

Series 40 Touch and Type UI Style Guide

Version 1.0; August 19, 2010

Series 40

NOKIA

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Change history

| | | |
|-----------------|-------------|---|
| August 19, 2010 | Version 1.0 | Describes the differences between the Touch and Type UI and the Compact UI described in <i>Series 40 UI Style Guide</i> . |
|-----------------|-------------|---|

1 Introduction

1.1 Purpose

This document provides an overview of the Nokia Series 40 Touch and Type User Interface (UI) and describes its essential parts. It can be used as an introduction to the Touch and Type UI or for reference. It can also be used as background material to help with decision making in different UI design phases.

The style guide is intended to be a compact, easy-to-read guide concentrating on the fundamental UI style elements that are applied across features and components.

Touch and Type is based on Compact UI, meaning that the general UI look and feel, and UI flows are similar. This document only describes the differences between the Touch and Type UI and Compact UI. For guidelines on Compact UI, see the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

1.2 Audience

This document is intended for anyone who needs a general overview of the Series 40 Touch and Type UI style. It is specifically targeted at:

- Application developers
- Content providers
- UI interaction designers
- UI software engineers
- UI graphic designers
- Usability experts
- Localisation engineers

2 Touch and Type UI style overview

The Touch and Type UI offers touch capabilities along with convenient number and text input via a real keypad. It is intended for one-hand operation, using single finger touch. Strokes using multiple fingers are not supported.

2.1 Key principles of Touch and Type UI

The Touch and Type UI is based on Compact UI, meaning that the general UI look and feel, and UI flows are similar. Additionally, it follows a set of key principles:

- Objects are manipulated directly with a single tap.
- Double tap is generally not recommended.
- The UI navigation is done by touch strokes, for example, dragging and flicking to scroll menus. The content always follows the direction of finger movement.
- Moving focus to an object to manipulate it is not used, because objects are manipulated by tapping them directly.
- Each finger touch-down event is indicated visually.
- Actions are usually performed on a touch release event.

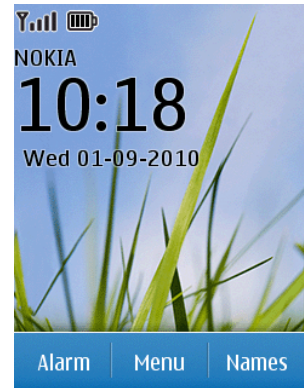


Figure 1: Touch and Type UI example

3 Displays

The Touch and Type UI supports a display resolution of 240 x 320 pixels (width by height).

The display is divided into the following generic components:

- Status zone: Displays the header text and status indicators. The status zone is not touch-enabled.
- Main zone: Displays the content of the current application, for example, user-selectable items, user data, message contents, etc. The content can be touch-enabled.
- Softkey zone: Displays the touch-enabled softkey buttons.



Figure 2: Basic layout

A minimum of 65,000 colours (16 bit) is preferred for colour displays.

To decrease battery consumption, the display light is dimmed when the device is left unused for a period of time. Tapping the screen turns on the light and selects the tapped item.

3.1 Touch-enabled objects

The user must be able to use a Touch and Type UI device with one hand, touching the screen with the thumb. To support this, touch-enabled objects should have the following dimensions:

- Size: 8 x 8 mm (width by height)

Note: The recommended size for touch-enabled objects is 8 x 8 mm (width by height).

In cases where a user task does not require one-hand usage, for example, in games, the touch-enabled objects can be designed for index finger usage, with the dimensions:

- Size: 7 x 7 mm (width by height)

In some special cases, where many objects are needed on one screen, touch-enabled objects may be smaller than normal, for example, the Calendar month view. In such cases, the dimensions for touch-enabled objects are:

- Size: 5 x 4.5 mm (width by height)

When using small touch-enabled areas, it is recommended to offer the user additional assistance in selecting (for example, the pop-up window when touching a date in the Calendar month view).

3.2 Basic layouts

Touch and Type UI style is based on Compact UI style, and most layouts stay the same for familiarity. The layouts contain the same zones, and the relative locations of the zones are similar, but the pixels of each zone are adjusted:

- The status zone size is decreased.
- The sizes of the main zone and the softkey zone are increased.
- The softkey zone is divided into two or three even parts depending on the number of softkey actions available. Softkey actions are placed the same as in Series 40 Compact UI; that is, Options are found at the bottom left, Back/Clear at the bottom right, and MSK at the bottom middle.

The Touch and Type UI reuses most UI components of Compact UI, but the sizes of touch-enabled objects are changed for finger touch usage, as described in Section 8, 'UI components'.

The following sections define the main zone and softkey zone sizes for the basic layouts. The examples represent layouts in left-to-right languages. In right-to-left languages, the layouts are mirrored (some elements, such as the softkey zones and signal and battery bar zones, still keep the same position as in the layouts for left-to-right languages).

3.2.1 Home screen layout

The Home screen state is the basic state of the device. The device goes to the Home screen after startup.

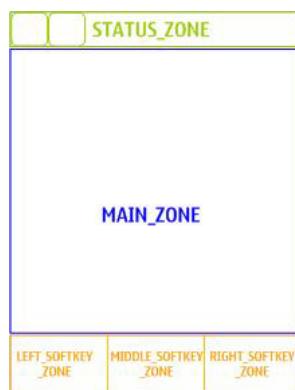


Figure 3: Example of the Home screen state layout, with three softkeys

| Main zone | Softkey zones |
|-----------|----------------------|
| 240 x 240 | 2 softkeys: 120 x 49 |
| | 3 softkeys: 80 x 49 |

Table 1: Zone sizes for Home screen layout

3.2.2 Base layout with a scroll bar

The base layout with a scroll bar is used to display scrollable elements, for example, lists, grids, and data viewers.

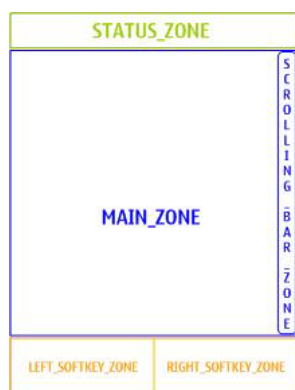


Figure 4: Example of base layout with scroll bar and two softkeys

| Main zone | Softkey zones |
|-----------|---|
| 234 x 240 | 2 softkeys: 120 x 49 3 softkeys: 80 x 49 |

Table 2: Zone sizes for base layout with scroll bar

3.2.3 Base layout without a scroll bar

A base layout without a scroll bar is used to display, for example, a multimedia player, an image viewer, and text input (when scrolling is not needed).



Figure 5: Example of base layout without scroll bar, with two softkeys

| Main zone | Softkey zones |
|-----------|---|
| 240 x 240 | 2 softkeys: 120 x 49 3 softkeys: 80 x 49 |

Table 3: Zone sizes for base layout without scroll bar

3.2.4 Browser layout

Detailed guidelines on how to optimise browser content to be shown in the Series 40 UI are available from the Forum Nokia Browsing technology pages at <http://www.forum.nokia.com/browsing>.



Figure 6: Example of browser layout, with three softkeys

| Main zone | Softkey zones |
|-----------|---|
| 240 x 240 | 2 softkeys: 120 x 49 3 softkeys: 80 x 49 |

Table 4: Zone sizes for browser layout

The browser determines when the vertical and horizontal scroll bars are displayed, depending on the content and configuration.

3.2.4.1 Browser full layout

Browser content can also be displayed as a full canvas layout, which enables free use of the full screen resolution.

3.2.5 Java™ application layouts

Detailed guidelines on how to optimise Java™ application content to be shown in the Series 40 UI are available from the Forum Nokia Java technology pages at <http://www.forum.nokia.com/java>.

