



LEBANESE AMERICAN UNIVERSITY
Electrical and Computer Engineering Dept
COE 593 (COE Application)

Fall 2013
W. FAWAZ

Project III

Due date: Monday January 20, 2014

I. Preamble

It is strongly advisable that you read carefully **chapters 6** of your **textbook** titled "Android: how to program with an introduction to Java" **before** you start working on this third project. This is especially true since **the concepts** that are covered in these chapters are **essential for** ensuring a successful completion of the present project. So, I encourage you to develop yourself **from scratch** the "Flag Quiz" App that is discussed in chapter 6 of your textbook. During the course of this exercise, make sure that you **follow the instructions** provided by the authors of the book to the letter. This preliminary subtask is going to be extremely useful; as such, you are kindly asked to take it very seriously.

II. Objective

Your main task is to develop an **enhanced version** of the Flag Quiz game discussed in Chapter 6 of your textbook. It is important to highlight that the said game aims at testing the user's ability to correctly **identify country flags**. For this project, you are required to make the **following enhancements** to this Flag Quiz app:

1. Count the number of questions that were answered correctly on the first try. After all the questions have been answered, display a message describing how well the user performed on the first guesses (displaying for instance the percentage of correct answers on first guesses).
2. Keep track of the score as the user proceeds through the application. Give the user the most points for answering correctly on the first guess, fewer points for answering correctly on the next guess, and so on and so forth.
3. If the user guesses the correct flag, include a "bonus question" asking the user to name the capital of that country. If the user answers correctly on the first guess, add 10 bonus points to the score; otherwise, simply display the correct answer, then allow the user to proceed to the next flag.
4. After the user answers the question correctly, include a link to the Wikipedia webpage for that country so that the user can learn more about the country as he/she plays the game. In this version of the app, you may want to allow the user to decide when to move to the next flag.
5. Add multiplayer functionality.
6. Use a `SharedPreferences` file to save the top five high scores
7. Publish your enhanced version of the Flag Quiz application on Google's app store by using the following naming convention for your app "FlagQuiz_YourLastName". Make sure that you append your last name to the end of the application's name to avoid any name conflicts with the applications developed by the other students. Whoever secures the largest number of downloads for his application will be generously rewarded.

For your convenience, **a zipped folder called "flags"** containing one image for each country's flag is provided and can be downloaded **from our course's website**.

What to turn in?

This project is due at the beginning of class on the due date. You have to turn in the following material in both hard and soft copies.

Criteria	Percentage
HTML Documentation of your code. In addition, provide explanations and illustrations in one or two pages along with a short write-up of questions and/or problems that you encountered while doing this project.	2 pts (10%)
Source code that contains an appropriate amount of comments. Well-organized and correct code receives 18 pts, messy yet working code receives 12 pts, code with bugs receives 6 pts, and incomplete code receives 3 pts.	18 pts (90 %)
Total	20pts (100%)

Good Luck!