**Due Date** – Friday, December 6, by 11:59 pm.

## **Submission**

- (1) Zip your project folder and submit it to Canvas. The zipped file MUST include the entire **app** folder containing the folders and files listed below.
  - o manifests folder containing the AndroidManifest.xml file.
  - o java folder containing all the source files \*.java.
  - o res folder, containing the resource folders, including drawable, layout, mipmap, values, and XML files.
  - o Gradle script files.
- (2) The submission button on Canvas will disappear after **December 6**, 11:59 pm. This is a hard deadline. Do not wait until the last minute to submit the project. You are responsible for ensuring the project is well-received in Canvas by the due date and time. You get 0 points if you do not have a submission on Canvas. **Projects sent through emails or other methods will not be accepted.**

## **Project Description**

Develop an Android app according to the functional requirements in Project 4, excluding the export of orders.

## **Project Requirement**

- 1. You MUST follow the <u>Coding Standard</u> posted on Canvas under Week #1 in the "Modules". **You will lose points** if you are not following the rules.
- 2. You are required to follow the Academic Integrity Policy. See the Additional Note #13 in the syllabus posted on Canvas. If your team uses a repository hosted on a public website, you MUST set the repository to private. Setting it to public is considered a violation of the academic integrity policy. The consequences of violation of the Academic Integrity Policy are: (i) all parties involved receive 0 (zero) on the project, (ii) the violation is reported, and (iii) a record on your file of this violation.
- 3. The graders will use **Pixel 3a XL API 34** as the AVD for testing your Android app.
- 4. You MUST use Toast, AlertDialog, ImageView, Spinner, and ListView, or -5 points for each missing.
- 5. You MUST use a <u>RecyclerView</u> for a list of pizzas combining Chicago and NYC style specialty pizzas and build-your-own pizzas or use a RecyclerView for a list of topping options; -10 points if you don't use a RecyclerView. Each option in the <u>RecyclerView</u> must include an image associated with the option, or -5 points.
- 6. Use at least 2 Android Activities (2 screens) and their associated layout files (\*.xml), or you will lose 10 points. The 10-point penalty doesn't apply if you use Fragments with a single Activity.
- 7. Define a Java class that implements the "Singleton" design pattern for sharing the global data between different Activities, or you will lose 5 points.
- 8. Remove ALL "hardcoded text" warnings by defining names for string literals in the **values/string.xml**. **-1 point** for each violation, with a **maximum of 5 points off**.
- 9. You MUST define the launcher icon in res/mipmap for your app or -5 points.
- 10. **Functional Testing.** Test documents and JUnit tests are NOT required. However, you are responsible for thoroughly testing your app and ensuring your app meets the functional requirements specified in Project 4. You will **lose 5 points** for each functional requirement not met.
- 11. 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.