3.2.5.1 Java canvas normal layout

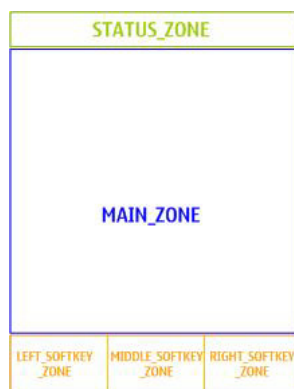


Figure 7: Example of Java canvas normal layout

| Main zone | Softkey zones |
|-----------|---|
| 240 x 240 | 2 softkeys: 120 x 49 3 softkeys: 80 x 49 |

Table 5: Zone sizes for Java canvas normal layout

3.2.5.2 Java canvas layout with ticker

The Java canvas layout with ticker can be used either on top of the normal canvas layout or on top of the form layout.

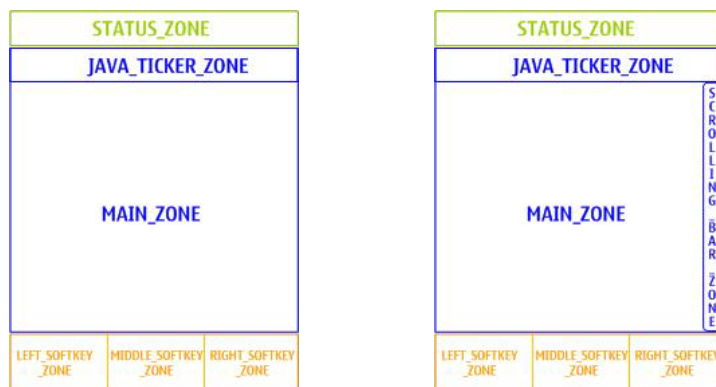


Figure 8: Examples of Java canvas layout with ticker (normal and form layouts)

| Main zone | Softkey zones |
|------------------------------------|---|
| Normal canvas layout: 240 x 212 | 2 softkeys: 120 x 49 3 softkeys: 80 x 49 |
| Form ticker layout: 234 x 212 | |

Table 6: Zone sizes for Java canvas layout with ticker

3.2.5.3 Java canvas full layout



The full Java canvas layout enables the free use of the full screen resolution.

3.3 Layout design guidelines

The general layout design guidelines are the same as for Compact UI. See the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

3.3.1 Icon sizes

The icon sizes used in the layout design should be consistent. The main icon sizes used in different displays are listed in Table 7.

| Icon type | Icon size | Notes | Example |
|--------------|-----------|--|--|
| Status icons | Height 22 | Used in the status zone to illustrate mobile device or network status. Only the height of the icons is fixed; the width can vary. | In Home screen:  In other layouts:  |

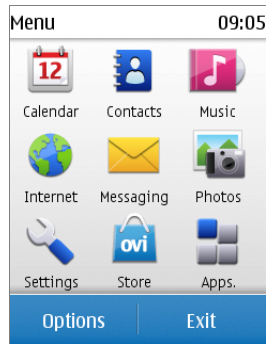

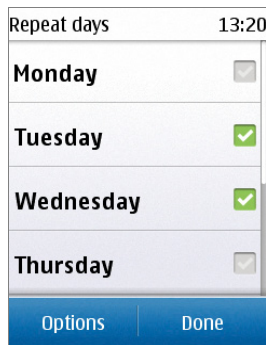
| Icon type | Icon size | Notes | Example |
|------------|-----------|---|---|
| Grid menu | 74 x 61 | Used in grid main menu. |  |
| List large | 43 x 43 | Used, for example, in second-level menus and the tab menu. |  |
| List | 24 x 24 | Used, for example, in third- or lower-level menus and data lists. |  |

Table 7: Icon sizes

3.4 Fonts

Most Series 40 fonts are proportional. A proportional typeface uses varying widths for characters, thus having a proportional font means that it is difficult to tell how many characters will fit on each line. For example, the character 'w' is much wider than the character 'i'.

The font sizes (in pixels) for the Touch and Type UI are listed in Table 8. The font used is a vector font.

The user can choose between a normal or large font size for menus and forms. (The large font size is not supported in all languages.)

| Font | Pixels |
|----------|--------|
| Softkeys | 20 |

| Font | Pixels |
|-------------------------|-----------|
| Header text | 20 |
| Main menu list normal | 24 |
| Main menu list large | 28 |
| Submenu items normal | 24 |
| Submenu items large | 28 |
| Option lists normal | 24 |
| Option lists large | 28 |
| Notes | 28 |
| Editors normal | 24 |
| Editors large | 28 |
| Form labels normal | 20 |
| Form labels large | 24 |
| Form field values | 20 |
| Messaging small | 20 |
| Messaging medium | 24 |
| Messaging large | 28 |
| Browser x-small | 12 |
| Browser x-small bold | 12 bold |
| Browser x-small italic | 12 italic |
| Browser small | 16 |
| Browser small bold | 16 bold |
| Browser small italic | 16 italic |
| Browser medium | 20 |
| Browser medium bold | 20 bold |
| Browser medium italic | 20 italic |
| Browser large | 24 |
| Browser large bold | 24 bold |
| Browser large italic | 24 italic |
| Browser x-large | 28 |
| Browser x-large bold | 28 bold |
| Browser x-large italic | 28 italic |
| Browser xx-large | 32 |
| Browser xx-large bold | 32 bold |
| Browser xx-large italic | 32 italic |
| Java small | 16 |
| Java small bold | 16 bold |

| Font | Pixels |
|-------------------------|----------------|
| Java small italic | 16 italic |
| Java small bold italic | 16 bold italic |
| Java medium | 20 |
| Java medium bold | 20 bold |
| Java medium italic | 20 italic |
| Java medium bold italic | 20 bold italic |
| Java large | 24 |
| Java large bold | 24 bold |
| Java large italic | 24 italic |
| Java large bold italic | 24 bold italic |
| Java form labels | 20 |
| Java form field values | 24 |

Table 8: Font sizes (in pixels) and styles used in basic UI components

Possible font sizes in x-small, xx-small, x-large, xx-large, and so on, are mapped to the listed fonts above.

3.5 Presentation of text

The guidelines for displaying text and numbers are the same as for Compact UI. See the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

3.6 Graphical elements

The general guidelines for displaying graphical elements are the same as for Compact UI. See the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

Additionally, the following graphic design objectives apply to the Touch and Type UI:

- If an element is touch-enabled, this should be indicated visually.
- Noninteractive elements should not look touch-enabled.
- Visual feedback should be given for all touch-enabled elements when the user touches them.

For information on visual feedback, see Section 5.11, 'Feedback'.

4 Keys

The physical keys in Touch and Type UI devices are:

- Send key
- End key
- ITU-T keypad
- Lock key
- Power key (optional)
- Volume up and down (optional)

In addition, keys may be added for certain application needs, for example:

- Messaging key
- Music key



Figure 9: Touch and Type UI physical keys

Note: Touch and Type UI devices do *not* have physical softkeys or navigation keys.

4.1 Key press

The key press functionality works as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

4.2 Softkeys

The Touch and Type UI does not have physical softkeys. Instead, softkey buttons are available on the touch screen, as described in Section 5.6, 'Softkey buttons'.

4.3 Scroll keys

The Touch and Type UI does not have physical scroll keys. Scrolling is done with strokes, as described in Section 5.4, 'Navigation'.

4.4 Send key

The Send key works as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

4.5 Numeric keys and character keys

The ITU-T keypad works as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

4.6 End key

The End key works as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

4.7 Power key

The Power key works as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

4.8 Volume keys

The Volume keys work as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

4.9 Keypad

Keypad is a feature that allows users to lock the keys and touch screen. This means that the device does not react to any key presses or touch strokes, except for the key-press and stroke sequence used for unlocking the keys and screen.

When the keypad is activated, the display light is turned off. Pressing the Lock key or End key turns on the display light and displays the Unlock information screen. The light is turned off again after a timeout. Pressing any other key or tapping the screen does not turn on the display light.

The keypad is deactivated when there is an incoming call and reactivated after call termination.

