Tuesday, May 3, 2016

Up Board project State and Status

Description

- This is an Android app project that is developed using Google's Android Studio. It allows a mobile phone user to develop and describe a data set that compiles a comprehensive slide show presentation. Data is stored on the Cloud for consumption of other more robust display apps and systems. The current implementation uses Google+ sign in and requires a Google account for authorization and authentication.

Configuration

- API 23 is targeted with a minimum API of 21. This allows the implementation of 'Material Design' as desired by the original project specification.
- This project uses various Google APIs which requires a Google developer account, an application record (Up Board), and signing key information. This has been set up as a temp account to enable development. This Up Board app Google development account should be switched to an 'official' corporate account for commercial distribution. I will provide the account information elsewhere in this document.
- This project is housed in a Git repository located at: https://github.com/tkvalentine/BotBoard-Android.git and is public, this repository should be transferred to ECLabs in Git.

Pertinent Requirements

- This app was developed on an Apple Mac. If you use Android Studio with MS Windows some of the project locations and IDE configurations may be different that on the Mac.
- This app uses various Google APIs which require setup between the app and Google via a Google App Development account. Specifically, APIs must be registered and authorized through a signing process. Android app keystore files are used to accomplish this. Both debug and release versions of the app are signed. The debug keystore is generated by Android Studio and the release keystore is created by the developer. A process of submitting the SHA1 values of the debug and release keystores to the Google API register on the Google Developer account authorizes the app to use the APIs requested. This is a mandatory requirement.

- The debug keystore for this project is not in the Git repository. It is created by Android Studio located at: ~/<user_home_directory>/.android/debug.keystore. The key alias is ‘androiddebugkey’, the key password is ‘android’, and the store password is ‘android’. Java has a tool named keytool that will extract the SHA1 values for submitting to Google.
- The release keystore for this project is in the Git repository located at: ~/BotBoard-Mobile/BotBoard/app/botboard-release.keystore. The key alias is ‘botboard’, the key password is ‘botboard’, and the store password is ‘botboard’. Again, Java has a tool named keytool that will extract the SHA1 values for submitting to Google.
- Again, the above have been setup as a temporary development account and registration and should be changed to a corporate account for commercial distribution.

App Development State

- The backend data store for this app if Firebase and can be accessed at: https://boiling-heat-9947.firebaseio.com.
- The only design documents are located (in the repository) at ~/BotBoard-Mobile/BotBoard/app/UpBoard Slide Data Structure.numbers and ~/BotBoard-Mobile/BotBoard/app/upboard_tablet_wireframes_v1.pdf.
- Both user interface and data models are complete to the Deck/Slide/Content level with Slide/Content/Snapshot and Slide/Content/Layout not implemented for creating/editing or user interface.
- The app currently does not handle orientation changes.
- The app currently does not implement custom screen size user interface considerations.
- The app currently creates a default user data set if none exists on Firebase. This was implemented to help model the data and provide visuals on content.
- The app currently implements two main activities, a Login activity and a Main (data) activity. The Main activity uses a visible/invisible series of panels. One panel for each level of the data hierarchy. The user interface layout, data adapters, and other code components are abstracted and separated to enable other app architectures to be implemented easier. Such as going to a multi-activity model instead of a single activity with multiple panels.

- The app currently (and only) uses Google+ sign in for authentication which is used to gain access to Firebase. Other methods may be implemented such as Facebook, Twitter, or email. The users data is directly and strongly coupled to the Google ID. If a user logs in or authenticates with an alternative account/method this app will not see the Firebase data associated with the Google+ account. It may be possible to gain access but currently this is not a discussed requirement.
- Graphic presentation, design, and color choice was implemented with Android Material themes in mind. This probably needs a professionally minded critique and adjustment to convey the app owner's character and presence.