

Lab Assignment #5

Due Date: *Week 10 (11.59 pm, Sunday)*

Marks/Weightage: 30/10%

Purpose: The purpose of this lab assignment is to:

- Develop Android applications with Location Service and Map-based activities

References: Textbook, ppt slides and Android tutorials
(<https://developer.android.com/training/location>,
<https://developers.google.com/maps/documentation/android-sdk/start>). This material provides the necessary information that you need to complete the exercises.

Be sure to read the following general instructions carefully:

- This assignment **MUST be completed in pairs** following **pair programming** rules:
<http://www.extremeprogramming.org/rules/pair.html>. You should **use the full names of both team members**.
- You will have to upload the completed assignment on eCentennial through the **assignment link under Assessments**.

Android Workspace/Project Naming rules:

You must name your Android Studio workspace and project according to the following rule:
yourfullname_COMP304SectionNumber_Labnumber_ExerciseNumber.

Example: JohnSmith_COMP304Sec001_Lab4_Ex1 and each subsequent exercise should be added as JohnSmith_COMP304Sec001_Lab5_Ex2 and so on.

Submission rules:

Submit your projects as **zip files** that are named according to the following rule:
yourfullname_COMP304SectionNumber_Labnumber_ExerciseNumber.zip

Example: JohnSmith_COMP304Sec001_Lab5_Ex1.zip

Upload your zipped assignment using the assignment link in e-centennial.

Exercise #1

Write an Android app that allows users to locate various restaurants in the city of Toronto. Your interface should display a list of available restaurants and their address.

The application should display the **map and satellite map** of the restaurant whenever user selects the name in the list.

- a) Make sure to classify restaurants according to their **cuisine**. For example: Italian, Greek, Chinese, Indian, etc. The first activity shows a list of different cuisines. [10 marks]
- b) Other activities show the **list** of restaurants belonging to the selected cuisine. [10 marks]
- c) When user selects a restaurant, another activity shows the map with a **marker** pointing to the selected restaurant. [10 marks]

Provide a friendly and nice look and feel UI. Use ListView controls for displaying the list of cuisines and restaurants. Use styles to create nice displays of lists.

Evaluation/Rubric:

Functionalities: All working, proper naming of activities, variables, and methods. Provide comments. Provide explanation when asked during the demonstration of the app.	75%
UI friendliness (proper layout, controls, styles, themes, images)	15%
Declaring resources in proper resource files	5%
Innovative features/effective way of coding	5% (for example using https://maps.googleapis.com/maps/api/place/)
Total	100%