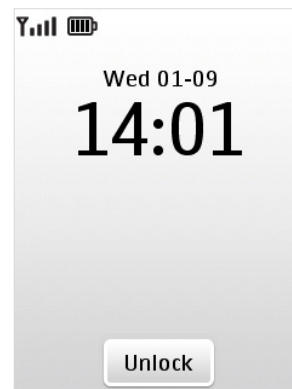


Figure 10: Unlock information screen

When the keypad is active, the device still needs to recognise the emergency number input key press sequence and enable emergency calls.

4.9.1 Locking the device

The keypad can be activated in the following ways:

- Pressing the Lock key;
- Tapping the MSK button and pressing the Star key (*) within a timeout, when the device is in the Home screen.

4.9.2 Unlocking the device






The keypad is deactivated by pressing the Lock key or the End key and then tapping the Unlock button on the touch screen.

5 Interaction

5.1 Strokes

The user can interact with the device using various strokes on the touch screen. The Touch and Type UI is intended for single finger strokes.

Table 9 lists the strokes used in the Touch and Type UI.

| Stroke | Symbol | Description | Function |
|---------------|---|--|--|
| Touch down |  | To touch down on an object. | Touch down initiates a stroke. |
| Touch release |  | To release the finger after touch down. | Touch release ends a stroke. |
| Tap |  | To touch down and release on the same object less than or equal to a long tap timeout. | <p>Tap is used to perform the default action for the tapped object, for example, selecting a list item in a list or activating the function of functional components, such as softkey buttons.</p> <p>Generally actions are performed on a touch release event, but there are some exceptions, for example:</p> <ul style="list-style-type: none"> • While content is moving (e.g., after flicking), a single tap stops the ongoing movement on a touch-down event. On touch release, no action is performed. • Tap on the Clear softkey button in editors clears a character on a touch-down event. On touch release, no action is performed. |
| Long tap |  | To touch down and hold on the same object longer than a long tap timeout. | <p>Long tap can access additional functions for the touched item.</p> <p>Long tap on functional areas accelerates the operation. For example, long tap on the Clear softkey button accelerates the clear action.</p> <p>The long tap action is performed after the long tap timeout.</p> <p>If an object does not have a long tap function, the normal tap function is performed.</p> |
| Double tap |  | Two consecutive taps on the same object within a timeout. | In general, double tap strokes should be avoided, but can be used in some application-specific states. For example, in the browser, double tap toggles between |



| Stroke | Symbol | Description | Function |
|---------------|---|--|--|
| | | | zoomed out and zoomed in. |
| Drag and drop |  | To touch down, move the finger, and release the finger after stopping the finger movement. | <p>Drag</p> <p>Drag is used for moving and scrolling. The content or whole canvas follows the finger movements.</p> <p>Drag can also be used for organising objects, in which case only the touched object follows the finger movements.</p> <p>If the organising canvas is scrollable in a horizontal or vertical direction, dragging moves both the selected object and the canvas when the user drags to the edge of the current display.</p> <p>Drop</p> <p>Drop releases the dragged content.</p> <p>When organising objects, drop places the dragged object into its indicated location.</p> <p>Generally, nothing is selected after drag and drop strokes.</p> <p>For non-movable objects, such as softkey buttons, drag and drop cancels the selection of the object if the finger is moved away from the object before release.</p> |
| Flick |  | To touch down, move, and release the finger before stopping the finger movement. | <p>Flicking is used for moving and scrolling.</p> <p>When flicking on the screen, the content or whole canvas follows the finger movements. After touch release, the content continues its movement with the direction and speed that it had at the moment of touch release until stopped gradually (the content continues the movement with some inertia), or until the end of the content is reached.</p> <p>Touch down instantly stops the moving.</p> |

Table 9: Stroke symbols

5.2 Home screen state

As in the Series 40 Compact UI, the Home screen state is the basic state of the device. The device goes to the Home screen after startup. The details of the Home screen state are described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

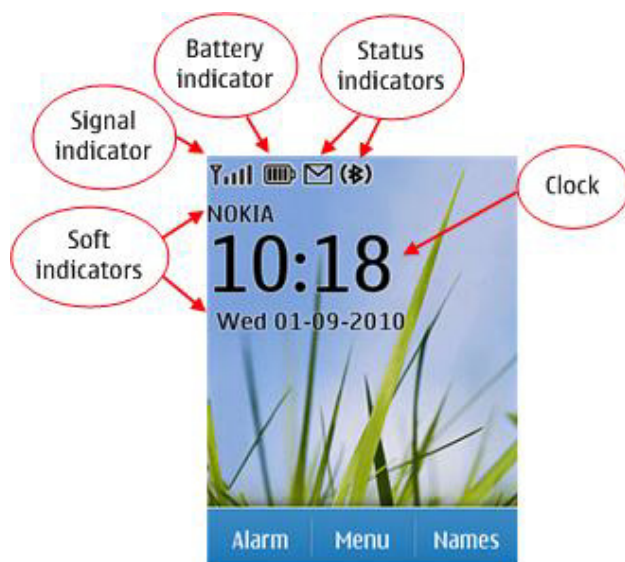


Figure 11: Elements shown in the Home screen state

5.2.1 Home screen personalisation

The user can personalise the left and right softkey buttons and the background image (wallpaper) of the Home screen.

The Active Home screen feature can be used to personalise the main zone contents for the Home screen display. With the Active Home screen it is possible to add, for example, a shortcut bar (containing links to favourite applications), a music player, today's calendar notes, or the user's own textual note on the Home screen display. Each of the Active Home screen elements can be selected by a tap stroke.

From the Home screen, the user can activate the keyguard, or use the physical keypad to enter numbers and instantly create a call.

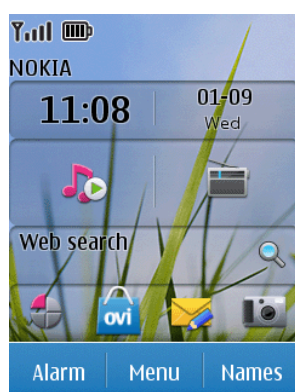


Figure 12: Series 40 Touch and Type UI Active Home screen

5.3 Menu

The Touch and Type UI follows the Series 40 UI style hierarchical menu structure. The applications, functions, and data of the device can be reached via a menu interface. The menu contains a main menu and submenus.

The user can scroll up and down in the main menu and submenu content. The scrolling automatically stops when reaching the end or top of the menu content.

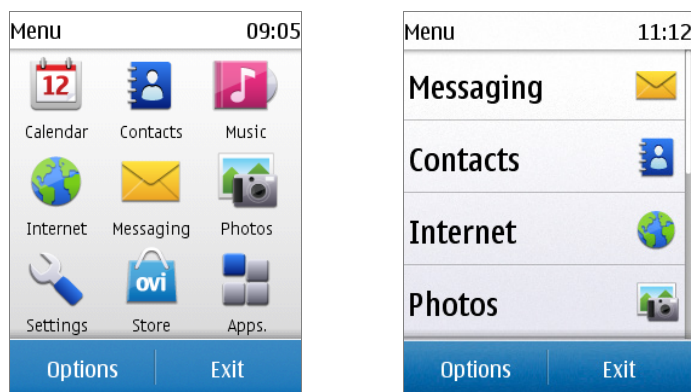


Figure 13: Series 40 Touch and Type UI menu style examples – grid and list

5.4 Navigation

The basic navigation hierarchy of the Touch and Type UI is the same as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

Design guideline: As much as possible, users should be able to operate the device using only touch strokes. A tap on an item selects the item directly. The RSK button is used for backstepping.

Navigation is done by drag and drop or flick strokes. The functions of the strokes are the following:

Drag and drop

When the user drags the list or grid, the entire content scrolls, following the finger movement until the user stops and releases the finger.

