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CUSTOM APPLICATION STORE LISTING FOR ADVERTISEMENTS

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ABSTRACT

A computing system (e.g., a cloud server) may cause a computing device to display a custom store listing (e.g., in accordance with a landing page optimization strategy) for an application (hereinafter referred to as "app") on an app store. The computing system may generate an identifier (e.g., a code, a token, a parameter, etc.) for each custom store listing. The computing system may then combine the respective identifier for each custom store listing with a base link (e.g., a Uniform Resource Locator (URL)) for the application to create a custom store listing link for the custom store listing. As such, a customer may select one of the custom store listing links and be directed to a custom store listing that is customized to appeal to the customer (e.g., as part of a targeted digital advertising strategy or campaign). In this way, a user (e.g., an app developer) of the computing system may create or use custom store listings as part of digital advertising campaigns for the user's app, which may increase acquisitions (e.g., downloads) for the user's app.

DESCRIPTION

The present disclosure describes techniques for causing a computing device to display a custom store listing (e.g., in accordance with a landing page optimization strategy) for an application (hereinafter referred to as "app") on an app store. The computing system may generate an identifier (e.g., a code, a token, a parameter, etc.) for each custom store listing. The computing system may then combine the respective identifier for each custom store listing with a base link (e.g., a Uniform Resource Locator (URL)) for the application to create a custom store listing link for the custom store listing.

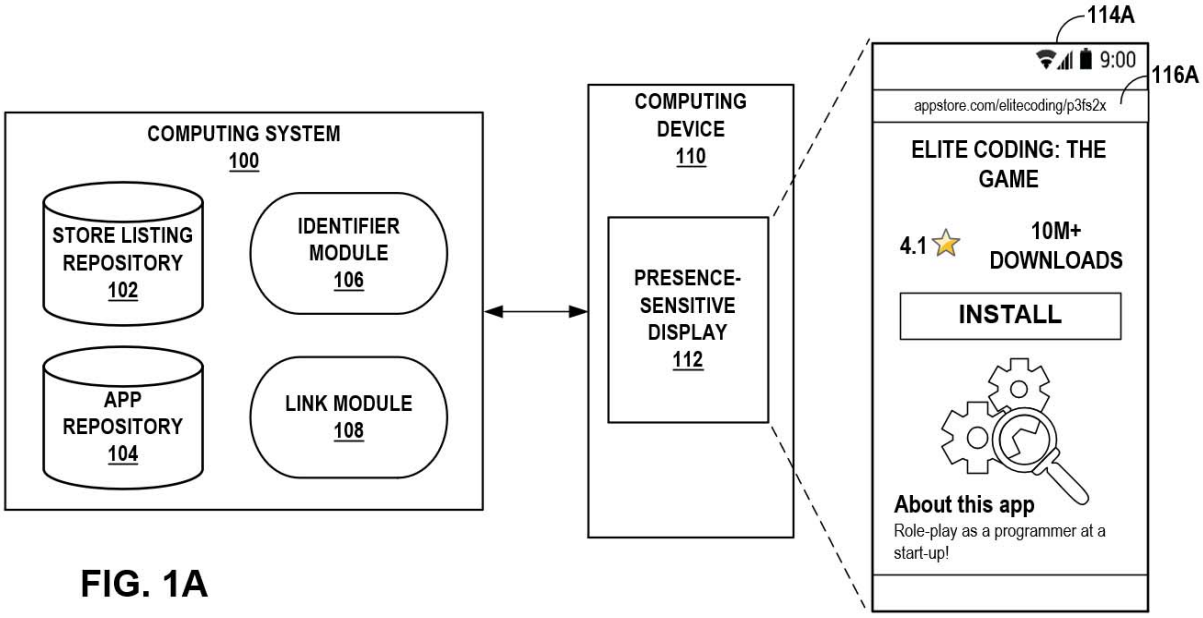

FIG. 1A

FIG. 1A is a conceptual diagram illustrating a computing system 100 configured to cause a computing device 110 to display a graphical user interface (GUI) 114A of a first custom store listing for a user's (e.g., an app developer's) app on an app store. In the example of FIG. 1A, computing system 100 includes an app store listing repository 102, an app repository 104, an identifier module 106, and a link module 108.

Computing system 100 may be any suitable remote computing system, such as one or more desktop computers, laptop computers, mainframes, servers, cloud computing systems, virtual machines, etc. capable of sending and receiving information via a network. In some examples, computing system 100 may represent a cloud computing system that provides one or more services (e.g., app store services) via the network. That is, in some examples, computing system 100 may be a distributed computing system. One or more computing devices, such as computing device 110, may access the services provided by the cloud by communicating with computing system 100.

