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Guidelines for presentation of graphic elements and related text in Hebrew environments

קווים מנחים לתצוגה של אלמנטים גרפיים ושל טקסט נלווה בסביבה עברית

The Standards Institution of Israel

מכון התקנים הישראלי

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מילות מפתח:

ממשק משתמש, דו-כיווני, טקסט, אלמנטים גרפיים.

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Introduction

This Standard is intended to be a generic standard for developers worldwide, therefore it is published in English only.

1. **Scope**

    This Standard describes the correct way to display:
    *   User Interface (UI) elements of software translated into Hebrew;
    *   Bidirectional text integrated with UI elements.

2. **Normative References**

    Standards and documents referenced in this Standard (for undated Standards and documents, the latest edition applies):

    SI 5194   -   Guidelines for a Logical User Interface for the Implementation of Editing Bidirectional Text

    SI 5857   -   Display of Complex Expressions Containing Bidirectional Text: Requirements

3. **User Interface Direction**

    The direction of the interface within an application will be RTL (Right-to-Left) or LTR (Left-to-Right) depending on the interface language of the application. When the language of the system is Hebrew, the direction of the system interface shall be RTL.

    For example:
    a. In an electronic spreadsheet, the order of the tabs and their position depend on the UI direction and should not be affected by the direction of the displayed spreadsheet.
    b. When the interface language is Hebrew, the button for "Next" shall appear left to the button for "Previous". If "Next" and "Previous" are represented by arrows, "Next" shall be displayed by a left pointing arrow and "Previous" shall be displayed as a right pointing arrow.
    c. The graphic indicators for ordered lists and unordered lists shall appear on the leading side (on the left side of the text for LTR paragraphs and on the right side for RTL paragraphs) relative to the paragraph direction.
        This will be the same side for all items in a list, independently of the directionality of the language in the items.
    d. The icons used in the interface shall not be mirrored regardless of the interface language, except when the icon indicates a direction, e.g. represents a paragraph direction or an element ordering.

    e. Any directionally sensitive animation should be mirrored if the UI is RTL.

    f. On/Off switches should be mirrored if the UI is RTL, as showed below:
        [On]<--[Off]

Standard interface elements managed by the system (such as a "Close" button or vertical scroll bars) shall always appear at the same position, regardless of the application or document direction (e.g. a "Close" button always appears on the upper right corner or on the upper left corner).

Interface elements managed by an application should change their position depending on the language of the application, except those which mimic system elements (e.g. a "Close" button of a dialog box) that should follow the guidelines for elements managed by the system.

In an RTL interface, navigation elements and touch gestures shall stay RTL. However, if the application mainly displays a document, navigation elements shall be displayed according to the direction of the document (the direction natural to the language mainly used in the document).

Whether the interface is LTR or RTL, elements which mimic real world items will be displayed in the same arrangement as those real world items. For instance,

- Multimedia controls will be displayed with Rewind on the left, Play in the middle and Forward on the right.

- Dial pads used for phone functionality should not be mirrored.

Calendars

- In Israel, two kinds of calendar are mainly in use: Gregorian and Hebrew (lunisolar). The default should be the Gregorian calendar.
  Note that use of the Hebrew date, most often together with the Gregorian date, is mandatory for Israeli public institutions in official communications.

- In Israel, the first day of the week is Sunday.

- Calendar components where the month names appear in Hebrew letters must flow from right to left, whether they display a Gregorian calendar or a Hebrew lunisolar calendar. When the month names appear in Latin letters, the flow must be from left to right.

- When flowing RTL, days of the week will be displayed as follows:
  Saturday ←Friday ←[…Weekdays…]←Sunday

- When flowing RTL, months will be displayed as follows:
  [March]←[February] ←[January]

- In a Hebrew lunisolar calendar displayed with Hebrew letters, day numbers should be represented in alphabetic representation. For instance, Alef for the first day of the month, Bet for the second day, Yod + Gimel for the thirteenth day.

For documents whose fixed width is larger than the display area, moving the horizontal slider to the right will show more text to the right, while moving the slider to the left will show more text to the left.

For documents without a fixed width (e.g. plain text), see Israeli Standard SI 5194.

Two Page Document Layout

When displaying a document where two pages are presented side by side, the layout should vary according to the document language.

o for a RTL document :   [Page #2] [Page #1]

o for a LTR document :   [Page #1] [Page #2]

The order of the tabs will depend on the application direction.

4.   Text Direction and Alignment

Unless otherwise explicitly specified at the application level, the default direction for any text component within an application will depend on the first strong character according to the Unicode Bidirectional Algorithm.

By default, applications inherit the interface language and the direction of the user currently using the operating system.

The end user should be able to change the base direction of text which is not part of the interface (for instance text in input fields). This includes text that the user creates and text which is retrieved dynamically by the application. The user's decisions about text direction should be applied automatically whenever the same text is displayed regardless of its context.

Note: the direction set by the user may be LTR, RTL or contextual.

Examples of means to change the base direction:

- Keyboard shortcut;
- Icon;
- Context menu;
- Gesture.

The system should remember the user's last selection for direction of text in an input field as an initial value for the following empty fields when their direction is unspecified or specified as contextual (also known as auto). This initial value will affect both direction and alignment.

Static text shall be aligned according to the direction of the interface.

The alignment of dynamic text shall follow the final direction of the content. However, this does not apply to fields with obscured content (e.g. passwords), since the alignment in such fields is not significant.

When typing in an obscured field, there shall be a clear indication of the current keyboard input language, preferably close to the position of the field.

If the user changes the base text direction, the alignment shall change accordingly.

Controls appearing within a text field should keep their location regardless of the content direction.

It shall be possible to set the direction (LTR or RTL) of any selectable sequence of words (e.g. phrase, sentence or paragraph).

Some kinds of text have a specific direction;
- Phone numbers should be displayed as a LTR string.
- File paths should be displayed as a LTR string (and aligned on the left when residing in a separate field).

5. Sort

The default sort order should depend on the locale. When the locale is Hebrew, words written with the Hebrew alphabet should be displayed before words written with other alphabets.

6. Messages

a. The direction of a message shall be in accordance with the natural direction of the language of the message.

b. There shall be isolation between the message and its surroundings. There shall also be isolation between the body of the message and varying inserts that may appear within the message.

c. The direction of an insert may be set as an attribute of the insert. It may not be changed individually by the user.

d. The rules for displaying complex expressions should be applied to inserts as prescribed in Israeli Standard SI 5857.

e. Alignment of the message shall correspond to the direction of the outer message.

7. Virtual Keyboards

a. The keys common to different languages, including at least punctuation signs, should appear at the same location in all mappings.
The keys for switching a language or character set shall appear at the same location in all mappings.

b. The keyboard should allow changing the text direction from LTR to RTL and vice versa, particularly in applications running in a browser.

c. Words appearing as predictive text should be ordered LTR for Latin words and RTL for Hebrew words.