Android Project Report

Team Members

- Dennis Huang (dlh4fx)
- Matthew Tillman (mst2jd)

Device Name

Nexus 7 called GIRAFARIG

Project/App Title

Android Quiz App

Instructions on App Usage

The app closely follows the description on the Android Mini-App Project on the class website. When the app is opened, there will be two tabs: New Quizzes & Completed Quizzes. On the New Quizzes tab, simply tap one of the titles of the quiz to start the quiz. A new activity will start, and the screen will display a question, a progress bar, and two options for answering. As an answer is chosen, the next question will be displayed, and the progress bar will increment. After the last question has been answered, the result will be displayed, along with a button titled "Go Home". Clicking the button will end the quiz, and the app will return to the home page. The quiz that was just finished will now appear in the Completed Quizzes tab. If tapped, a toast message will pop up displaying the title of the quiz and the result. To reset the app, exit the app tap the Overview button (button on the right of the Home button), and end Android Quiz App. Then, click on the Android Quiz App icon to start it again.

Special Information

The app was developed in Android Studio using the 5.0 SDK and tested on a Nexus 7 tablet. The app should run fine on devices with the same version of Android.

Lessons Learned

One topic that was talked about in class was implementing fragments in an activity's interface. The two tab layout was given in an example Android layout, but the two tabs would essentially display the same thing. When a TextView was added to one tab, the other tab would also display the TextView. To alleviate this problem, a new layout file was created, and the fragments were used to display the different layouts. So now when a different tab was selected, a different layout file was loaded.

Another thing learned from the project was finishing an activity. Starting an activity was not hard to do. An onClick function was tied to a TextView, which started the quiz when the title was tapped on. However, getting back to the homepage with an updated tab list required more thought put into it. Initially, the "Go Home" button was tied with an onClick function that started the main activity, which brought the app back to the main page. However, that essentially restarted the entire app, so it was as if the quiz was never taken. Ending the quiz activity required a finish() call, which called onDestroy() for the current activity. This brought the app back to the homepage with the quiz under the Completed Quizzes tab.