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AUTO-ROTATE VIDEOS ONLY

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AUTO-ROTATE VIDEOS ONLY

ABSTRACT

A computing device (e.g., a mobile phone, camera, tablet computer, etc.) may include an integrated display device (e.g., a presence-sensitive screen) at which a user interface is presented. The computing device may automatically rotate the presentation of the user interface based on an orientation of the display device (e.g., as detected by one or more motion or orientation sensors). For instance, when the display device is orientated lengthwise, the computing device may present the user interface in landscape. Similarly, when the display device is oriented widthwise, the computing device may present the user interface in portrait. In some cases, it may not be desirable for the computing device to automatically rotate the presentation of all user interface content. As such, in some examples, the computing device may only automatically rotate specific types of content (e.g., video content) based on the orientation of the display device and leave content other than the specific types of content unrotated (regardless of the orientation of the display device).

DESCRIPTION

Auto rotating a displayed user interface between portrait mode and landscape mode is a common feature for mobile computing devices. Some computing devices provide user control of autorotation. For instance, a user may selectively enable or disable autorotation. Some content may be better viewed in one mode or the other. For instance, video content (most of which are shot in landscape) may be better viewed in landscape mode, while text content may be better viewed in portrait mode. However, existing autorotation controls only enable users to wholesale select between enabling autorotation for all content, or disabling autorotation for all content. As

such, it would be desirable for a computing device to enable more fine grained control of autorotation.

The example computing device shown in Figure 1 provides a user with additional control over autorotation. For instance, the computing device may allow a user to select between several different autorotation modes including, but not limited to, disable autorotation for all content, enable autorotation for all content, and enable autorotation for specific content (e.g., video data) only.

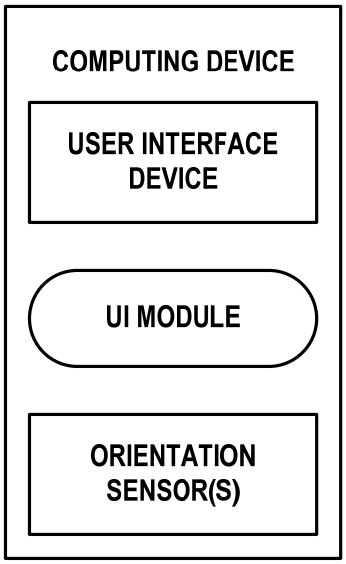

Figure 1

The computing device of Figure 1 includes a user interface (UI) device, a UI module, and one or more orientation sensors. Example computing devices include mobile phones, tablets, digital cameras, laptops, gaming systems, e-book readers, televisions, wearable computing devices, or any other type of mobile or non-mobile computing device connected to a display that may be rotated.

The user interface device (UID) may function as an input device for the computing device and as an output device. The UID may function as an input device using a presence-

sensitive input screen, such as a resistive touchscreen, a surface acoustic wave touchscreen, a capacitive touchscreen, a projective capacitance touchscreen, a pressure sensitive screen, an acoustic pulse recognition touchscreen, or another presence-sensitive display technology. The UID may function as an output (e.g., display) device using any one or more display devices, such as a liquid crystal display (LCD), dot matrix display, light emitting diode (LED) display, organic light-emitting diode (OLED) display, e-ink, or similar monochrome or color display capable of outputting visible information to a user.

The orientation sensors may function as sensors that generate data indicative of an orientation of the user interface device. For instance, the orientation sensors may generate data indicating whether the user interface device is oriented horizontally (e.g., in landscape) or vertically (e.g., in portrait). Examples of orientation sensors include, but are not limited to, accelerometers and gyroscopes.

User interface module controls the user interface device including determining what the user interface device presents and what information is exchanged between the user interface device and other applications or components of the computing device. For example, in controlling what the user interface device displays, the user interface module may receive information from a component of computing device for generating a user interface and elements thereof. In response, the user interface module may output instructions and information to the user interface device that cause the user interface device to display a user interface. When handling input detected by the user interface device, the user interface module may receive information from the user interface device in response to inputs detected at locations of a screen of the user interface device at which elements of the user interface are displayed. The user interface module disseminates information about inputs detected by the user interface device to

other components of the computing device for interpreting the inputs and for causing the computing device to perform one or more functions in response to the inputs.

