	N/A
UI	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
adding Symbian S60 Options menu and panes	CS001351, CS001511, CS001512, CS001513	-	-	CS001402
combining UI with engine	CS001613, CS001625, CS001543, CS001544, CS001545	-	-	-
drawing standard borders	-	CS000862	-	-
switching views	N/A	CS001378, CS000848	CS000973	
calculating text width	CS001349	-	-	-
setting label fonts	-	CS000833	CS001316	-
drawing custom borders	-	CS000824	-	-
adding scrollbars	-	CS000823	-	CS001554
listening for scrollbar events	-	CS000884	-	-
implementing a horizontally scrolling view	CS001630	-	-	-
receiving key events	CS001352	N/A	CS001315	CS000943
listening for window server events	CS001353	-	-	-
reacting to changes in screen size	-	-	-	CS001499
detecting and changing display orientation	-	-	-	CS001498, CS001366
locking display orientation	CS001517	-	-	-
using indicators	-	CS000818, CS001121	N/A	CS001549, CS001550

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using progress bars	-	-	-	CS001559
using custom controls and elements	CS001627, CS001612	CS000859, CS000860, CS000861, CS000868	CS001267	-
creating transparent controls	CS001614	-	-	-
using custom dialogs	-	CS000870, CS001165	CS000946	-
using custom scrollbars	-	CS000869, CS000885	-	-
using interpolation	-	CS001166	-	-
using listboxes	-	-	CS001266	CS000941
using grids	-	-	-	CS000940
using notes	-	CS000945	CS001312	-
using dialogs	-	CS001056, CS001062	CS001312	-
using queries	-	CS001055, CS001059, CS001060, CS001061	-	-
managing layouts	CS001308, CS001309	-	-	-
using buttons	-	-	-	CS001547
using radio buttons	-	CS001118	-	CS001552
using checkboxes	-	-	-	CS001548, CS001551
using carousels	-	-	-	CS001546
using datepicker component	-	-	-	CS001553
catching menu events	-	CS001117	-	CS001364
handling touch UI events	-	CS001144, CS001145, CS001146, CS001147, CS001148, CS001163, CS001164	-	-
showing text input	-	-	-	-
enabling and disabling keypad lock	N/A	CS000932	N/A	N/A
Personalisation	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
using skins	N/A	CS001025	N/A	N/A
using style sheets	CS001502	-	-	-
accessing screensaver settings	N/A	CS001039	N/A	N/A
setting ringtones	N/A	CS001294	N/A	-
Graphics	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
adding an application icon	CS001351	CS000808	CS000958	-
loading images	CS001500	-	-	CS001245
rotating bitmaps and images	CS001514	CS000866, CS001139	CS001263	-
scaling bitmaps	CS001347, CS001346	CS000984	CS001269	-
converting bitmap to JPEG	-	CS000906	-	-
avoid flickering with double-buffering	-	CS001049	CS001268	CS001363
creating effects	CS001515	-	CS001319	-
drawing	CS001516	-	CS001313, CS001272	-
	CS001556, CS001557, CS001558, CS001559			

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using animation	CS001559, CS001560, CS001561, CS001628, CS001629	-	CS001271	
changing background colour	CS001348, CS001501	-	N/A	-
Imaging/Camera	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
Camera:				
taking a picture	S60 MobileExt	CS000904	CS001259	N/A
saving a captured image	-	CS000905	CS001261	N/A
displaying viewfinder data	S60 MobileExt	CS000907	-	N/A
handling (releasing) camera resource	-	CS000821	CS001262	N/A
checking if the camera is running	-	CS000815	-	N/A
determining the number of cameras	-	CS000826	CS001273	N/A
using autofocus	S60 MobileExt	CS000954	N/A	N/A
reading image information	-	CS000968	-	-
Audio/Video	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
finding audio and video formats	N/A	CS000899	CS001260	N/A
playing multichannel audio	N/A	CS000916	-	-
managing key sounds	N/A	CS000951, CS000952, CS000953	N/A	-
configuring speech encoders (e.g., AMR)	N/A	CS001030	N/A	N/A
converting text-to-speech	N/A	CS001031	N/A	N/A
accessing video encoders	N/A	CS001065	N/A	N/A
using audio adjustments in the audio player	N/A	CS001130, CS001131, CS001132, CS001133, CS001134, CS001135, CS001136	N/A	N/A
Browsing and Download	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
open html pages and links in browser	CS001495	CS001385, CS001386	CS000974	CS001372, CS001518
gather and add data from a Web page	CS001496, CS001497	-	-	-
Games	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
detecting collisions	-	CS000865	CS000959	N/A
Localisation	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
localising application strings	-	CS000807	CS001094, CS001095, CS001096	CS001370
localising application help	-	CS000810	-	-
localising application menus	-	CS000811	-	-
localising number format	-	CS000855	-	-
localising currency	-	CS000856	-	-
localising timestamps	-	CS000857	CS001322	-
using localised images	-	CS000858	CS001317	CS001369
Help	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
implementing CS Help	N/A	CS000809	N/A	N/A

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localising application help	-	CS000810	-	
Location	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
searching for GPS devices	N/A	CS000822	FNWiki	-
finding position	S60 MobileExt	CS001376, CS001377	FNWiki	CS001161
tracking changes in location	S60 MobileExt	-	FNWiki	CS001176
calculating the distance	-	CS001375	-	CS001175
launching location settings	-	CS001035	N/A	-
Landmarks:				
adding a landmark	S60 MobileExt	-	-	-
modifying a landmark	N/A	-	-	-
exporting landmarks	N/A	-	-	-
importing landmarks	N/A	-	-	-
Development process	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
using command line arguments	-	-	N/A	-
deploying and exporting files	CS001423, CS001424	-	-	-
setting up Qt Mobility	CS001615	-	-	-
Testing/Debugging	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
displaying error texts	-	CS000965	-	-
resolving error texts	-	CS000966	-	-
Installation	**Qt**	**Symbian C++**	**Java**	**Web Runtime**
creating dependencies	-	CS001097	N/A	N/A
showing manufacturer disclaimer	-	CS000934, CS000935	N/A	-

Give feedback

Currently only references to the Nokia Developer code snippets are listed. If you know that a use case is documented somewhere else, or if you notice an error, please let us know by adding comment below. You may also add a suggestion for a new, relevant use case.

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