

sent the portion of the application with which the user is interacting via the virtual input device. However, other portions of the application display may be determined to be significant. For example, a portion of the application display that is directly affected by input via the virtual input device may be determined to be significant. In some examples, there may not even be an input field of the application display.

[0041] What is determined to be significant may be a function of a particular application and/or application display, or may be a function of characteristics of applications in general. In some situations, portions of the application display other than the input field may be relatively significant so as to warrant not being covered in the composite display by the virtual input device display. The relative significance may be context-dependent. For example, the relative significance may be dependent on a particular mode in which the application is operating.

[0042] In accordance with some examples, rather than the application display being substantially unchanged (such as is illustrated in FIG. 3 and FIG. 3-1, the display processing 106 determines characteristics of the composite display such that, while substantially all the information on the application display remains visible within the composite display, the application display is modified in the composite display to accommodate the virtual input device display. In some examples, the display processing 106 determines characteristics of the composite display such that the spatial aspect of the application display is adjusted to provide room on the composite display for the virtual input device while minimizing or eliminating the amount of information on the application display that would otherwise be obscured on the composite display by the virtual input device display.

[0043] In some examples, at least one portion of the application display is compressed on the composite display to accommodate the virtual input device display. FIG. 4 illustrates one example where all portions of the application display are substantially equally compressed on the composite display, in one orientation. FIG. 5 illustrates another example, where less than all portions of the application display are compressed on the composite display. In other examples, portions of the application display are expanded on the composite display where, for example, these portions of the application display are significant with respect to the virtual input device.

[0044] In some examples, which portion or portions of the application display are compressed on the composite display is based on the characteristics of the application display. For example, some portions of the application display determined to be of greater significance may not be compressed, whereas other portions of the application display determined to be of lesser significance may be compressed. In some examples, the amount by which a particular portion of the application display is compressed is based on the relative significance of that portion of the application display. Different portions of the application display may be compressed (or expanded) by different amounts in the composite display, including no change in spatial aspect.

[0045] In yet other examples, characteristics of the virtual input device on the composite display may be user configurable, as a preset condition and/or the characteristics of the virtual input device display can be dynamically configured.

As an example of dynamic configuration, the user may change the position of the virtual input device display in the composite display by touching a portion of the virtual keyboard display and “dragging” the virtual input device display to a desired portion of the composite display.

[0046] In some examples, the application display component itself, in the composite display, does not change as the user causes the characteristics of the virtual input device display, in the composite display, to change. Thus, for example, if the user causes the position of the virtual input device display, in the composite display, to change, different portions of the application display are covered as the virtual input device display is moved. In other examples, the display processing 106 makes new determinations of the characteristics of the application display, in the composite display, as the user causes the characteristics of the virtual input device display to change. For example, the display processing 106 may make new determinations of which portions of the application display to compress in the composite display based at least in part on the new positions of the virtual input device display in the composite display.

[0047] We now discuss the virtual input device initiation event (FIG. 1) in more detail. In particular, there are various examples of events that may comprise the virtual input device initiation event, to cause the virtual input device to be initially displayed as part of the composite display. The virtual input device may be displayed as part of the composite display, for example, in response to specific actions of the user directly corresponding to a virtual input device initiation event. In accordance with one example, the application has an input field as part of the application display, and a user gesture with respect to the input field may cause the virtual input device initiation event to be triggered. The user gesture may be, for example, a tap or double tap on the portion of the touch screen corresponding to the display of the input field. Typically, the operating system processing 104 includes the processing to recognize such a user gesture with respect to the input field and to cause the virtual input device initiation event to be triggered.

[0048] As another example of an event that may cause the virtual input device initiation event to be triggered, there may be an “on screen” button displayed as part of the application display, the activation of which by the user is interpreted by the operating system processing 104 and causes a virtual input device initiation event to be triggered. As yet another example, an on-screen button may be associated with the operating system more generally and, for example, displayed on a “desktop” portion of the touch screen associated with the operating system, as opposed to being specifically part of the application display. Activating the on-screen button in either case causes the virtual input device initiation event to be triggered, and the initial input device processing 110 is executed as a result.

[0049] As yet another example, the keyboard initiation event may be triggered by the user putting her fingers on the touch screen (for example, a multipoint touch screen) in a “typing” position. The detection of this user action may trigger a virtual keyboard initiation event, based on which the initial keyboard processing 110 is executed and the virtual input device is displayed as part of the composite display. In this case, for example, the operating system processing 104, interacting with the touch screen hardware