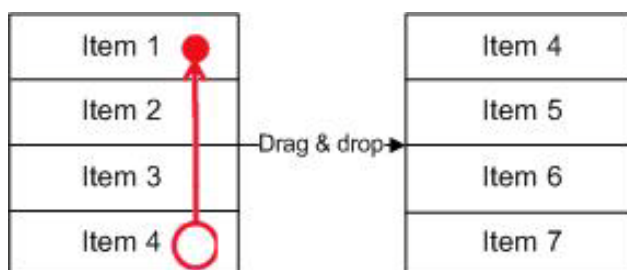


Figure 14: Example of scrolling a list with the drag and drop stroke

Flick

When the user flicks the list or grid, the entire content scrolls, following the finger movement. When the user releases the finger, the content continues the scrolling with some inertia.

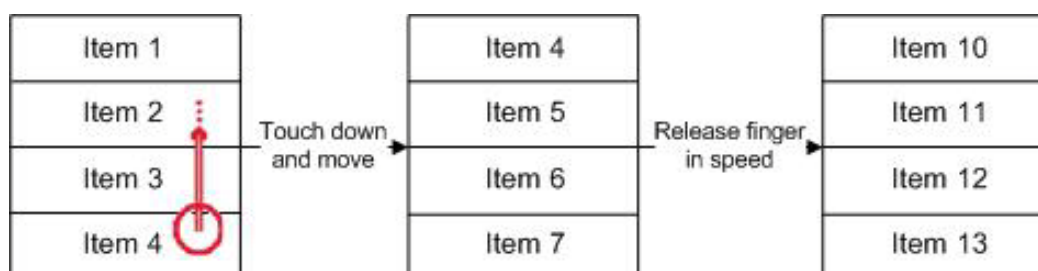


Figure 15: Example of scrolling a list with the flick stroke

5.5 Navigation aids



Figure 16: Navigation aids in Series 40 Touch and Type UI

Visual feedback should be given when a list or grid reaches the beginning or end of content. For details on visual feedback, see Section 5.11, 'Feedback'.

5.5.1 Focus

In a non-touch UI, focus has to be moved to an item with the scroll keys to interact with the item. In the Touch and Type UI, objects are selected by tapping them directly, so focus is not used.

Focus can be used in an application-specific context if an item needs to be highlighted but not selected, for example, Calendar month view.

5.5.2 Header text

Header text is used as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

5.5.3 Scroll bar

The scroll bar works as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>). If the content fits in one display, the scroll bar is not displayed.

The purpose of the scroll bar is to indicate the relative position of the current visible part in the whole content. It is not touch-enabled and cannot be used to scroll the content.

5.6 Softkey buttons

In the Touch and Type UI, the zone at the bottom of the screen is reserved for softkey buttons. The softkey zone can be divided into two buttons (LSK and RSK buttons) or three (adding the MSK button in the middle).

Generally, in Series 40 UI style the LSK button is primarily used to offer more options, while the RSK button has the negative action (Exit, Back, Clear). The most important function of the state can be put in the MSK zone when it improves the user experience. For example, Search is the MSK button in the names list in Phonebook.

- When a softkey button provides a function, it must be labeled.
- The same function cannot be available in several softkey buttons at the same time.
- A function should be mapped to the same softkey button in all contexts.

Tapping on the softkey button performs its function. Long tapping on the softkey button is generally not recommended, except for repeat actions. For example, long tap on the Clear RSK button accelerates the clear action. If there is no long tap function for the softkey, long tapping performs a single tap function after the user releases his or her finger.



Figure 17: Examples of two and three softkey buttons

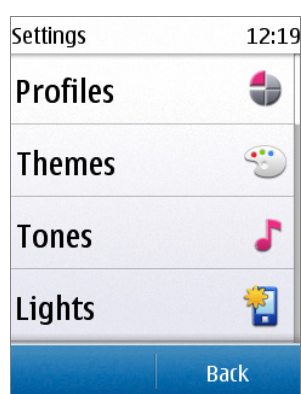


Figure 18: Example of two softkey buttons with only RSK button function

Table 10 lists the default number of softkey buttons and their labels.

| State | Softkey buttons |
|-----------------------|--|
| Home screen | 3 softkey buttons: Alarm – Menu – Names Note: RSK and LSK button default labels can vary from product to product. For more information, refer to Section 5, 'Home screen state'. |
| Selection lists | 2 softkey buttons: [Options] – *Exit/**Back LSK button Options are optional. |
| Multi-selection lists | 2 softkey buttons: Options – Back/Done RSK button is Back when no changes are done. RSK button is Done when changes are done. LSK button Options include items such as Mark all/Unmark all. |
| Confirmation queries | 2 softkey buttons for two-option query: Yes – No 3 softkey buttons for three-option query: No – Yes – Back |

| State | Softkey buttons |
|--------------------------|--|
| Data queries and editors | 3 softkey buttons: Options – OK/Search – Back/Clear MSK button is OK by default. MSK button is Search in empty data queries if the fetch service (from contacts) is available. LSK button is Options when there are predictions or other editor functions available in the query editor. The option list also possibly includes Search. RSK button is Back when there are no characters entered to the data query. RSK button is Clear when there are one or more characters entered to the data query. |
| Forms | 3 softkey buttons: Options – Save – Back/Cancel MSK button is Save by default. It is used for the successful completion of the form and can be changed by feature to a more appropriate label, such as Send for sending a message. RSK button is Back when there are no changes done in the form. Cancel RSK button is used after changes have been made. |
| Viewers | 3 softkey buttons: Options – (Application-specific MSK button) – *Exit/**Back |
| Interruption | [Options] – (Application-specific MSK button) – Quit RSK button is Quit when pressing it interrupts an ongoing operation. It is used with operations when it is not possible to guarantee that the original state can be restored. LSK button Options are optional. |
| Cancellation | [Options] – (Application-specific MSK button) – Cancel RSK button is Cancel when pressing it truly cancels an ongoing operation. It is used in situations where no permanent changes have been made yet and the original conditions can be restored. LSK button Options are optional. |
| Soft notifications | [Options] – (Application-specific MSK button) – *Exit LSK button Options are optional. |

Table 10: Default labels for softkeys

Design guidelines:

* The Exit label is used as the RSK button text when tapping it brings the device to the Home screen state or when the application is going to be closed in the Java mobile information device profile (MIDP).

** The Back label is used as the RSK button text when pressing it returns the device to a previous state.

5.7 Backstepping

Backstepping works as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

5.8 Text input

Text input generally works as described in the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>), with the exception that the user moves the cursor by tapping either the arrow buttons or the text directly.

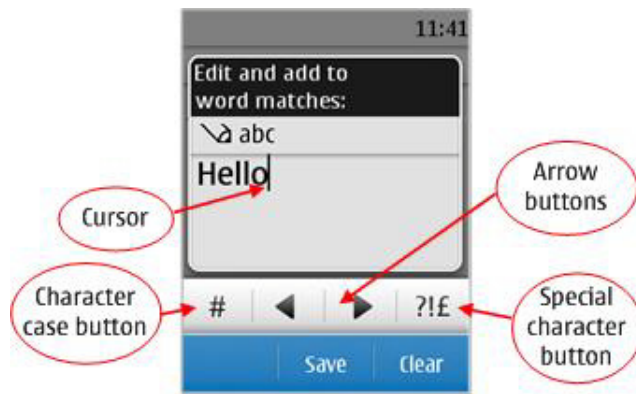


Figure 19: Examples of text input screen

Additionally, the user can access the special character screen both by pressing the Star key (*) and by tapping the Special character button.

In alpha mode, the character case can be changed both by pressing the Hash key (#) and by tapping the Character case button. Double tap on the Character key toggles predictive text input on and off.

The user can delete characters one by one, by tapping the RSK button Clear. Long tap on Clear deletes several characters at an accelerating speed.

Copying and pasting text is not available in the Touch and Type UI.

5.9 Toolbar

A toolbar is a group of state-specific interactive objects that allow fast access to key functions normally found under an option list. Items in the toolbar should not be duplicated in the option list.

A toolbar function must be a key function and frequently used, for example, Play/Pause in the music player.

Toolbars should not be used if it means removing or reducing space for some other important UI elements. If an application's primary function is to display content, the user would benefit from seeing more content on screen without scrolling, rather than having a toolbar take up screen space.

