

ITIS/ITCS 5180 Mobile Application Development
Homework 08

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 on behalf of all the other group members.
3. Your assignment will be graded for functional requirements and efficiency of your submitted solution. You will lose points if your code is not efficient, does unnecessary processing or blocks the UI thread.
4. Export your Android project and create a zip file which includes all the project folder and any required libraries.
5. Submission details:
 - a. Compress the contents of your project folder. The file name is very important and should follow the following format: **Group#_HW8.zip**
 - b. Only one group member is required to submit on behalf of the whole group.
 - c. You should submit the assignment through Canvas: Submit the zip file.
- 6. The minimum SDK version should be set to 23, and the target SDK version should be set to 27.**
- 7. Failure to follow the above instructions will result in point deductions.**

Homework 08 (100 points)

In this assignment you will be developing a Trip planar application. No wireframe designs will be provided. You have design your own workable GUI. You are free to improvise anything in your design.

You need to implement all the following functionalities:

1. You have to use Google Authentication (using Google account) to manage multiple users in your app.
2. Each user can create Trip plans, and can see the Trips the other users created. Use Firebase to save the trips.
3. **Creating a Trip plan:**
 1. Each trip contains a trip name, destination city, and the places you want to visit in that city, and planned day for the trip.
 2. Destination city: Use Google places API to search for cities in USA, and select the destination city.
 3. Under the destination city find and add places (airports, amusement parks, aquarium, car rental, museum, police station, city hall, and parking) within 1

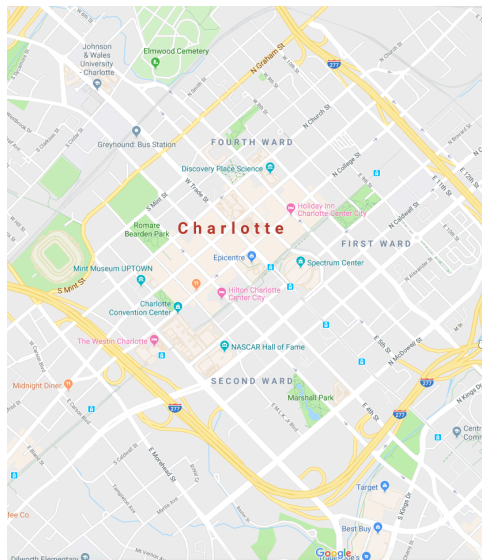


Figure: places near Charlotte City Center

miles radius of the city center. Find the keywords for types of places at: https://developers.google.com/places/web-service/supported_types

4. Add up to 15 places you are interested in near the destination city in the Trip.
5. There can be multiple trips in the list.
4. Show a screen with the details of the Trip when clicked on show details icon.
5. Display a Trip map displaying all the places you added to the trip.

GOOD LUCK!!!