

CSC 214 ASSIGNMENT 01

Your assignment is to write a simple application for Android mobile platforms by following the instructions below. The assignment has three sections that will be implemented as part of a single Android application. You are expected to practice good coding principles, including class design, structure, comments, etc. *See the coding guidelines for the course for more information. Remember, you can lose up to 10% of your score for poor style, and gain up to 10% if you do something impressively creative above and beyond the requirements of the assignment.*

You are encouraged, but not required, to put your code into a Github repository (or the equivalent). Please note that if you choose to do so, the repository must be **private**. Publicly accessible source repositories containing solutions to CSC 214 projects or assignments are a violation of the academic honesty policy (see below) even if it is not your intention to give the solution to other students.

Note: Giving or receiving electronic copies of CSC 214 assignment solutions are violations of the academic honesty policy. More importantly, as each assignment builds on the previous assignments, and each project builds on the assignments, if you do not implement the solutions yourself, you will not learn by doing, and will struggle with later assignments.

The goal of this assignment is to install Android Studio and the Android SDK, to create a simple app, to create an Android Virtual Device for use in development and testing, and to learn how to submit assignments for the course on Blackboard.

Assignment Instructions

1. Using Android Studio, create a new Android Application with the following attributes:
 - a. Application name: "Hello *YourName*" (but replace "YourName" with your first name).
 - b. Company Domain: "csc214.assignment01" then move to the next dialog.
 - c. The target Android devices should be "Phone and Tablet" and "API 25: Android 7.1.1 (Nougat)."
 - d. Add an "Empty Activity"
 - e. Activity Name: "Hello *YourName*Activity" (again use your first name)
 - f. Use defaults for the remaining values.

2. Edit the following files:
 - a. Edit “strings.xml” file to add a space between “Hello” and your name in the `app_name`, e.g. “Hello Luke” (if there currently is not a space).
 - b. Edit the “activity_hello_*.xml” file and change the “Hello World!” value to include a comma and your full name, e.g. “Hello, Luke Skywalker!”
3. For this assignment, the TA will run and test your app on a specific virtual device. Any sample screenshots that you include with your submission will be expected to use the same virtual device. Using the Android Virtual Device Manager, create a new Android Virtual device with the following characteristics:
 - a. “Nexus 6” 5.96”, 1440x2560 hardware.
 - b. Nougat, API 25, x86 system image.
 - c. Name it something memorable like “Nexus for Mobile Programming.”

HAND IN

Before handing in, create two additional files in your lab directory:

1. Create a README that contains the following:
 - a. Your contact information (name, class, lab session), TA name, and assignment number.
 - b. A brief (one paragraph at most) description of the assignment.
2. Create a directory titled “SampleOutput.” This directory should contain:
 - a. A file called “logs.txt” that contains examples any relevant logs generated by your application. Remember to use LogCat filters to show *only* your log messages before copying them into the file.
 - b. Screenshots (in PNG or JPG format) taken from an Android Virtual Device that show examples of your application’s user interface.
3. Name your file using your last name and the assignment number. For example: “stjacques_assignment01.zip”. This makes it easier for the TAs to organize when grading multiple students.

Hand in by uploading the compressed (i.e. “zipped”) folder containing your Android Studio project and the required additional files to Blackboard. Remember that **late submissions are not accepted**.