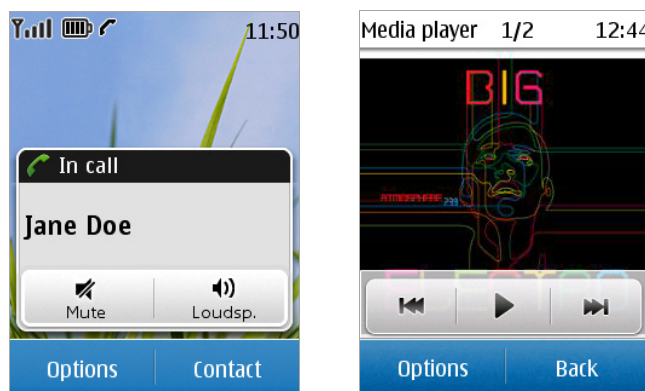


Figure 20 Examples of toolbars

Tapping an object in the toolbar activates the action.

A toolbar button is dimmed if the related function is not available in the current view.

5.10 Zooming

If zooming is a primary function of a state, zooming should be activated by single tapping the canvas. If single tap is reserved for another more important function, zooming should be activated by the MSK button.

When zooming is activated, the mobile device displays two zoom buttons: one for zoom in (+) and one for zoom out (-). The zoom buttons are displayed at touch down, before touch release.

Zooming buttons are displayed to the right in the screen in portrait mode and at the bottom of the screen in landscape mode.

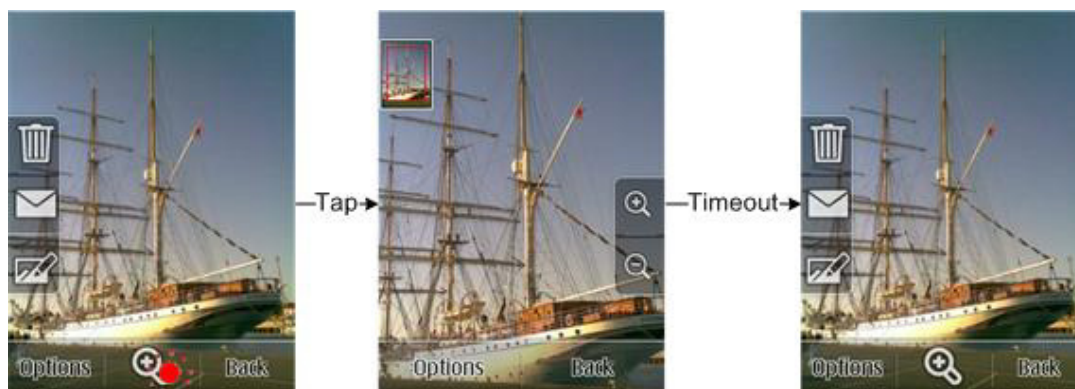


Figure 21: Example of activating zoom with MSK button

Single tap on either zoom button changes the zoom by one increment. The zoom level will immediately increase or decrease accordingly.

Long tap continuously zooms in or out until the user stops pressing or the minimum/maximum zoom level is reached.

When the last zoom level is reached, the related zoom button icon appears dimmed.

While the zooming buttons are visible, the softkey buttons are the same as in the previous state, with the exception that the MSK button is blank if zooming was activated by the MSK button.

The zoom buttons disappear after a timeout, or when the user taps the main zone. The zoom level is maintained when the buttons disappear.

Keypad shortcuts may also be used for zooming: the Star (*) key to zoom in and the Hash (#) key to zoom out.

Generally, it is not recommended that Volume keys be used for zooming, because applications outputting sound (continuously or periodically) may be running in the background.

5.11 Feedback

The general guidelines for feedback are the same as for Compact UI. See the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>). In addition, the following guidelines apply for the Touch and Type UI.

5.11.1 Visual feedback

Immediate visual feedback should be given to the user upon touch down on all touch-enabled elements.



Figure 22: Example of visual feedback for touch down

Visual feedback should also be given when the user touches an item that has an item-specific option list; when a list or grid reaches the beginning or end of the content; and when the user moves an object, for example, when organising objects with drag and drop.

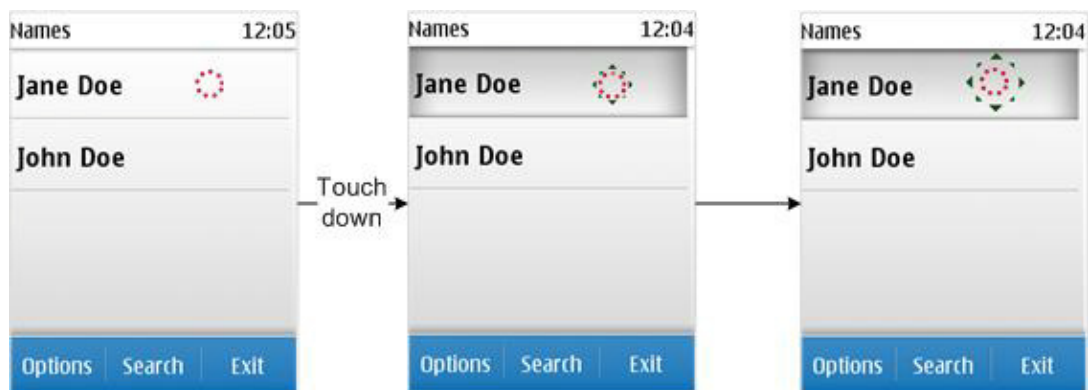


Figure 23: Example of visual feedback for touch down on item with item-specific option list

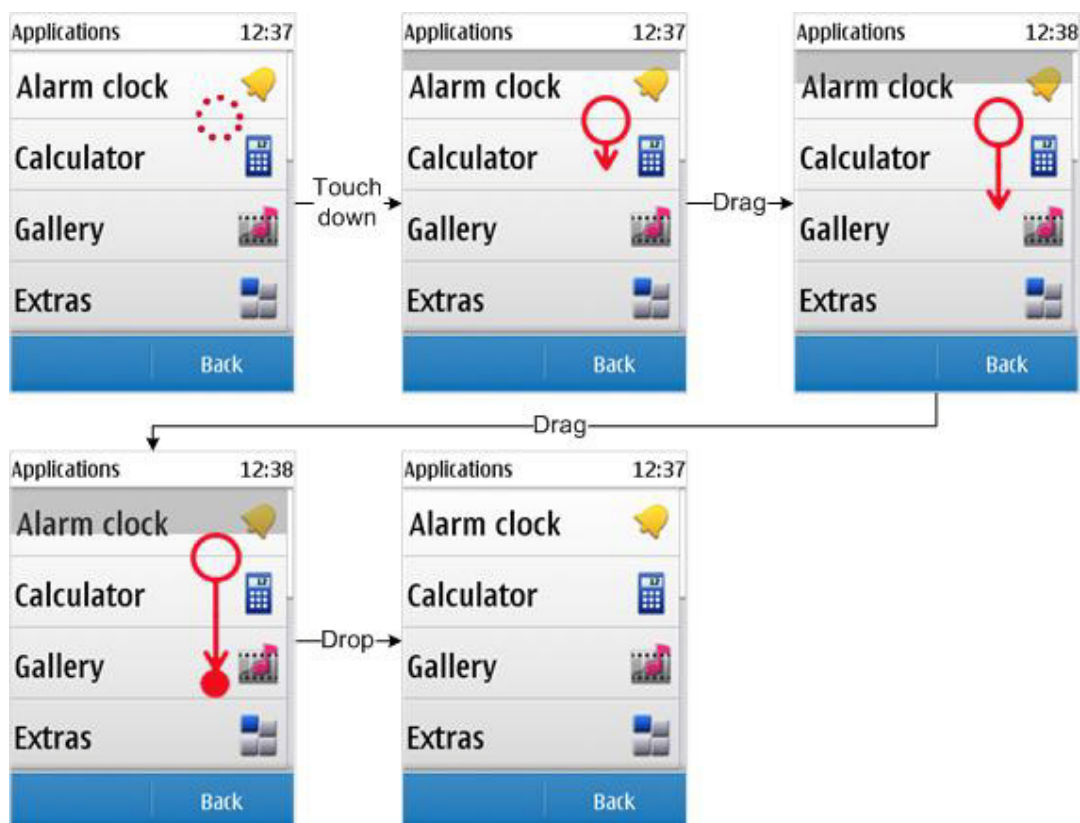


Figure 24: Example of visual feedback when reaching beginning of list

Visual feedback should not be used for non-interactive objects, such as status icons.

