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Selecting native ad units using gestures

Bo Lin

Tyler Pletz

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## Selecting native ad units using gestures

ABSTRACT

Native advertisements are advertisements that closely match the look-and-feel of the publication in which the ads are placed. Native ads are especially popular on mobile platforms, where they are integrated into the editorial feed of the publication. For native ads to provide an integrative user experience, publishers provide style-related instructions to ad-networks. An important step in providing such instruction is selection of the slot for the native ad. Slot selection is relatively easy on desktop but challenging on mobile devices. The present disclosure provides several gesture-based techniques to select an ad slot using mobile devices.

KEYWORDS

- Native ad

- In-feed ad

- Slot selection

- Online advertising

- Gesture recognition

BACKGROUND

A native ad is a form of advertisement or other branded content that follows the natural form and function of editorial content of a publication. Online publishers, e.g., publishers that target mobile devices, often, even exclusively, utilize native advertising to monetize their content inventories.
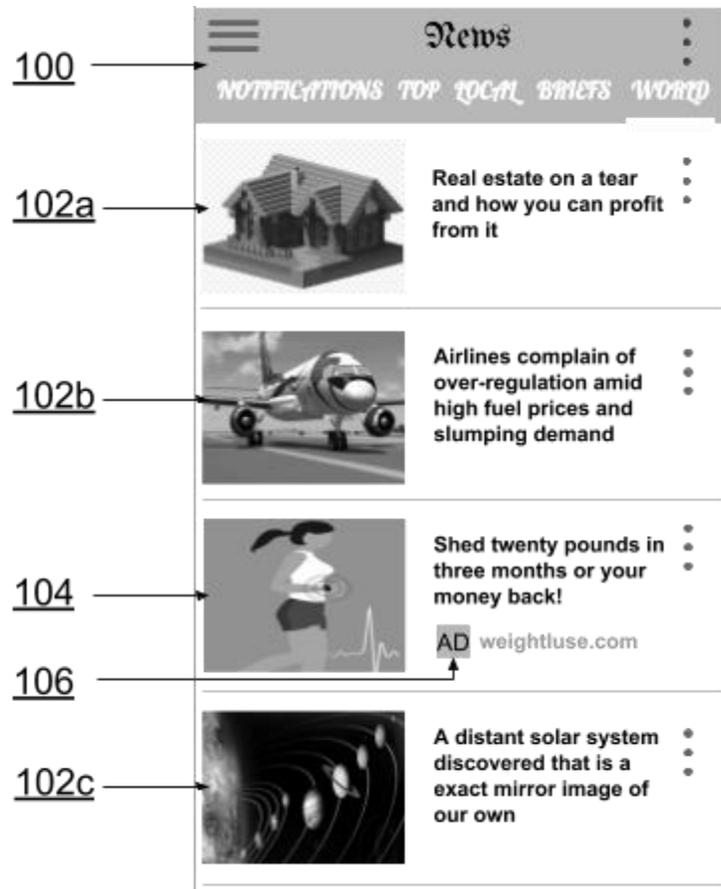
Fig. 1: Example of a native ad

Fig. 1 illustrates an example of a native ad. A publisher offers a news application or website (100) that provides consumers with content (102a-c). Integrated within the content feed is an advertisement (104) that closely mimics editorial content. Such an advertisement is known as a native ad. If the ad is integrated within the news feed (as in Fig. 1), it is also known as an in-feed ad. Due to similarity to content and natural location within the editorial feed, the native ad is marked as such by a marker (106). The marker may also link to the advertiser's website. Native ads appear in many print and electronic publications, and are tailored to the user device, e.g., smartphone, tablet, desktop PC, etc.

For a native ad to perform as designed, e.g., closely mimic the look-and-feel of editorial content and provide an integrative user experience, publishers provide instructions to ad-networks relating to the style to be mimicked on their website. An important step in providing such instruction is the selection of the slot for the native ad. While slot selection is relatively easy on a desktop environment, it is challenging on mobile devices.

DESCRIPTION

This disclosure provides a simple user interface based on gestures and gesture combinations to enable publishers to select an advertising slot on their web page. Once selected, such a slot can be used for a variety of purposes relating to native ads, e.g., for automatic learning and generation of native styles for that particular slot, etc. The techniques of this disclosure work seamlessly across actual mobile devices and mobile emulators on desktops.

In what follows, user is to be understood as the publisher unless otherwise noted. For example, a user may be a person tasked by the publisher to manage advertising on the publication's website.

