**Homework 1: First Android App**

The purpose of this assignment is to get a first taste of Android application programming and using the

Android Studio editor, as well as using widgets/views and events to produce an interactive graphical app.

Before working on this or any assignment, you will need to set up the **Android Studio** IDE on your computer. You will create Android project with name **HW1\_YOURNAME** by selecting **Kotlin** as language. We suggest that you do this as early as possible, because some students may get stuck and need time to get the IDE set up.

**Assignment Description:**

For this first assignment, we'll practice whatever topics we covered in the class. You should develop an app that has the following:

1. Your app should be set up as an **Android Studio** project, so it can easily be opened/graded by others.

1. In **MainActivity** you will display either profile picture or avatar based on switch button and populate list view under image with your name, department, year using **static** listing method.
2. Create a button name **Grade** and write intent to go **GradeActivity**. Here you will take input score from editTextNumber and display letter grade in TextView once you click **Show Grade** button. You will implement our grading policy in **GradeActivity** along with **Back** button.  
    **x<60: F 60≤x<63: D-  63≤x<67 : D**

**67≤x<70: D+ 70≤x<73: C-  73≤x<77 : C**

**77≤x<80: C+ 80≤x<83: B-  83≤x<87 : B**

**87≤x<90: B+ 90≤x<93: A- 93≤x: A**

For example, if you input 94 in editTextNumber, it will display **You got A grade** into the text view.

1. Create another button in **MainActivity** name **Favorite** and go to activity **FavoriteActivity**. In FavoriteActivity, pick two radio buttons (Fruit and Flower). Based on radio button you will **dynamically** populate either five fruits or flowers in Spinner. You will display Toast with message: **Your favorite fruit/flower is Grape/Rose** once selected any item in Spinner. You have to implement **Back** button also.
2. We haven't talked very much about layout yet, so your app can have essentially any layout you want, so long as the various widgets are visible and can be interacted with.
3. Along with your app, please turn in a file named README.txt that contains your name and email address along with the name of your app and a very brief description of it, along with any special instructions that the user might need to know in order to use it properly (if there are any), e.g.,

If you want help, please feel free to show your code to others or ask for help in our online discussion forum. Feel free to make an app as simple or as complex as you like, relative to your familiarity level and time constraints. If you work on your solution for a few hours and are still not done, you can turn it in, and we will award you credit. You can do it!

**Submission and Grading:**

This homework will be due on **March 10th 11:59 pm**. The students with **DSS** will get extended time according to university policy. Please put your program source code and README.txt in a zipped file and submit it onto Cougar Course. Your submission will be graded quickly by simply running it and evaluating its functionality. It does not need to be perfect or bug-free to receive credit. Your code will not be graded on style, but we still encourage you to follow good overall coding style for your own sake.