5.11.2 Tactile feedback

The mobile device gives tactile feedback by gently vibrating whenever the user touches the screen or, for example, when the user reaches the start or end of a long list. Tactile feedback can be turned on or off via settings.

5.11.3 Audio feedback

As in Compact UI, audio feedback is used to get the user's attention, for example, a tone accompanying an error note. Audio is not recommended as feedback for touching the display.

6 Sounds

General sound guidelines are the same as for Compact UI. See the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

7 Localisation

The localisation guidelines are the same as for Compact UI. See the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>).

8 UI components

To maintain consistent functionality across applications and situations in the UI, the UI is designed using UI components. UI components are the building blocks used to build an application or a feature's functionality and appearance.

A UI component is an independent piece of the UI that can be used in many contexts. It has a well-defined external interface and can be redesigned internally, in such a way that applications using UI components do not need any work to get the component changes.

The main benefit of using UI components is consistency — that is, the same functionality has a similar behaviour and appearance in all contexts. Using UI components also increases efficiency by reducing the amount of overlapping design and implementation work.

The UI components for Touch and Type are generally the same as for Compact UI. See the [Series 40 UI Style Guide](http://www.forum.nokia.com) at Forum Nokia (<http://www.forum.nokia.com>). However, there are some differences, which are listed here.

Pop-up window appearance

In nested pop-up option lists, tapping on an item activates the related action: for example, opening a sublevel list.

The user is able to go back to the previous level by tapping on the RSK Back button or tapping outside the active sublevel list.

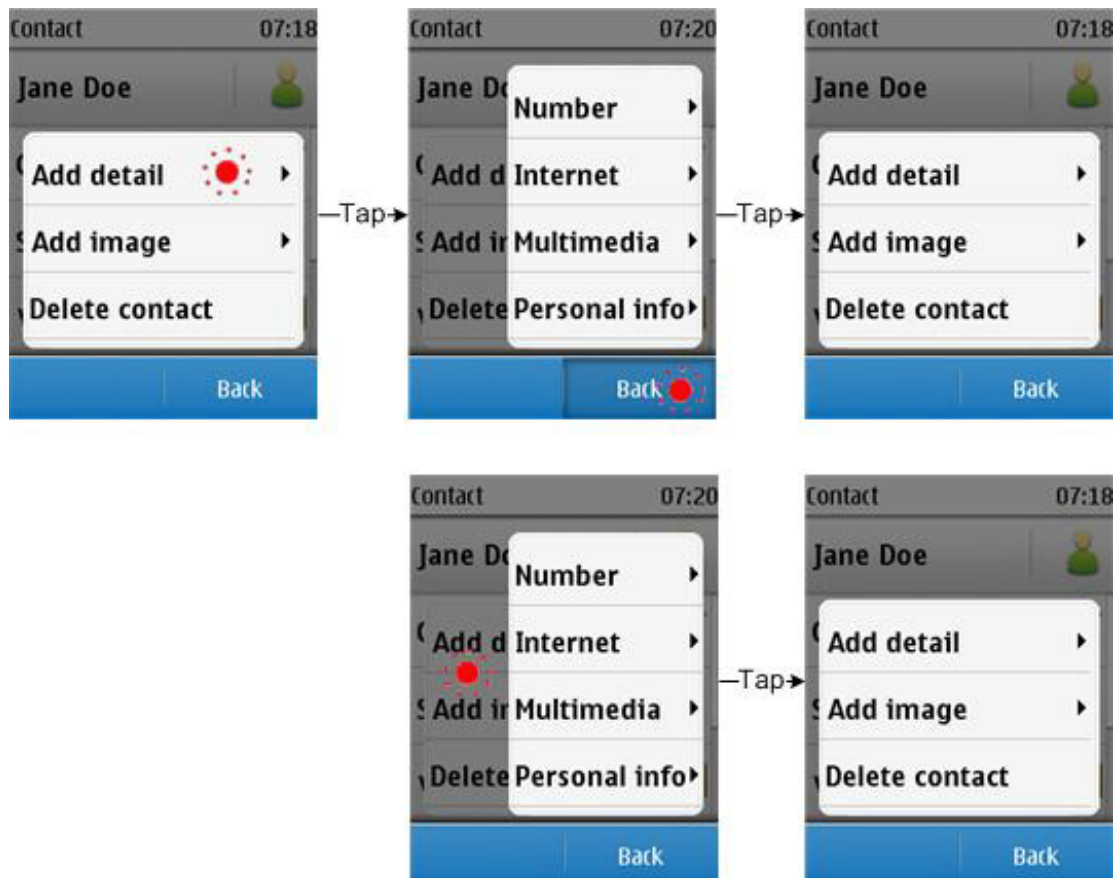


Figure 25: Example of nested pop-up option list structure and navigation

8.1 Lists

Tapping on a list item activates the related action directly. There is no focus needed in the Touch and Type UI.

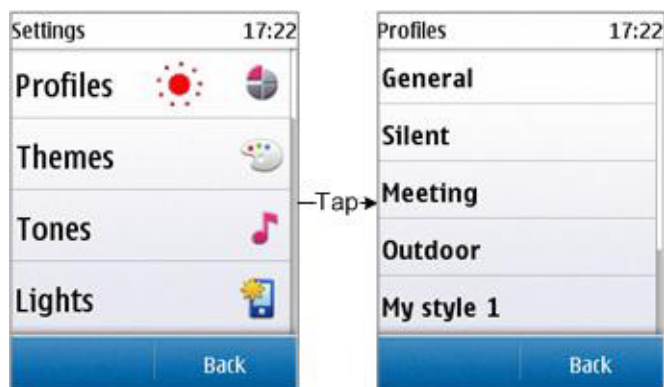


Figure 26: Example of selecting an item in a list

The user can scroll lists as described in Section 5.4, 'Navigation'.

If the content of a list fits in one display, no scroll bar is displayed.

8.1.1 One-row choice items



Figure 27: Example of one-row choice items

8.1.2 Multiple-row choice items

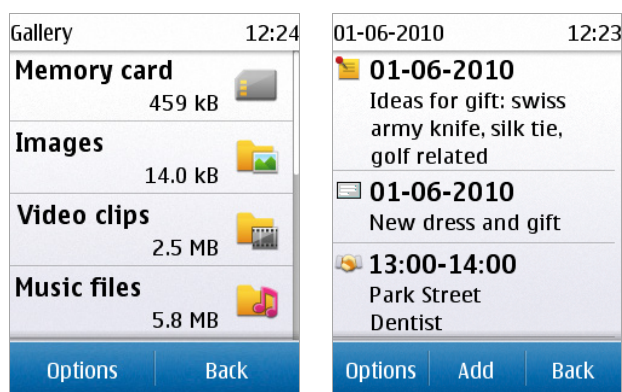


Figure 28: Example of multiple-row choice items

8.2 Settings

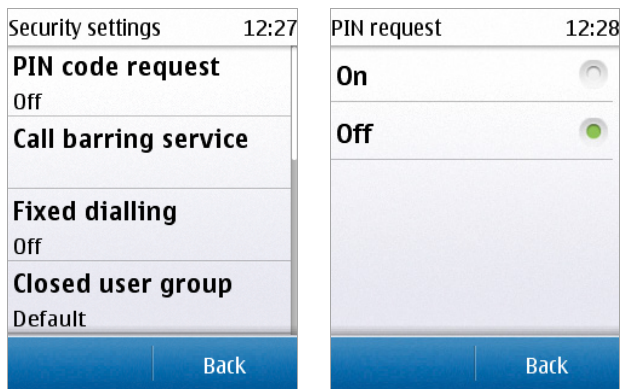


Figure 29: Example of settings screen and setting value list

8.3 Multi-selection lists

In multi-selection lists, tapping anywhere on an unmarked item marks the item. Tapping anywhere on a marked item unmarks the item.

