

COMSE 6998-7

Assignment 1: Due - Feb 14th

You will build an iPhone app capable of searching for a list of venues (restaurants, etc...) matching a keyword within an N mile radius. Think **Google maps**.

We are providing a framework (library) to handle the searching. You will need to enable the user to input a search term, and plot the results on a map.

Steps:

1. Create an apple developer account if you don't have one. <https://developer.apple.com/programs/ios/>.
2. Download and install Xcode (latest version, as of this writing 5.1). <https://developer.apple.com/xcode/>. For the record Xcode is NOT a programming language, it is an IDE.
3. Clone into the mapsFramework hosted on this github repository. <https://github.com/williamFalcon/6998GoogleMapsFramework>.
4. Read the documentation on the framework. The framework contains a class that will do the heavy lifting for you. You will pass it a GPS location, query term and radius, and it will return a list of Venue objects. You are then responsible for displaying these on a map. The results will come through a protocol callback (familiarize yourself with the protocol delegate pattern http://www.tutorialspoint.com/ios/ios_delegates.htm). This pattern is a core concept of iOS programming.
5. In addition, you will need to go to Google and create an api account (free). You will need to obtain an API key for *Places Search*. <https://developers.google.com/places/documentation/index#Authentication>.
6. When instantiating the GoogleMapManager class, you will need to provide it with your API key generated in the last step.
7. The map must be managed by a UINavigationController.
8. Make it look nice.
9. Comment your code

Helpful resources to get you started:

Core location (maps):

https://developer.apple.com/library/ios/documentation/CoreLocation/Reference/CoreLocation_Framework/index.html

MapAnnotations:

<https://developer.apple.com/library/ios/documentation/userexperience/conceptual/LocationAwarenessPG/AnnotatingMaps/AnnotatingMaps.html>

Grading:

The assignment will be graded based on:

- a. The final output, based on the requirements.
- b. The look and feel.
- c. Code quality.
- d. Understanding of the code written.