

[0031] Also included in the memory 102 are a keyboard module (or a set of instructions) 131, a word recommendations module (or a set of instructions) 133, and a dictionary 136. The keyboard module 131 operates one or more soft keyboards. The word recommendations module 133 determines word completion or replacement recommendations for text entered by the user. The dictionary 136 includes a list of words in a language, from which word recommendations are drawn. In some embodiments, the dictionary also includes usage frequency rankings associated with the words in the dictionary.

[0032] Each of the above identified modules and applications correspond to a set of instructions for performing one or more functions described above. These modules (i.e., sets of instructions) need not be implemented as separate software programs, procedures or modules. The various modules and sub-modules may be rearranged and/or combined. Memory 102 may include additional modules and/or sub-modules, or fewer modules and/or sub-modules. Memory 102, therefore, may include a subset or a superset of the above identified modules and/or sub-modules. Various functions of the device 100 may be implemented in hardware and/or in software, including in one or more signal processing and/or application specific integrated circuits.

[0033] Attention is now directed towards embodiments of user interfaces and associated processes that may be implemented on the device 100. FIG. 2 is a schematic diagram illustrating an embodiment of a user interface for a portable electronic device 200. The device 200 includes a touch screen 208. In some embodiments, the touch screen may display one or more trays. A tray is a defined region or area within a graphical user interface. One tray may include a user entry interface, such as a virtual or soft keyboard 210 that includes a plurality of icons. The icons may include one or more symbols. In this embodiment, as well as others described below, a user may select one or more of the icons, and thus, one or more of the corresponding symbols, by making contact or touching the keyboard 210, for example, with one or more fingers 212 (not drawn to scale in the figure). The contact may correspond to the one or more icons. In some embodiments, selection of one or more icons occurs when the user breaks contact with the one or more icons. In some embodiments, the contact may include a gesture, such as one or more taps, one or more swipes (e.g., from left to right, right to left, upward and/or downward) and/or a rolling of a finger (e.g., from right to left, left to right, upward and/or downward) that has made contact with the device 200. In some embodiments, inadvertent contact with an icon may not select a corresponding symbol. For example, a swipe gesture that sweeps over an icon may not select a corresponding symbol if the gesture corresponding to selection is a tap gesture.

[0034] Alternatively, in some other embodiments, the keyboard may be a physical keyboard that includes a set of push buttons, a keypad, or the like. The physical keyboard is not a part of the touch screen display. The physical keyboard includes keys that correspond to the plurality of icons described above. A user may select one or more of the icons by pushing the corresponding keys on the physical keyboard.

[0035] The device 200 may include a display tray 214, which is displayed on the touch screen 208. The display tray 214 may display one or more of the characters and/or symbols that are selected by the user. The device 200 may also include one or more physical buttons, such as the clear, hold and menu buttons shown in FIG. 2. The menu button may be used to

navigate to any application in a set of applications that may be executed on the device 200. Alternatively, in some embodiments, the clear, hold, and/or menu buttons are implemented as soft keys in a GUI in touch screen 208.

[0036] Attention is now directed to FIG. 3, which illustrates a flow diagram of a process flow 300 for providing word recommendations in accordance with some embodiments. As text is entered by a user on a device, one or more candidate character sequences (suggested replacements) may be provided in response to the entered text. The user may select a candidate character sequence to further extend or to complete the entered text.

[0037] A current character string is displayed in a first area of a touch screen of a portable device (302). In some embodiments, the current character string (which is a word, number, symbol, or a combination thereof) is at least a portion of a sequence of characters entered into the device by a user. The user inputs a sequence of characters into the portable device via an input device, such as a keyboard 210, and the device receives and displays the input on the touch screen. In some embodiments, the current character string is the endmost sequence of non-whitespace characters input by the user via the input device and delimited from the rest of the sequence of characters entered by the user by delimiters, such as whitespaces, line breaks, and punctuation.

[0038] The current character string (or a portion thereof) and one or more suggested replacements for the current character string is displayed in a second area (for example, a word selection area 216) of the touch screen (304). The second area may be located between the first area and the keyboard. The one or more suggested replacements, which may be words, numbers, or combinations thereof, are selected from a dictionary 136 for display by the device in accordance with predefined procedures. An example of a procedure for selecting suggested replacements for display is described in U.S. patent application Ser. No. Attorney Docket 063266-5040), which is hereby incorporated by reference as background information. The user may take one of a plurality of actions with respect to the current character string and the suggested replacement displayed in the second area. If the user action is activation of a key on the keyboard associated with a delimiter (306—Activate a key . . . ), the current character string in the first area of the touch screen is replaced with the suggested replacement (308). The delimiter associated with the activated key may be appended to the end of the suggested replacement in the first area. For example, if the activated key is associated with a comma, a comma is appended to the suggested replacement (which replaces the current character string) in the first area. In some embodiments, delimiters include spaces, line breaks (sometimes called line returns), and terminal punctuation (for example, commas, periods, exclamation points, question marks, and semicolons). In other embodiment, delimiters may include a subset of the delimiters listed above, and may optionally include additional delimiters as well.

[0039] If the user action is performance of a first gesture on the suggested replacement in the second area of the touch screen (306—Perform gesture on the suggested replacement . . . ), the current character string in the first area of the touch screen is replaced with the suggested replacement (308). In some embodiments, a whitespace is appended to the end of the suggested replacement in the first area. In some embodiments, the first gesture includes one or more taps on the suggested replacement in the second area.