

## COMSE 6998-7

### Assignment 3: Due March 30 at 11:55 pm

Welcome to assignment three. In this assignment you will continue to build on your excellent assignment one application. This time, you will extend the functionality, and use features from the lab sessions. This homework should give you an introduction to [UITableView](#), [CoreData](#), [UIDynamics](#), [GCD](#) and [UIGesture recognizers](#).

#### Requirements:

1. Your current version only supports viewing the locations on a map. Your user discovery showed that 49% of users prefer a table view. In this step you will need to [provide another viewing option: a list of venues](#).
  - a. Add a tab bar controller to your app
  - b. The first tab should be searching/loading on a map (basically what you have right now)
  - c. The second tab should be a list of the locations you found, sorted by distance to the starting point (closest at the top).
    - i. If no search has been performed, it should be empty and say something clever to the user.
    - ii. After the search, when the user presses that second tab, it should update with those results.
    - iii. If the user performs a new search, the list should reflect those changes
  - d. You can use a [UITableView](#) or a [UICollectionView](#) to show the results.
  - e. When a user presses a cell, a detail view should pop up (with details about the venue).
  - f. Hints: [UITabBar](#), [UITableView](#)/[UICollectionView](#)
2. The user may want to remember details about a location offline. So we are going to use [core data](#) to save those results.
  - a. Add a button somewhere to the result entry (map or table or both) that is a favorite button. When the user presses it, it should save to core data and put the button in a selected state. The opposite should happen when unselected
  - b. Hints: [CoreData](#), [UIButton](#)

3. Your user research has shown that users have [no idea how to use your app](#).
  - a. Upon loading the app the first time, you should drop in a little help button that will annoy the users (like the facebook app message button that you have to drag away). This should happen on the very first screen they see.
  - b. The button should “fall” from the top of the screen, and land at the bottom. The user can drag this around the screen and it will stay wherever it was dragged to.
  - c. If the user taps the button she will get a nice alert message with brief instructions.
  - d. The button should look nice (a little circle, etc...)
  - e. Hints: UIDynamics, UIAlertView, UIGestureRecognizer
  
4. So... Github broke and hackers destroyed the googlemaps framework you used on your previous assignment. Implement your own [google places request](#).
  - a. You will need to create your own google class that makes the networking requests using a method (not named the same as the googlemaps one) to return the results.
  - b. Add a cancel request button to the main screen when the request is happening (and remove it when it is not).
  - c. When the request is happening, show a waiting pop up BUT make sure that the user can still press the cancel button to stop (or appear to stop) the network request.
  - d. Hints: UIButton, GCD

## 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.