The user interface module may cause the user interface device to present user interfaces to facilitate interaction between users and the computing device. For example, the user interface model may cause the user interface device to present the graphical user interface (GUI) shown below in Figure 2.

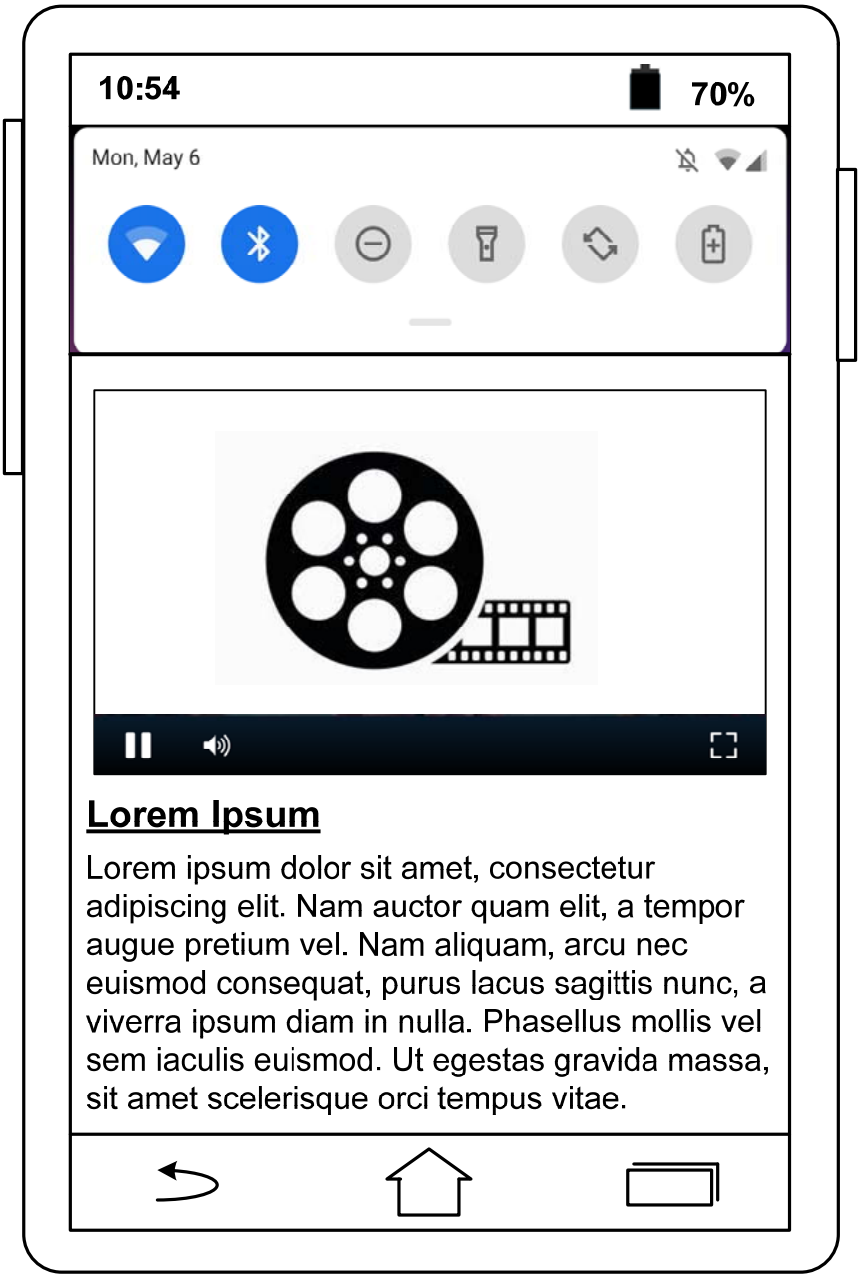

Figure 2

The GUI may include various content types and controls. As shown at the top of Figure 2 (from left to right), the GUI may include controls for adjusting Wi-Fi, Bluetooth, Do Not Disturb, Flashlight, Autorotation, and Battery Saver. The GUI may include additional controls, such as a control for activating an airplane mode and a control for activating a hotspot.

