

ITIS/ITCS 4180/5180 Mobile Application Development  
In Class Assignment 10

**Basic Instructions:**

---

1. In every file submitted you **MUST** place the following comments:
  - a. Assignment #.
  - b. File Name.
  - c. Full name of all students in your group.
2. Each group should submit only one assignment. Only the group leader is supposed to submit the assignment on behalf of all the other group members.
3. Please download the support files provided with this assignment and use them when implementing your project.
4. Export your Android project as follows:
  - a. From eclipse, choose "*Export...*" from the File menu.
  - b. From the Export window, choose *General* then *File System*. Click *Next*.
  - c. Make sure that your Android project for this assignment is selected. Make sure that all of its subfolders are also selected.
  - d. Choose the location you want to save the exported project directory to. For example, your *Desktop* or *Documents* folder.
  - e. When exporting make sure you select *Create directory structure for files*.
  - f. Click Finish, and then go to the directory you exported the project to. Make sure the exported directory contains all necessary files, such as the .java and resource files.
5. Submission details:
  - a. When you submit the assignment, compress your exported Android project into a single zip file. The format of compressed file name is InClassAssignment#.zip
  - b. You should submit the assignment through Moodle: Submit the zip file.
- 6. Failure to follow the above instructions will result in point deductions.**

## In Class Assignment 10 (100 Points)

In this assignment you will draw jogging trip paths on Google map using polylines and markers. The application is composed of 2 activities, namely **MainActivity**, and **JogTripActivity**.

### Notes:

1. The recommended Android Virtual Device (AVD) should have minimum SDK version set to 14 and target SDK at least 17. The app should display correctly on 3.2" QVGA (ADP2) (320x480: mdpi).



Figure 1, Application User Interface

### Part 1 (30 Points): Main Activity

The interface should be created to match the user interface (UI) presented in Figure1(a). You will be using layout files, and `strings.xml` to create the user interface. The Main Activity is responsible for loading a list of jog trip locations from [parse.com](http://parse.com). The implementation requirements include:

1. Create a jogging trips app on [parse.com](http://parse.com). Import the provided jog trips class into [parse.com](http://parse.com). This class contains information about each jog trip, i.e., jog trip title, list of latitude and longitude location points, `createdAt`, and `updatedAt`.
2. Retrieve the jog trip information from the jog trips table on [parse.com](http://parse.com) and display the jog trip titles in a `ListView`.
3. Tapping on a list item should setup the required intent to start the **JogTrip Activity** and pass it the selected jog trip's information.

## Part 2 (70 Points): JogTrip Activity

This activity should display a Google Map Fragment. It should receive the selected jog trip's information from the Main Activity. The jog trip's locations should be displayed on the Google Map. The implementation requirements include:

1. Using PolyLine display the jog trail on the map. For more information about PolyLine: <https://developers.google.com/maps/documentation/android/shapes>
2. A marker should be used to display only the start and end locations on the map.
3. The map should be centered and zoomed to display all the jog points as shown in Figure 2. For more information go to <http://developer.android.com/reference/com/google/android/gms/maps/CameraUpdateFactory.html>
4. Pressing the back button should finish this activity and show the Main Activity.

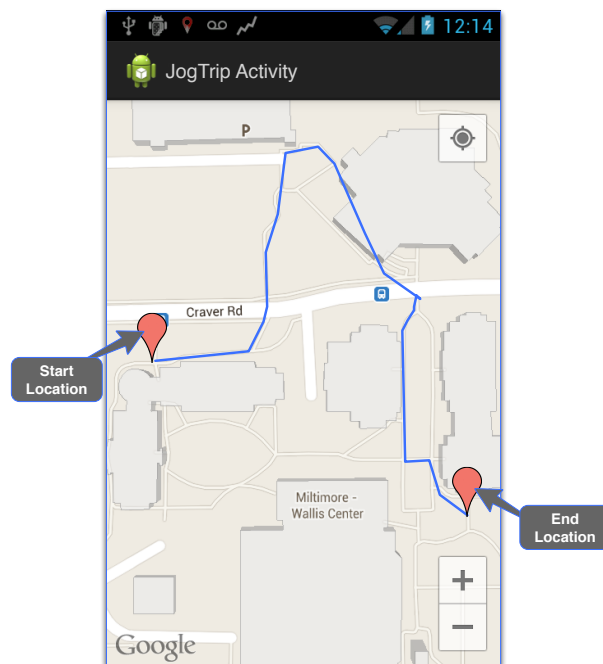


Figure 2, JogTrip Activity, Jog trip path using markers and polyline