

# CIS 3515 Assignment 1

Instructions:

Ensure that we have a functional development environment.

1. If this is your personal machine, ensure that you have a recent version of the Java Development Kit installed. Visit <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html> and download the latest version for your platform.
2. Install Android Studio. Visit <https://developer.android.com/studio> and download Android Studio for your platform.
  - The setup will install the IDE, SDK, and set up a default virtual (emulated) device.
  - If you are using a machine that already has Android studio installed, move on to the next step.
3. Test the environment by creating a new Android project.
  1. Launch Android Studio
  2. If presented with the Quick Start dialog, select **Start a new Android Studio Project**
  3. If presented with the development interface, start a new project by clicking **File -> New Project...**
  4. On the *Choose your project* screen, select **Empty Activity**. Click on **Next**
  5. For *Application name*, enter **HelloWorld**
    - For Package Name, enter **edu.temple.helloworld**
    - For Save *location*, enter a location where you have write permission, and where your project files will be safe from future deletion, such as your user directory
    - For *Language*, select **Java**
    - Select API 28 (or the latest available platform) as the Minimum API level.
    - Ensure all other options are unchecked, and Click on **Finish**
  6. Once your application has been configured by Android Studio, test it by clicking on the Run App button (the green **play** button in the toolbar)
  7. If presented with a dialog to *Select Deployment Target* dialog, ensure an **Available Emulator** is selected. If no Emulators are listed, click on *Create New Emulator* and follow the steps to create a new virtual device (Ask the TA for assistance). To save time, check the *Use same device for future launches* checkbox. Click on **OK** – Once launched.
4. In the Project view of your IDE under **app**, expand the **res->values** folder and open the **strings.xml** file

5. Add a new XML item under **resources** resembling the following. Use the following information:

1. *name*: my\_greeting
2. *value*: Hello, World. This is my first app!

Eg:

```
<resources>
    <string name="app_name">Hello World</string>
    <string name="my_greeting">Hello, World. This is my first app!</string>
</resources>
```

6. In the **Project** view, expand the **res->layout** folder and open the **activity\_main.xml** file
7. Perform one of the following and save the file
  1. Select the “Hello World” TextView that was automatically generated for you
  2. In the *Attributes* pane, replace the Hello World **text** value with the following:  
“@string/my\_greeting”  
**or**
  3. Click on the **Text** tab under the palette list (bottom left), find the **TextView** tag, and replace the value of the **android:text** property with **@string/my\_greeting**
8. Run your application again and note the change to the displayed text
9. Share your project to GitHub and commit all work done so far with a descriptive message. If the repository is made private, ensure that the TA has been added to the project so that they have access  
VCS → Import Into Version Control → Share Project on GitHub
10. Once completed, Add a button to the layout and arrange it within the layout file so that it is centered horizontally.
11. Change that button’s **click** behavior to have it update the text attribute on the TextView object to read  
“You have clicked the button”
12. Commit the new changes to GitHub with a descriptive message.

**Submit your GitHub project URL to Canvas before the deadline. No Commits are allowed after the deadline. Any commits after the submission deadline will incur a penalty, potentially leading to no points being awarded for the assignment.**

### Rubric

Error-free layout with centered button	20%
Using string resource (@string/my_greeting)	20%
Click behavior for button implemented	30%
Project shared to GitHub with 2 commits	30%