Computing system 100 may include one or more processors and one or more storage devices. The processors may implement functionality and/or execute instructions associated with computing system 100. Examples of the processors may include application processors, display controllers, auxiliary processors, one or more sensor hubs, and any other hardware configured to function as a processor, a processing unit, or a processing device. Modules (e.g., identifier module 106, link module 108, etc.) may be operable (e.g., executed) by the processors to perform various actions, operations, or functions of computing system 100. That is, identifier module 106 and link module 108 may form executable code, which when executed, cause the processors to perform specific operations in accordance with (e.g., causing computing system 100 to become a specific-purpose computer by which to perform) various aspects of the techniques described here.

The storage devices of computing system 100 may store app store listing repository 102, app repository 104, identifier module 106, and link module 108. The storage devices may, in some examples, be described as a computer-readable storage medium. For example, the storage devices may be configured for long-term, as well as short-term storage of information, such as instructions, data, or other information used by computing system 100.

In the example of FIG. 1A, computing device 110 is a smartphone. However, computing device 110 may be any mobile or non-mobile computing device, such as a cellular phone, a smartphone, a personal digital assistant (PDA), a desktop computer, a laptop computer, a tablet computer, a portable gaming device, a portable media player, an e-book reader, a watch (including a so-called smartwatch), an add-on device (such as a casting device), smart glasses, a gaming controller, and/or the like. Computing device 110 may communicate with computing system 100 via a network, such as a cellular radio, a third-generation (3G) radio, a fourth-

generation (4G) radio, a fifth-generation (5G) radio, a Bluetooth® radio (or any other personal area network (PAN) radio), a near-field communication (NFC) radio, a WiFi® radio (or any other wireless local area network (WLAN) radio), and/or the like. Additionally or alternatively, computing device 110 may include wired communication devices capable of transmitting and/or receiving communication signals via a direct link over a wired communication medium (e.g., a Universal Serial Bus (USB) cable).

Computing device 110 may include a presence-sensitive display ("display") 112. Display 112 may be a presence-sensitive display that functions as an input device and as an output device. For example, the presence-sensitive display may function as an input device using a presence-sensitive input component, such as a resistive touchscreen, a surface acoustic wave touchscreen, a capacitive touchscreen, a projective capacitive touchscreen, a pressure sensitive screen, an acoustic pulse recognition touchscreen, or another presence-sensitive display technology. The presence-sensitive display may function as an output (e.g., display) device using any of one or more display components, such as a liquid crystal display (LCD), dot matrix display, light emitting diode (LED) display, microLED display, organic light-emitting diode (OLED) display, e-ink, active matrix organic light-emitting diode (AMOLED) display, or similar monochrome or color display capable of outputting visible information, such as GUI 114A of a first custom store listing.

In accordance with techniques of this disclosure, computing system 100 may cause computing device 110 to display a custom store listing for an app that is included in an app store. A custom store listing for the app may include a customized icon, a customized video, a customized screenshot, a customized text, and/or the like. Computing system 100 may store custom store listings (e.g., for every app on the app store) in store listing repository 102.

Similarly, computing store 100 may store applications (e.g., every app on the app store) in app repository 104.

Identifier module 106 of computing system 100 may generate and assign an identifier (e.g., a code, a token, a parameter, etc.) for a custom store listing. As such, a link directing a customer to the custom store listing (e.g,, a custom store listing link such as a custom store listing link 116A) may include a base link (e.g., a Uniform Resource Locator (URL) and an identifier (e.g., an identifier appended to the base link) such that each custom store listing link is unique. Example identifiers include alphanumeric codes, although it should be understood that the identifier may be any information (e.g., a sequence of characters) capable of uniquely identifying a custom store listing. Thus, in some examples, computing system 100 may generate alphanumeric codes as the identifiers for the custom store listings and assign each alphanumeric code to a corresponding custom store listing.

In some examples, responsive to an input (e.g., a tap provided via display 112) from a user (e.g., an app developer) of computing system 100, computing system 100 may generate and assign a first alphanumeric code (e.g., “p3fs2x”) for a first custom store listing for the user’s app (e.g., “Elite Coding: The Game”), a second alphanumeric code (e.g., “3jfdj2”) for a second custom store listing for the user’s app, and so on. In other examples, computing system 100 may automatically generate and assign an identifier for each custom store listing for the user’s app. In any case, because each custom store listing of the user’s app may be designed to appeal (e.g., based on customer characteristics such as interests, location, device characteristics, behavioral characteristics such as downloading certain types of apps, visiting certain websites, and/or the like, demographic information, etc.) to a different group of customers, the custom store listing links may direct each group of customers to the custom store listing designed to appeal to that

group of customers as part of a targeted digital advertising strategy, potentially increasing acquisitions (e.g., downloads) of the user's app.