Example gesture combinations that may be used to select advertising slots on mobile applications or web-pages include:

- swipe to select slot, e.g., enable user to swipe on screen to select a slot on the page;
- drag to select slot, e.g., enable user to drag slot on a page in order to select it;
- long-press to select slot, e.g., enable user to long-touch a slot in order to select it;
- joystick to select slot, e.g., enable user to use a mini joystick to move up/down/left/right in order to select a slot on the page; etc.
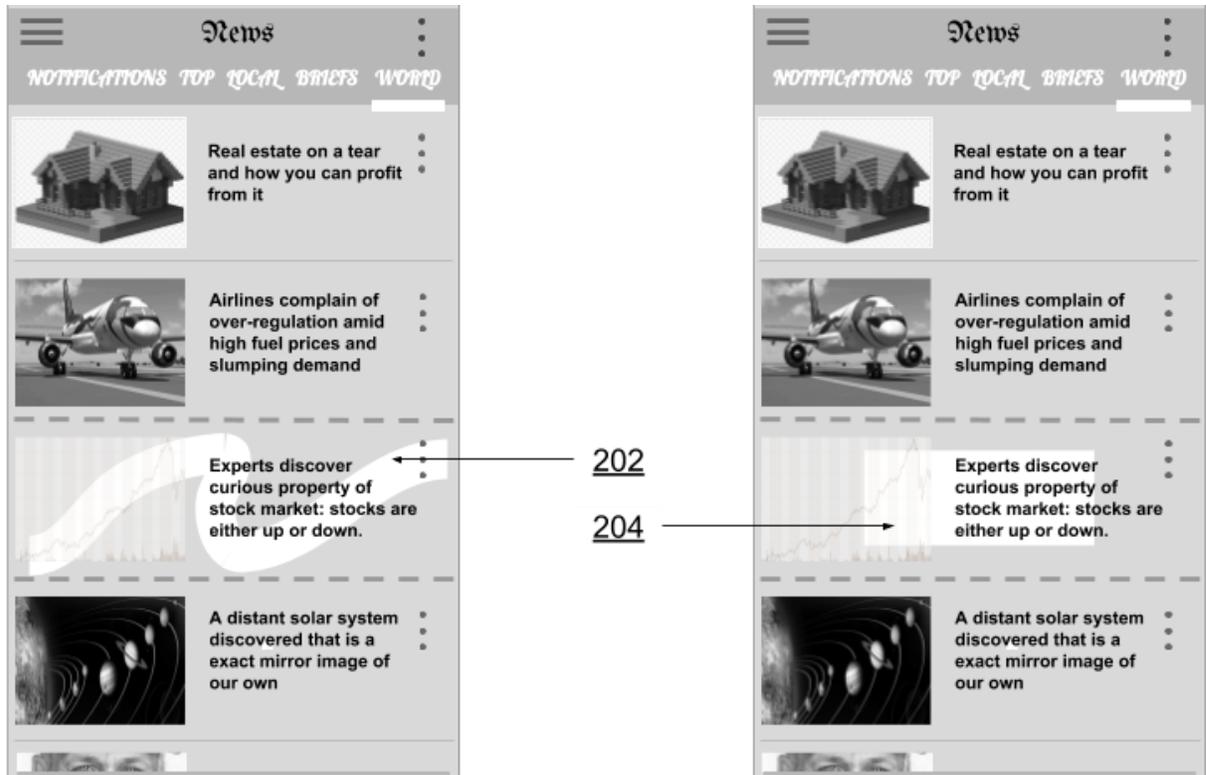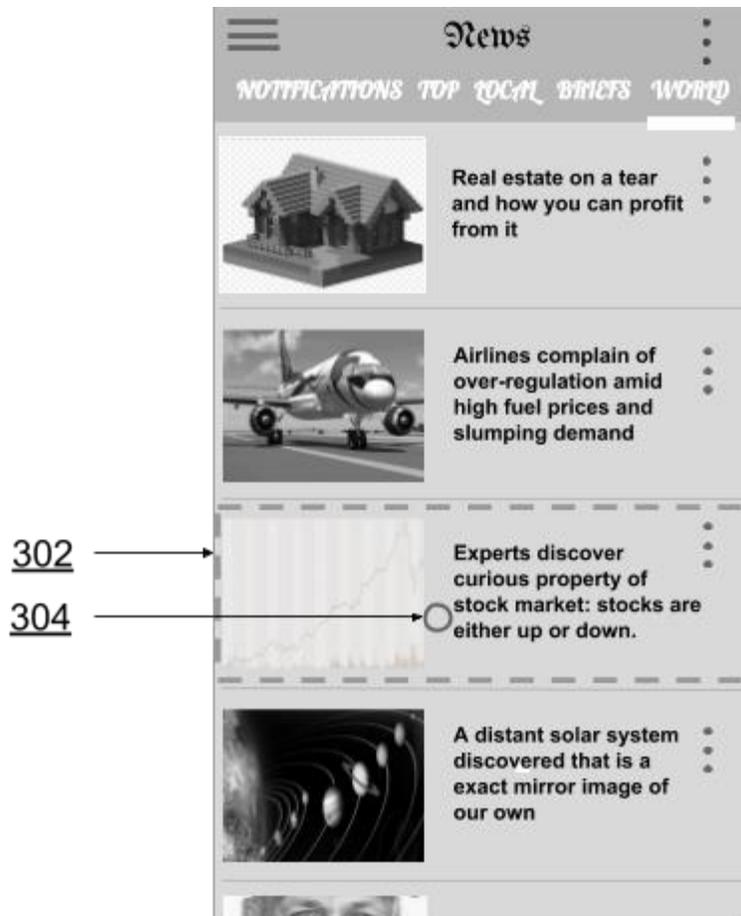
(a)   (b)

