

## Project #5 (130 points)

### Due Date

Monday, April 24, by 11:59pm.

### Submission

- (1) Zip your project folder and submit it to Canvas. The zipped file **MUST** include the following items.
  - The entire app folder, including
    - manifests, containing the AndroidManifest.xml
    - java, containing the source files \*.java
    - res, containing the resource folders drawable, layout, mipmap, values and xml
    - Gradle scripts
- (2) Add a comment together with your submission on Canvas. Include the API level and the AVD you use to run your app.
- (3) The submission button on Canvas will disappear after **April 24, 11:59pm**. It is your responsibility to ensure your Internet connection is good for the submission. **You get 0 points** if you do not have a submission on Canvas. **Projects sent through the emails will not be accepted.**

### Project Description

Develop an Android app according to the functional requirements of Project 4.

### Project Requirement

1. You **MUST** follow the Coding Standard posted on Canvas under Week #1 in the “Modules”. **You will lose points** if you are not following the rules.
2. You are responsible for following the Academic Integrity Policy. See the **Additional Note #14** in the syllabus. The consequences of violation of Academic Integrity Policy are: **(i) your group receives 0 (zero) on the project, (ii) the violation is reported, (iii) a record on your file of this violation.**
3. You **MUST** use Toast, AlertDialog, ImageView, Spinner, and ListView, or **-5 points** for each violation.
4. You **MUST** use a RecyclerView for a list of donut options, or **-10 points**. Must include a list of at least 12 different donut options with images (all donut types/flavors combined), or **-5 points**.
5. Use at least 2 Android Activities (2 screens) and their associated layout files (\*.xml), or you will **lose 10 points**.
  - If you need to share data between the Android activities, you can use **public static** to define the variables.
  - If you are using multiple Fragments, it is fine to have only one Activity. Fragment is optional for this project.
6. You must remove ALL “hardcoded text” warnings. In other words, you must define all the texts to be displayed on the GUIs in the **string.xml** resource file. **-1 point** for each violation, with a **maximum of 5 points off**. You will not lose points on other warnings, however, try your best to fix all the warnings.
7. You **MUST** define the launcher icon for your app, or **-5 points**.
8. **Testing.** Test specification is NOT required. However, you are responsible to thoroughly test your software and ensure your software is meeting the functional requirements listed in Project 4. You will **lose 5 points** for each functional requirement not met.

Your software must always run in a sane state and **should not crash in any circumstances**. You must catch all exceptions. Your app shall continue to run until the user stops the program execution or closes the window.

You will **lose 2 points** for each exception not caught, OR for each faulty behavior.