The autorotation control may enable a user to select from a plurality of autorotation modes. As discussed above, in addition to disable autorotation for all content and enable autorotation for all content, the autorotation control may be selectable to an additional mode in which autorotation is enabled for specific content (e.g., video data) only. The following figures illustrate the effects of the various autorotation modes when the computing device is physically rotated from vertical (e.g., portrait) to horizontal (e.g., landscape). Figure 3 illustrates the effect when autorotation is disabled, Figure 4 illustrates the effect when autorotation is enabled for all content, and Figure 5 illustrates the effect when autorotation is enabled for specific content only.

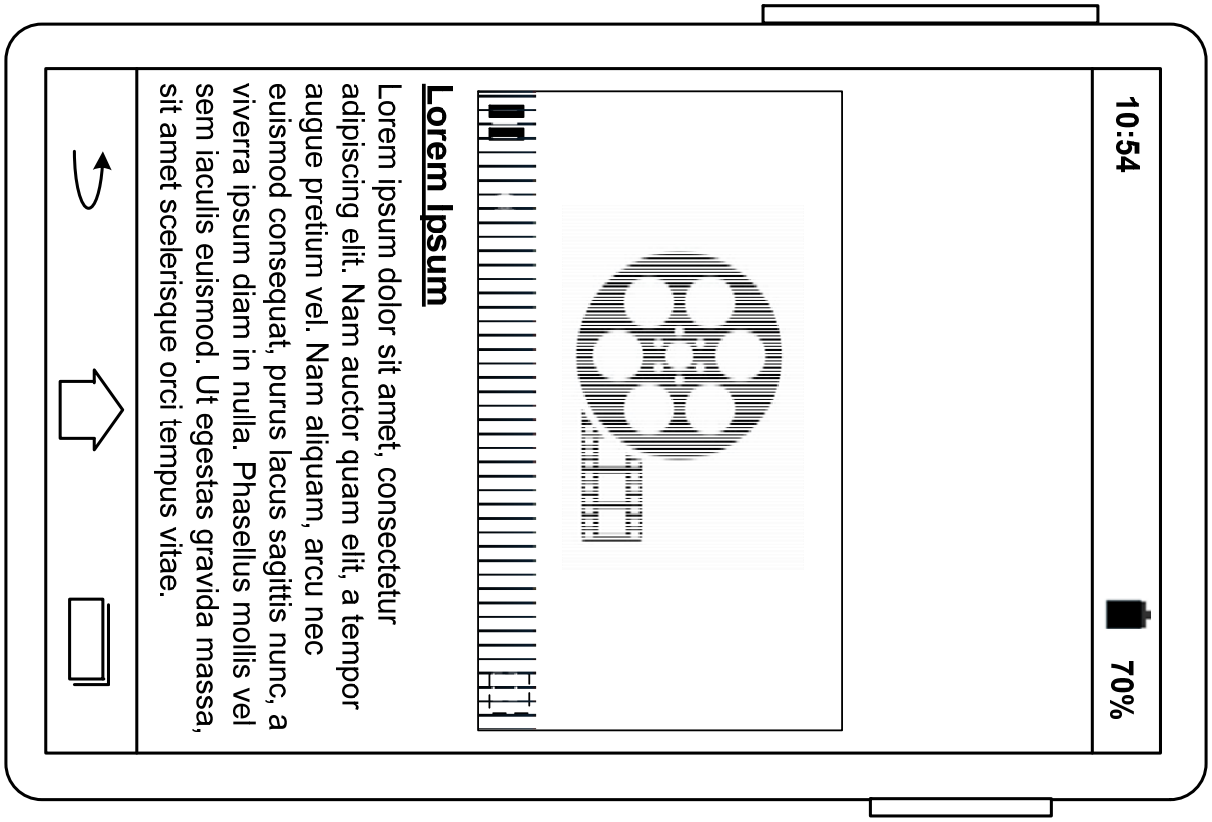

Figure 3

As shown in Figure 3, when the computing device is physically rotated from vertical (e.g., portrait) to horizontal (e.g., landscape) with autorotation disabled, none of the content displayed

in the user interface is automatically rotated. Specifically, as shown in Figure 3, both the video content and the text content are not rotated.