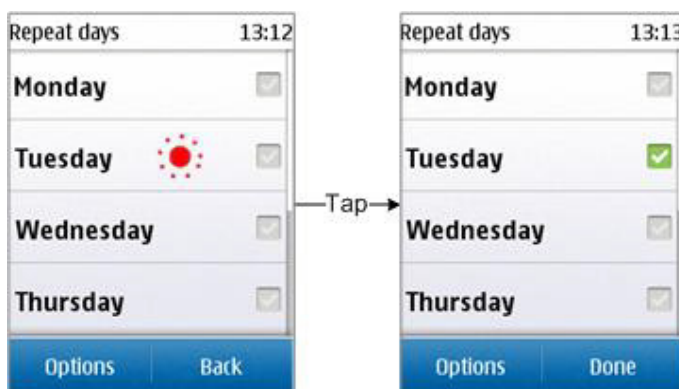


Figure 30: Example of a multi-selection list

8.4 Option lists

In the Touch and Type UI there are two types of option lists: general option lists and item-specific option lists.

The general option lists are accessed by tapping the LSK button Options. This only displays general options that are relevant for the current state, for example, adding a new contact to the phonebook. If there are no general options available for a state, the LSK button is empty.



Figure 31: Example of general option list

Item-specific option lists display options that affect a specific item, for example, Edit and Delete. Because there is no focus in the Touch and Type UI, the user long taps an item to access the item-specific option list.

When touching an item, visual feedback indicates to the user if the item has an item-specific option list. For details on visual feedback, see Section 5.11, 'Feedback'.

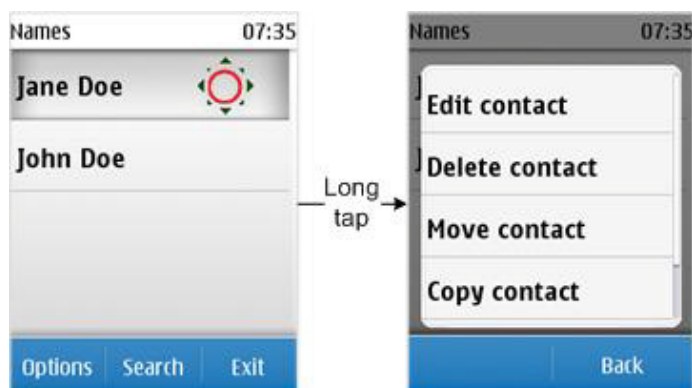


Figure 32: Example of item-specific option list

If a state is designed to only present one data item, the item-specific options are available from the LSK Options button, for example, a phonebook contact card only presents one contact. In such states the most important actions should be displayed directly on the screen when possible; see Section 5.9, 'Toolbar'



Figure 33: Example of option list for a state presenting only one data item (the selected contact)

Besides long press, it is recommended to offer additional access to item-specific options (for example, from the LSK Options button, as shown in Figure 33, or from a menu, as shown in Figure 34).

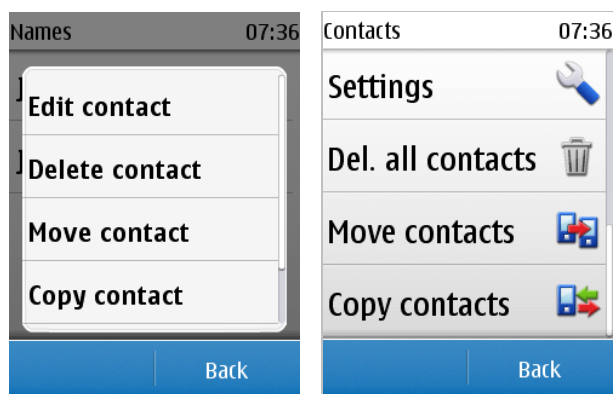


Figure 34: Example of functions (Move and Copy) offered both in an item-specific option list and in a menu

8.5 Grids

Tapping on a grid item activates the related action directly.

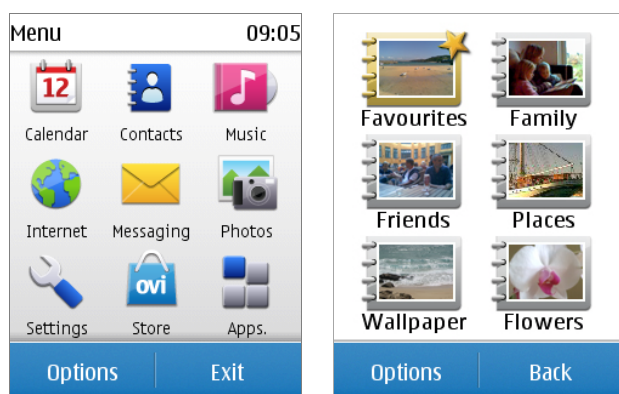


Figure 35: Examples of a grid

For information on navigating in a grid, see Section 5.4, 'Navigation'.

8.6 Tabs

Tabs are not recommended in the Touch and Type UI.

8.7 Data queries

The user can type characters in data queries by pressing the ITU-T keypad.

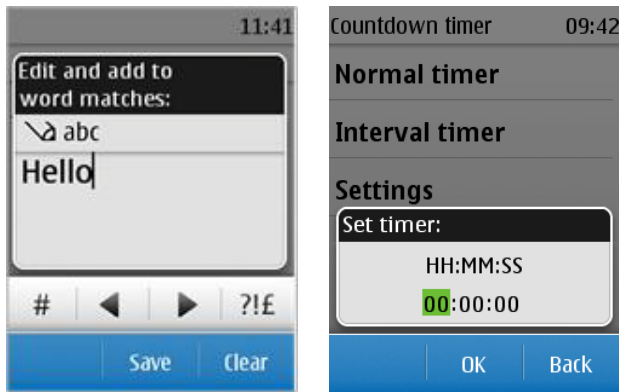


Figure 36: Examples of data query screens

In date and time queries, tapping the entry field area moves focus to the next item. When the focus is on the last item, tapping moves focus back to the first item. With one entry field item in focus, the user is able to input digits into it directly, using the ITU-T keypad.

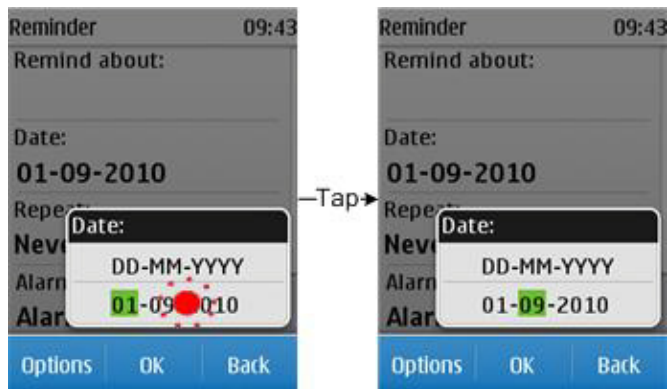


Figure 37: Example of moving focus in time and date query

8.8 Forms

In forms, a field's content or value can be changed by tapping the field.

Date and time entry fields, level control fields, and some text fields open up in a pop-up window, while the other field types open up in a full screen.