Link module 108 of computing system 100 may combine the respective identifier for each custom store listing with a base link (e.g., a Uniform Resource Locator (URL), such as "appstore.com/elitecoding") for the application to create custom store listing link 116A for the custom store listing. For example, computing system 100 may add a delimiter (e.g., "/") to the end of the base link and then add the respective alphanumeric code for the custom store listing. Thus, custom store listing link 116A for the first custom store listing for the user's app may be "appstore.com/elitecoding/p3fs2x".

Responsive to a customer (e.g., a high-end smartphone user who enjoys programming who is also interested in a popular game) selecting custom store listing link 116A (e.g., by tapping a targeted digital advertisement in which custom store listing link 116A is embedded), computing system 100 may parse custom store listing link 116A to direct the customer to the custom store listing associated with the identifier (e.g., "p3fs2x") in custom store listing link 116A. That is, computing system 100 may direct the customer to the first custom store listing (e.g., which was customized to appeal to a customer interested in a popular game, a customer interested in a particular advertisement for the user's app, a customer with particular characteristics such as interests, location, device characteristics, behavioral characteristics such as downloading certain types of apps, visiting certain websites, and/or the like, demographic information, etc.). In some examples, the customer may belong to an advertising group, where each customer in the advertising group shares a set of characteristics (e.g., interests, location, device characteristics, behavioral characteristics such as downloading certain types of apps, visiting certain websites, and/or the like, demographic information, etc.) such that each customer

in the advertising group is directed to the same custom store listing (e.g., first custom store listing).

To direct the customer to the first custom store listing, computing system 100 may identify the app associated with custom store listing link 116A based on the base link of custom store listing link 116A. Computing system 100 may search app store listing repository 102 (e.g., based on the base link) to identify the custom store listing that further includes or is assigned the identifier "p3fs2x" in custom store listing link 116A. Responsive to identifying the custom store listing that includes or is assigned the identifier "p3fs2x" in custom store listing link 116A as the first custom store listing, computing system 100 may send an indication of the custom store listing to computing device 100 via a network. Computing device 100 may then display (e.g., via display 112), to the customer, GUI 114A of the first custom store listing.

