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Peeking user interface for foldable devices

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Peeking user interface for foldable devices

ABSTRACT

This disclosure describes techniques to utilize an exposed portion of the display screen of a foldable device in a folded state to display a peeking user interface. Per techniques of this disclosure, a user interface displays selected content on the exposed portion of a display screen when a device is in the folded state. The selected content can include important notifications such as incoming calls, received text messages, contextual information, items that need user attention, etc. The exposed portion of the display screen in the folded state can be utilized to display icons associated with applications that are of likely interest to the user, e.g., determined from user context (if permitted by the user) or pre-selected by the user.

KEYWORDS

- Foldable device
- Foldable phone
- Ambient mode
- Idle state
- Hibernate state
- User interface
- Notification display

BACKGROUND

Foldable devices such as foldable phones are attractive since they have a small form-factor when folded and can be opened to reveal a larger display screen. A foldable device can include two display screens of unequal dimensions that fold inwards to close the device. When

folded, the device is placed in an idle (ambient) mode. When folded, a portion of the device display remains exposed to view owing to the unequal dimensions of the two display screens.

DESCRIPTION

This disclosure describes techniques to utilize an exposed portion of the display screen of a foldable device in a folded state to display a peeking user interface. Per techniques of this disclosure, a user interface displays selected content on the exposed portion of a display screen when a device is in the folded state. The selected content can include important notifications such as incoming calls, received text messages, contextual information, items that need user attention, etc.

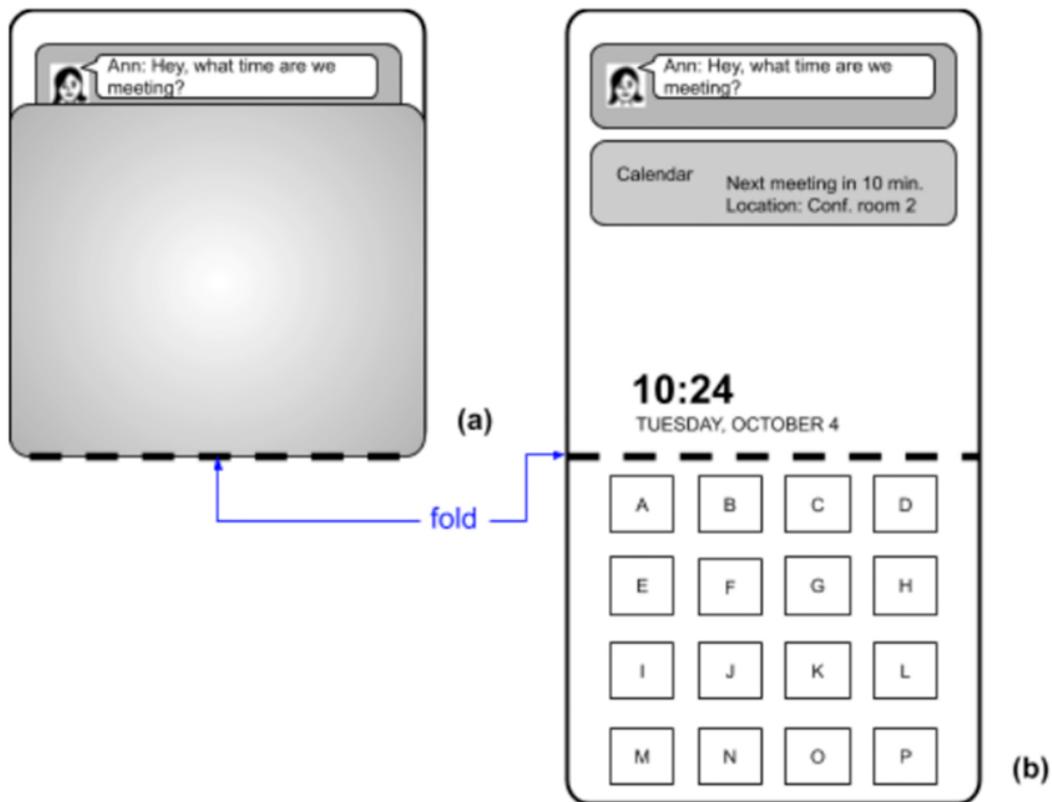


Fig. 1: Condensed user interface to quickly access selected display content

Fig. 1(a) depicts an example foldable phone that has been folded to close where a bottom display screen is smaller than a top display screen of the device. A portion of the display screen is thus exposed to view due to the unequal dimensions of the display screens. In this illustrative example, the exposed portion of the display screen is utilized to exhibit important user notifications, e.g. a text message that was received. The text message can be viewed by the user by glancing at the device. The user can also open the foldable device to view the message and other content, as illustrated in Fig. 1(b).

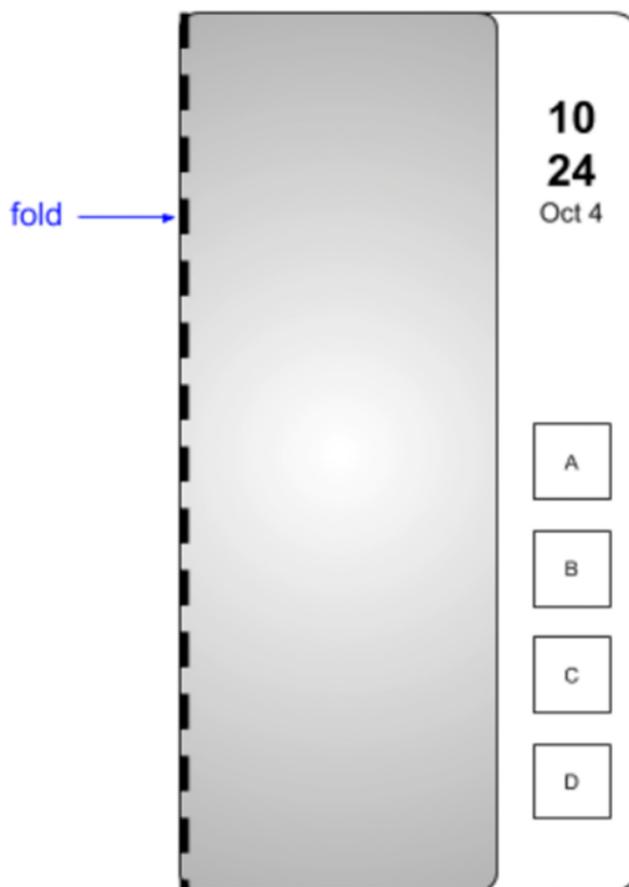


Fig. 2: Selected icons displayed via peeking user interface

Fig. 2 illustrates another example foldable device in a folded state, where the left edge has the fold. In this illustrative example, the exposed portion of the display screen in the folded

state is utilized to display a set of app icons (A, B, C, and D) associated with applications of likely interest to the user. The icons for display can be pre-selected by the user, or with user permission and express consent, can be determined from the user context.

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may enable use of user information (e.g., information about a user's context or a user's preferences), and if the user is sent content or communications from a server.

CONCLUSION

This disclosure describes techniques to utilize an exposed portion of the display screen of a foldable device in a folded state to display a peeking user interface. Per techniques of this disclosure, a user interface displays selected content on the exposed portion of a display screen when a device is in the folded state. The selected content can include important notifications such as incoming calls, received text messages, contextual information, items that need user attention, etc. The exposed portion of the display screen in the folded state can be utilized to display icons associated with applications that are of likely interest to the user, e.g., determined from user context (if permitted by the user) or pre-selected by the user.