Figure 4

As shown in Figure 4, when the computing device is physically rotated from vertical (e.g., portrait) to horizontal (e.g., landscape) with autorotation enabled for all content, all of the content displayed in the user interface is automatically rotated from portrait to landscape. Specifically, as shown in Figure 4, both the video content and the text content are rotated.

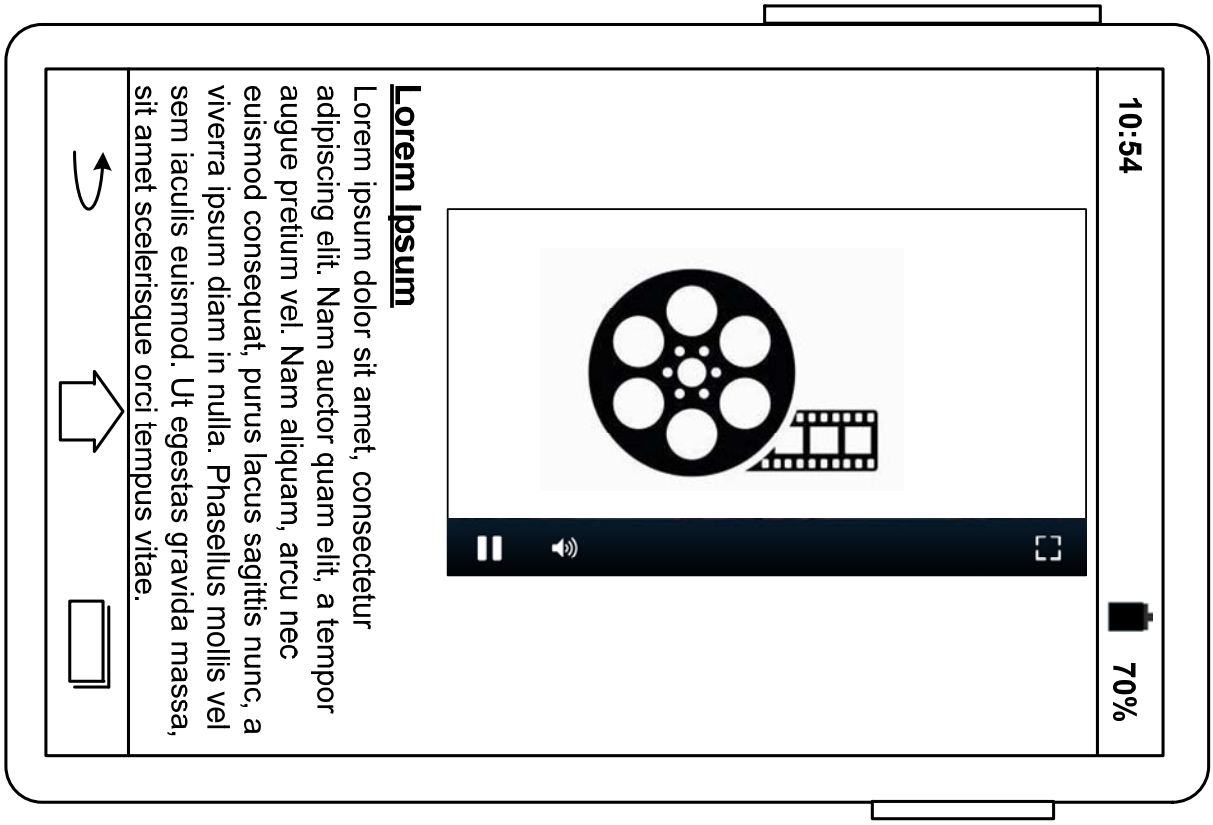

Figure 5

As shown in Figure 5, when the computing device is physically rotated from vertical (e.g., portrait) to horizontal (e.g., landscape) with autorotation enabled for specific content, content in the user interface other than the specific content is not automatically rotated while content in the user interface that is the specific content is automatically rotated from portrait to landscape. Specifically, as shown in Figure 5, the video content is rotated while the text content is not.

