Mobile Design Pattern: SMS Form

Description

Mobile applications could offer to users the **ability to send SMS messages directly from within the application**. In order to offer this kind of functionality, a form for SMS composing is usually presented to the user, with characteristics that are easily recognizable.

Advantages

SMS Forms integrated in a mobile application give to the user the possibility to **send SMS messages without the need to leave the application** and open the default SMS composer. Also, being integrated within the application, the SMS Form can be **customized** in order to offer to the user a **richer or smoother user experience** (e.g.: filling fields with **pre-compiled data**, allowing to send a SMS message to **multiple recipients**).

Disadvantages

In order to offer the SMS sending functionality, the used technology must offer programmatic **access to Messaging** (to send the SMS message) **and (optionally) to Contacts** (in order to choose the recipient number from the phonebook). Depending on the used technology, this kind of access could or could not be available.

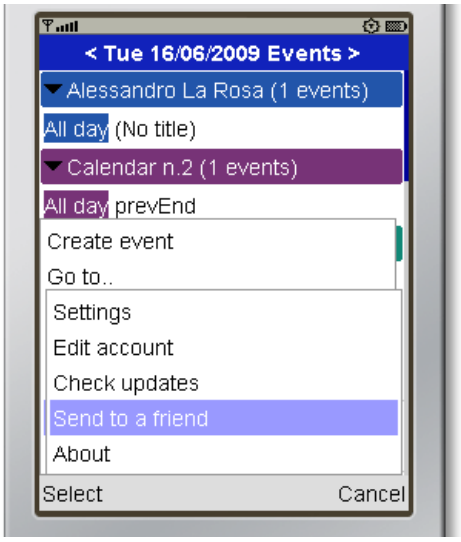
Fallback option

When direct SMS sending from a mobile application is not possible because of technology limits, a fallback option is, when available, to **open the default SMS editor**. If possible, the SMS editor **fields are pre-compiled** with data passed from the mobile application, in order to provide a **better user experience to the final user**.

Use when

The SMS Form Design Pattern is useful in all these situations where you want to allow users to compose and send SMS messages from within a mobile application. This can include scenarios like:

- **Messaging applications**
- **Sending an application download link** to a friend (the classical "Send to a friend" functionality), as shown in the following screenshot.



Use how

Design guidelines

SMS Forms are actually a **common pattern for most mobile users**, since SMS messaging is a functionality always present on mobile phones. For this reason, when adding a SMS Form to a mobile application, it is good practice to respect some **common layout and usability guidelines** that allow users to easily understand the various interface functionalities.

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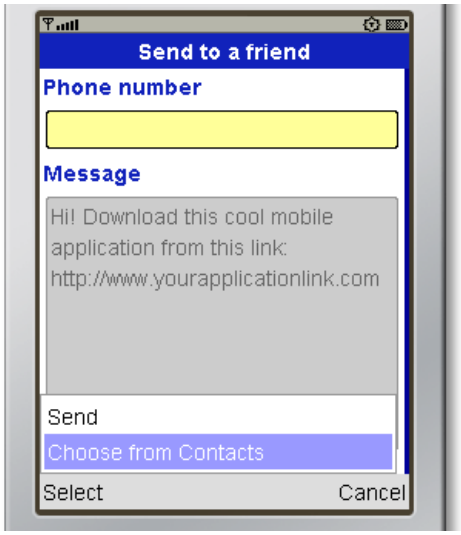

An SMS Form is typically composed of **few, well distinguishable UI elements**. These are:

- A **single-line field for the receiver's phone number**
- A **button** (typically placed near the phone number's field, or in the soft-keys' menu) to allow users to **choose a phone number from the device's phonebook**
- A **multi-line field to allow users to type the message body**
- A **button to send the SMS**

If the SMS sending is a core functionality of the application, it is also good practice to provide extra functionalities to the user, such as:

- **saving an SMS draft**, and the ability re-open and send saved drafts
- **sending a single SMS message** to multiple recipients, without the need to re-type the message for each number

Technology how-to

In order to correctly implement the SMS Form design pattern, the **used technology must allow the access to these device functionalities**:

- **SMS sending**: this functionality is usually offered through some sort of **Messaging API**
- **Access to phonebook**: in order to choose a phone number of a stored contacts

Depending on the used technology, these functionalities are offered through different methods and APIs.

Symbian C++

The following articles explain how to access stored Contacts, and how to send SMS messages from a Symbian C++ application:

- Getting contact info from default database
- CS001307 - Symbian C++: Sending an SMS

Python

The following articles explain how to access stored Contacts, and how to send SMS messages from a Python application:

- How to choose a phone number
- How to send SMS

Java ME

The following articles explain how to access stored Contacts, and how to send SMS messages from a Java ME application:

- How to read contacts using JSR 75
- How to send text SMS in Java ME

Flash Lite

The following articles explain how to access stored Contacts, and how to send SMS messages from a Flash Lite application, by using **Platform Services**:

- CS001223 - Listing contacts in Flash Lite
- CS001249 - Sending an SMS in Flash Lite

If Platform Services are not available, the default SMS editor can be opened with pre-compiled data, as shown in this Nokia

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Developer Wiki article:

- How to send SMS/MMS messages using Flash Lite

Design tips

- Give to the user the ability to **directly type the number in the number field**, without requiring an extra click to access a separate view. If this feature is not natively supported by the used technology, check if it can be programmatically implemented.
- When possible, give to the user the ability to **directly type the message in the message field**, without requiring an extra click to access a separate view.
- Always **support T9 functionality** where available.
- Provide a clear **notification about the sending status**

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