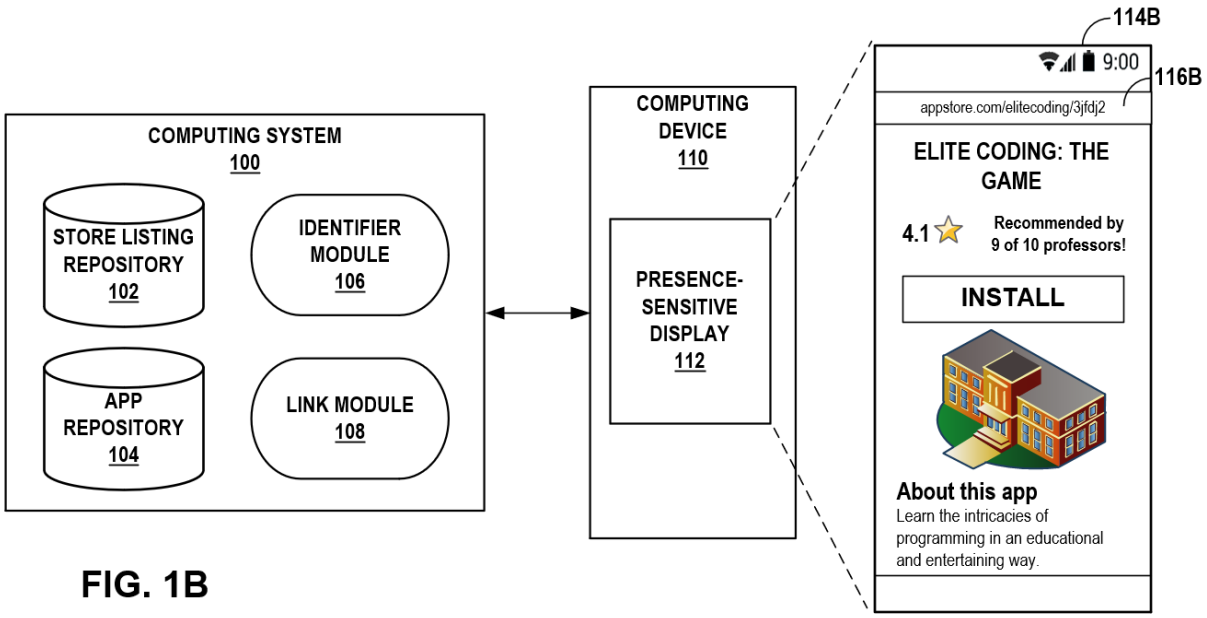

FIG. 1B

FIG. 1B is a conceptual diagram illustrating a computing system 100 configured to cause a computing device 110 to display a graphical user interface (GUI) 114B of a second custom store listing for a user's app (e.g., "Elite Coding: The Game") on an app store. As described

above, identifier module 106 of computing system 100 may generate and assign (e.g., in response to user input, automatically, etc.) a second alphanumeric code (e.g., "3jfdj2") for the second custom store listing. Link module 108 of computing system 100 may then combine the second alphanumeric code with the base link for the user's app (e.g., "appstore.com/elitecoding") to create a custom store listing link 116B for the second custom store listing. Thus, custom store listing link 116B for the first custom store listing for the user's app may be "appstore.com/elitecoding/3jfdj2".

Responsive to a customer (e.g., a user located in the United States with strong interest in technology and a particular game) selecting custom store listing link 116B (e.g., by tapping a targeted digital advertisement in which custom store listing link 116B is embedded), computing system 100 may parse custom store listing link 116B to direct the customer to the custom store listing associated with the identifier (e.g., "3jfdj2") in custom store listing link 116B. That is, computing system 100 may direct the customer to the second custom store listing (e.g., which was customized to appeal to a customer interested in an educational game, a customer interested in a particular advertisement for the user's app, a customer with particular characteristics such as interests, location, device characteristics, behavioral characteristics such as downloading certain types of apps, visiting certain websites, and/or the like, demographic information, etc.).

Responsive to the customer selecting custom store listing link 116B, computing system 100 may direct the customer to the second custom store listing. The second custom store listing may be different from the first custom store listing such that each custom store listing is associated with a given app but is designed to optimally appeal to a different group of customers for that app. For example, because the first custom store listing is designed to appeal to a customer interested in a popular game, the first custom store listing may emphasize the app's

number of downloads and the app's role-playing aspect. Similarly, because the second custom store listing is designed to appeal to a customer interested in an educational game, the second custom store listing may emphasize the app's recommendation by nine of ten professors and the app's educational content.

As described above, computing system 100 may identify the app associated with custom store listing link 116B based on the base link of custom store listing link 116B. Computing system 100 may search app store listing repository 102 to identify the custom store listing that includes or is assigned the identifier "3jfdj2" in custom store listing link 116B. Responsive to identifying the custom store listing that includes or is assigned the identifier "3jfdj2" in custom store listing link 116B as the second custom store listing, computing system 100 may send an indication of the second custom store listing to computing device 100 via a network. Computing device 100 may then display to the customer GUI 114B of the second custom store listing.

In examples where no custom store listing link includes or is assigned an identifier associated with a custom store listing link (e.g., a custom store listing link 116C), computing system 100 may direct the customer to a main store listing (e.g., a default page) for the app. That is, computing system 100 may direct the customer to the main store listing whenever computing system 100 is unable to identify a custom store listing that includes or is assigned an identifier in a custom store listing link.

One or more advantages of the techniques described in this disclosure include enabling a user, such as an app developer, to perform landing page optimization for the user's app on the app store. By allowing customers to select custom store listings for the user's app in accordance with the techniques described, the user may use a targeted digital advertising strategy to display custom store listings customized to appeal (e.g., interests, location, device characteristics,

behavioral characteristics such as downloading certain types of apps, visiting certain websites, and/or the like, demographic information, etc.) to each customer. As a result, customers may be more interested in downloading the user's app, in turn helping the user market the user's app by increasing acquisitions of the user's app.

References

1. US Patent Application Publication No. US20160292728A1.
2. US Patent Application Publication No. US20170169473A1.
3. US Patent No. US8707442B1.
4. Appsflyer, "Appsflyer." https://www.appsflyer.com/product/overview/, dated December 2, 2020.
5. Apple, "App store connect." https://developer.apple.com/app-store-connect/, dated December 2, 2020.
6. Facebook, "Add deep links to your app ad." https://www.facebook.com/business/help/1627795160837067?id=1858550721111595, dated December 2, 2020.