Disposable Apps

ABSTRACT

This disclosure describes techniques that enable end users that do not possess technical knowhow, e.g., knowledge of software development, to create apps. The apps can be standalone, e.g., run directly on an operating system, or be integrated into other apps or software. For example, the apps can be integrated into a conversational assistant, a browser, etc. The user-generated apps are designated for a specific event and/or a specific time period. When the user-generated app is no longer needed, the app and its data are automatically destroyed.

KEYWORDS

- conversational app
- disposable app
- mobile app
- events

BACKGROUND

Software applications, e.g., mobile apps, provide a specific set of functionality. Users that do not possess technical knowhow of app development employ software developers to build and host an app with user-specified functionality. Hiring and working software developers can take considerable time and expense. Further, certain functionality is required only for a particular amount of time, e.g., during an event. After the event, the app and data generated by the app can be discarded, e.g., to eliminate concerns of data persistence, hosting costs, etc. Discarding an app and its data can also require hiring developers.

DESCRIPTION
This disclosure describes techniques that enable end users that do not possess technical knowhow, e.g., knowledge of software development, to create apps. The apps can be standalone, e.g., run directly on an operating system, or be integrated into other apps or software. For example, the apps can be integrated into a conversational assistant, a browser, etc. The user-generated apps are designated for a specific event and/or a specific time period. When the user-generated app is no longer needed, the app and its data are automatically destroyed.

Fig. 1: Generation of a disposable app

A user interface, e.g., a graphical user interface, a voice user interface, etc. is provided to enable a user to generate an app. The user provides the name, type (e.g., a game, a quiz, etc.) and a lifetime, e.g., event and/or time period for an app. The lifetime indicates the duration for which the app is available. Further, the user is provided a set of templates to choose from. The user interface also enables a user to provide data to drive the app features.

Fig. 1 illustrates a disposable app (102) generated based on the user input (100). The disposable app generator (120) provides a user interface (122) and a set of app templates (124). The app is automatically generated, without the need for users to write software code, design the
app user interface, etc. For example, the user-provided data may be combined with a template to
generate the app. The app has a name (104) and type (106). Further, based on user input, the
disposable app has a predefined lifetime (108). If the user selects a template for the app, the
selected template is stored as part of the app (110). The app also stores user-provided data (112),
as permitted by users

Once an app is created, it is usable on any device, e.g., smartphone, tablet, television,
computer, home speaker, etc. For example, if the app operates within a conversational assistant,
the app is available on devices that run the conversational assistant. Users that are permitted
access to the app can invoke and use the app during its lifetime of availability. Once the lifetime
of the app is over, the app and user data are automatically discarded. The user that generated the
app has complete control over the lifetime of the app.

Example

A user creates an app that executes within a conversational assistant. The app is a voice-
based app that the user designates for use during a family occasions, e.g., a birthday celebration.
The app is a trivia game about the user’s family. The user interface to generate the app enables
the user to specify a name and lifetime, and to select a type for the app. The user sets
permissions for the app such that any family member can access and play the trivia game on any
device that can run the conversational assistant. Further, the user specifies that multiple family
members can play the game together, e.g., as a turn-by-turn trivia game. The user also specifies
that the app exist during the birthday celebration and that the app is to be automatically destroyed
after the event. The trivia game is automatically generated and made available to the user’s
family members within the conversational assistant based on the user provided information.
The graphical user interface and infrastructure that enables the creation of disposable apps can also be available via an application programming interface (API) or as a software development kit (SDK). App developers can then assist users to generate apps via this mechanism.

In situations in which certain implementations discussed herein may collect or use personal information about users (e.g., user data, information about a user’s social network, user's location and time at the location, user's biometric information, user's activities and demographic information), users are provided with one or more opportunities to control whether information is collected, whether the personal information is stored, whether the personal information is used, and how the information is collected about the user, stored and used. That is, the techniques discussed herein collect, store and/or use user personal information specifically upon receiving explicit authorization from the relevant users to do so.

For example, a user is provided with control over whether programs or features collect user information about that particular user or other users relevant to the program or feature. Each user for which personal information is to be collected is presented with one or more options to allow control over the information collection relevant to that user, to provide permission or authorization as to whether the information is collected and as to which portions of the information are to be collected. For example, users can be provided with one or more such control options over a communication network. In addition, certain data may be treated in one or more ways before it is stored or used so that personally identifiable information is removed. As one example, a user’s identity may be treated so that no personally identifiable information can be determined. As another example, a user’s geographic location may be generalized to a larger region so that the user's particular location cannot be determined.
CONCLUSION

This disclosure describes techniques that enable end users that do not possess technical knowhow, e.g., knowledge of software development, to create apps. The apps can be standalone, e.g., run directly on an operating system, or be integrated into other apps or software. For example, the apps can be integrated into a conversational assistant, a browser, etc. The user-generated apps are designated for a specific event and/or a specific time period. When the user-generated app is no longer needed, the app and its data are automatically destroyed.