Fig. 2: Selecting a slot by (a) swiping; (b) dragging

Fig. 2(a) illustrates selection of a slot by swiping (202), e.g., by drawing an area (illustrated with the white swipe). Fig. 2(b) illustrates selection of a slot by dragging (204) to select a rectangular area (illustrated by the white rectangle).

Fig. 3: Selecting a slot by long press

Fig. 3 illustrates the selection of a slot by long press. The user long-presses the slot for it to be selected (302). A focusing circle (304) optionally appears to guide the user in making the slot selection. In case the user is making a slot selection using a mobile emulator on desktop, this can be initiated by hovering over the slot.
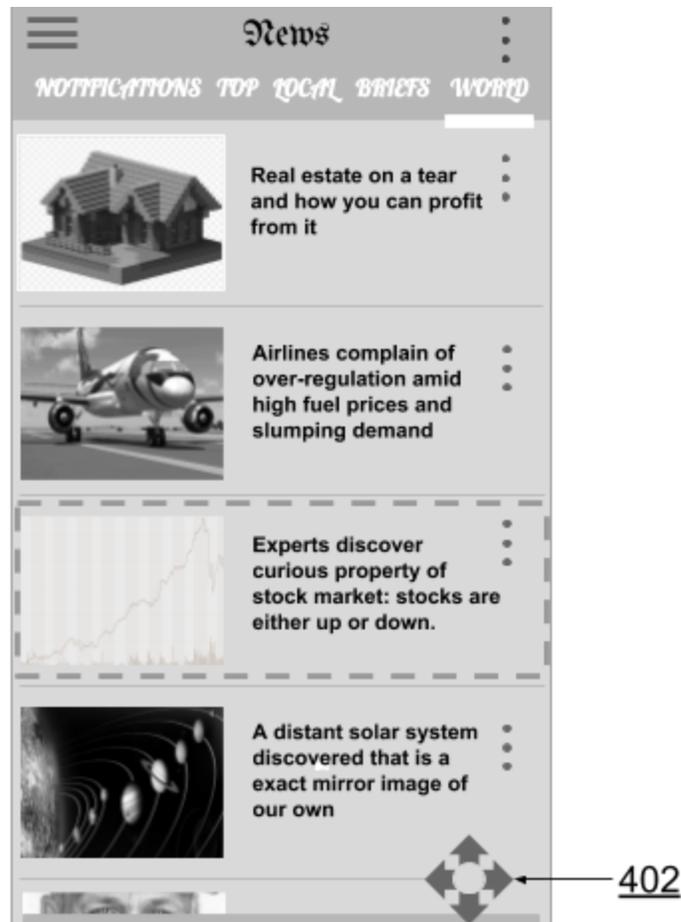
Fig. 4: Slot selection using a joystick

Fig. 4 illustrates the selection of a slot using a joystick (402), e.g., an up/down/left/right controller. To select an advertising slot, the user moves the focus position one step at a time using the joystick. The joystick step size may be fixed (which is accurate albeit slow) or may be set to go to the next division (DIV) of the web-page.

Other ways to select slot include long-pressing a slot to traverse the document object model (DOM) tree, with operations defined to traverse up, down, or along sibling nodes of the DOM tree, etc. The gestures described herein can also be attached to keyboard events, e.g., to make the user experience in emulator mode intuitive and ergonomic. The user experience and workflow on actual mobile device and emulator are otherwise similar. The above slot-selection

techniques can be combined with other tools such as libraries that auto-detect slots on the page to further improve the user experience, e.g., a set of slots or DIVs could be pre-selected for the users.

CONCLUSION

This disclosure provides techniques that enable online publishers to select and specify slots for native or in-feed advertisements. The techniques present a simple user interface to enable slot selection via gesture combinations such as swipe, drag, joystick-movement, hover, long-press, etc. A selected slot may be used for various purposes, e.g., for training an auto-generator of native ads. The techniques are usable by a publisher that administers web pages using various devices, e.g., a mobile device, a mobile emulator on desktop, etc. The techniques are well-suited to a server-rendered approach for native ads and provide publishers with ways to create and optimize native styles.