In some examples, the computing device may resize the rotated content. For instance, as shown in Figure 6, the computing device may increase a size of the video content when automatically rotating the video content from portrait to landscape.

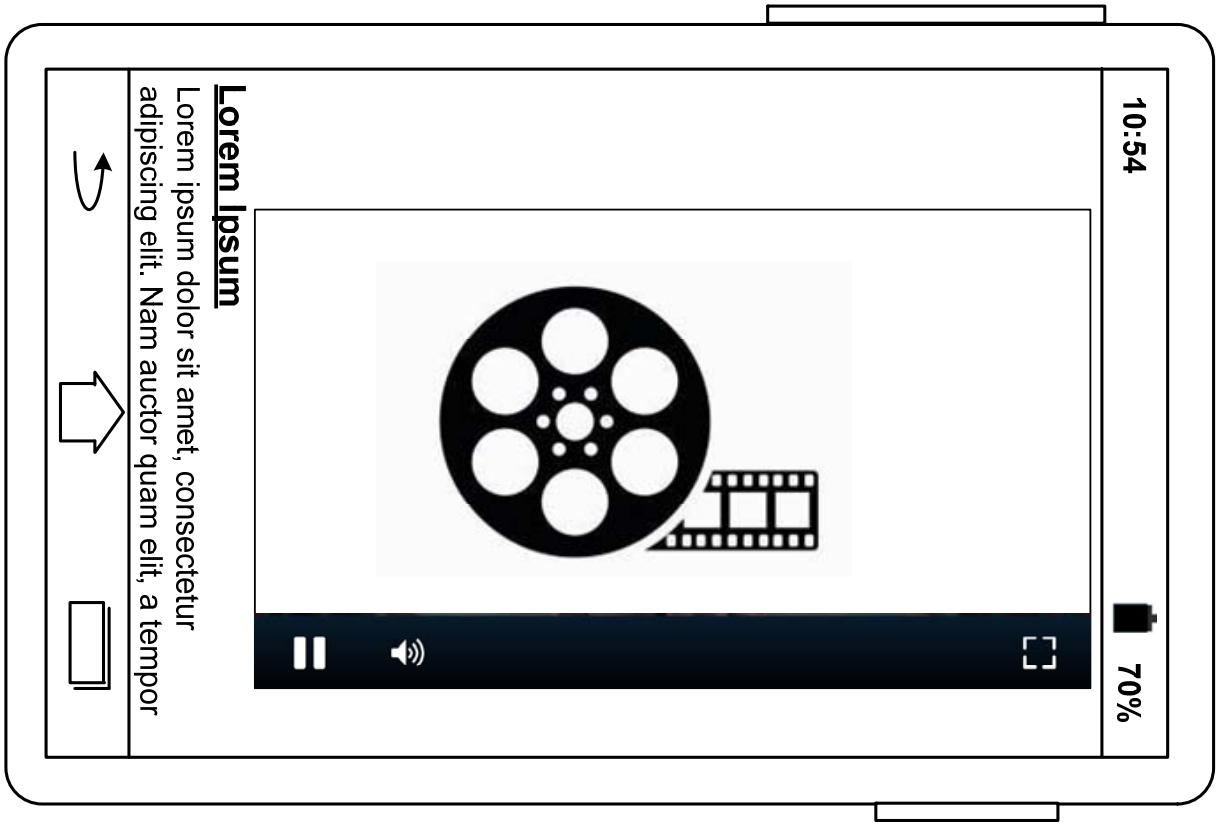

Figure 6

By providing selective rotation of certain types of content, the computing device may enable a user to more efficiently consume content. In particular, while some applications or other content types may not be optimized for landscape, video content may typically be suited for landscape. As such, by only rotating specific content types, such as video, these techniques may enable optimal display of both applications and video.

It is noted that the techniques in this disclosure may be combined with any other suitable technique or combination of techniques. As one example, the techniques of this disclosure may be combined with the functionality of the MX Player application by J2 Interactive, LLC available at play.google.com/store/apps/details?id=com.mxtech.videoplayer.ad&hl=en_US. As another example, the techniques of this disclosure may be combined with the techniques described in EP 2527969A1.