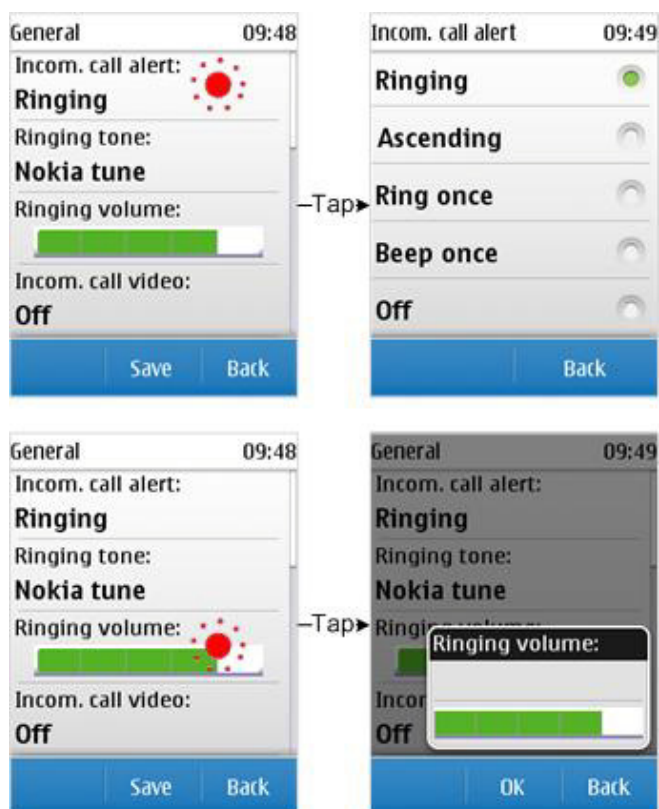


Figure 38: Examples of changing a field value

Long tap on a field activates the item-specific option list for the field (if available); see Section 8.4, 'Option lists'.

For information on navigating in a form, see Section 5.4, 'Navigation'.

8.9 Confirmation and list queries

The user selects an item in a list query by tapping it directly.

Tapping outside a query performs no action.

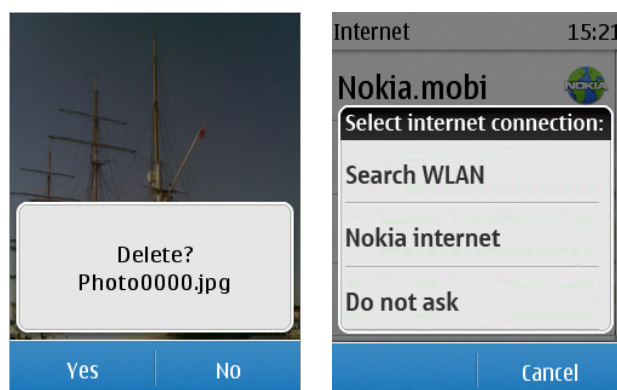


Figure 39: Examples of confirmation and list queries

8.10 Soft notifications

Tapping on a softkey button in a soft notification performs the softkey button function.

Tapping outside a notification performs no action.

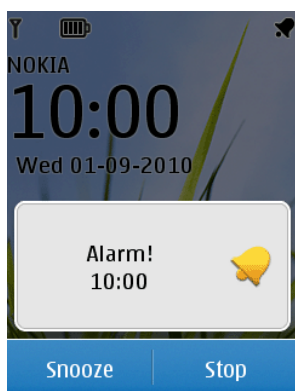


Figure 40: Example of a soft notification

In soft notifications that include a list of events, tapping on a list item activates the related action.

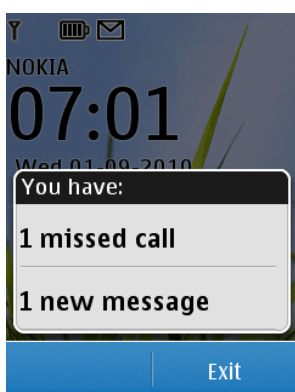


Figure 41: Example of soft notification with a list

8.11 Notes

For notes with softkey buttons, tapping on a button performs the softkey button function. Tapping outside a note performs no action.

For notes that disappear automatically after a timeout, tapping inside or outside the note makes the note disappear immediately.

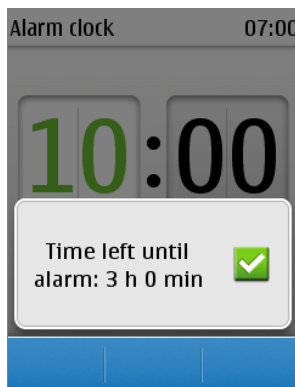


Figure 42: Example of a note

Terms and abbreviations

| Term or abbreviation | Meaning |
|----------------------|---|
| Battery bar | Graphical element indicating remaining battery capacity. |
| Confirmation query | Requests the user to confirm an operation. |
| Cursor | Vertical element in editors indicating the insertion point. |
| Data query | UI component used for entering information, for example, a name or phone number. |
| Fetch service | Performs retrieval of data from Contacts to be used in features. |
| Focus | Graphical indication of the current position in a list or grid. |
| Form | UI component used for presenting and editing several data elements that are grouped together in the same layout. |
| Header text | Textual aid, positioned at the top of the display, indicating to the user the current location in the application or menu structure. |
| Home screen state | The basic state of the device, where the device is waiting for input from the user or network. The device goes to the Home screen state after startup. |
| ITU-T keypad | Keypad that consists of number keys, Star key (*), and Hash key (#). |
| Keypad | Set of physical keys, such as ITU-T keypad or QWERTY keypad |
| Keypad | Set of physical keys, such as ITU-T keypad or QWERTY keypad |
| Keyguard | Feature that allows the user to lock the keys. |
| Keypad | Set of physical keys, such as ITU-T keypad or QWERTY keypad |
| Level control | UI component that enables the user to adjust a level, such as volume, display contrast, or game level. |
| List query | UI component that requests the user to choose between alternative choices in order to proceed with an operation. |
| LSK | Left softkey. A dynamic key whose function is indicated to the user as a softkey label at the lower-left corner of the display. |
| Main zone | Area in the display that is used to display the content of the current application, for example, user-selectable items, user data, and message contents. |
| MSK | Middle softkey. A dynamic key whose function is indicated to the user as a softkey label in the middle at the bottom of the display. Only present in a three-softkey UI. |
| Multiselection list | Selection list that allows the user to scroll and select several (or no) options to be active. |
| Note | UI component that informs the user about the state of the mobile device. |
| Numeric keys | 0-9, *, # |
| Pop-up window | Windows that appear on top of the original display. The window is only as large as needed to display the information that it contains, so parts of the original display are visible behind the pop-up window. This allows users to see the context of the item that they are setting. |
| RSK | Right softkey. A dynamic key whose function is indicated to the user as a softkey label at the lower-right corner of the display. |

| Term or abbreviation | Meaning |
|----------------------|---|
| Scroll bar | Vertical bar with an indicator element, a thumb, at the right edge of the display that assists the user in navigation by expressing what portion of the data is visible on the display. |
| Scroll key | Hard key used for moving the highlight or cursor on the display. |
| Selection list | Screen that shows a list of choice items from which the user can select. |
| Signal bar | Graphical element indicating the network signal strength. |
| Soft notification | Reminder of an event that has occurred in the user's absence or while the user was busy with an application. Soft notifications are displayed in the Home screen state. |
| Softkey | A dynamic, context-sensitive function displayed in close proximity to its physical key. |
| Softkey zone | Area at the bottom of the display that is used to display the softkey labels. Divided into two or three parts depending on the number of softkeys. |
| Status indicator | Graphical icon displayed in the status zone that is used to inform the user about device status or to give other important information that should be easy to notice. |
| Status zone | Area at the top of the display that is used to display the header text and status indicators. In non-Compact UI, the status zone also displays index numbers. |
| Strokes | All the interactions that are done by touching on the touch screen, including taps, and (single finger) strokes. |
| Tabs | UI component that enables fast viewing of parallel data views. The user can scroll between tabs to view different data presented in the tab pages. |
| Ticker zone | Area above the main zone that can be used to display a continuously scrolling text in MIDP 2.0. |
| UI | User interface. |
| UI component | A building block of the user interface that is used to build an application or feature functionality and appearance. |
| User response note | A note that requires user confirmation. |
| Wait note | A note that informs the user that an operation is in progress. |