Mobile Application Programming: Android

CS4962 Fall 2014
Project 1
Due: 11:59PM Monday, September 1st

Abstract

Create a simple Android application that shows a light and a control to turn the light on and off. The purpose of this assignment is to give students a reason to get Android Studio in a functioning state on a computer they have access to. It also allows students new to the UofU to see how the handin system works.

Components

- **Root Activity**: A subclass of android.app.Activity that creates a user interface with a light and light switch. Should also define a click listener for the light switch that turns the light on and off.
- **Light Image View**: A subclass of android.widget.ImageView that displays a light. It should reference application drawable resources for on and off state images.
- **Switch View**: A subclass of android.widget.Switch that is configured to turn the light on and off using the click listener defined by the root activity.

Considerations

This app should be very simple, but still look good. Please ensure that the background for the root layout element holding the light and switch has a background color that combines well with the light images. Center the light switch view and switch views in the layout. You can do this with linear layouts using layout weights and the “gravity” property of the LinearLayout.LayoutParams class. You can also use a relative layout to accomplish the same goals.

For the first few assignments submitted in class you **cannot** use layout XML files. All of your user interface must be created in code. We will take advantage XML layout and other XML technologies provided by the Android build tools later on in the course.

Handin

You should hand in your zipped project, including any supporting files, using the CADE Lab handin system on the website, or on the command line:

`handin cs4962 project0 your_project_zip_file.zip`