

Washington State University
School of Electrical Engineering and Computer Science
Spring 2018

CptS 479 Mobile Application Development

Homework 9

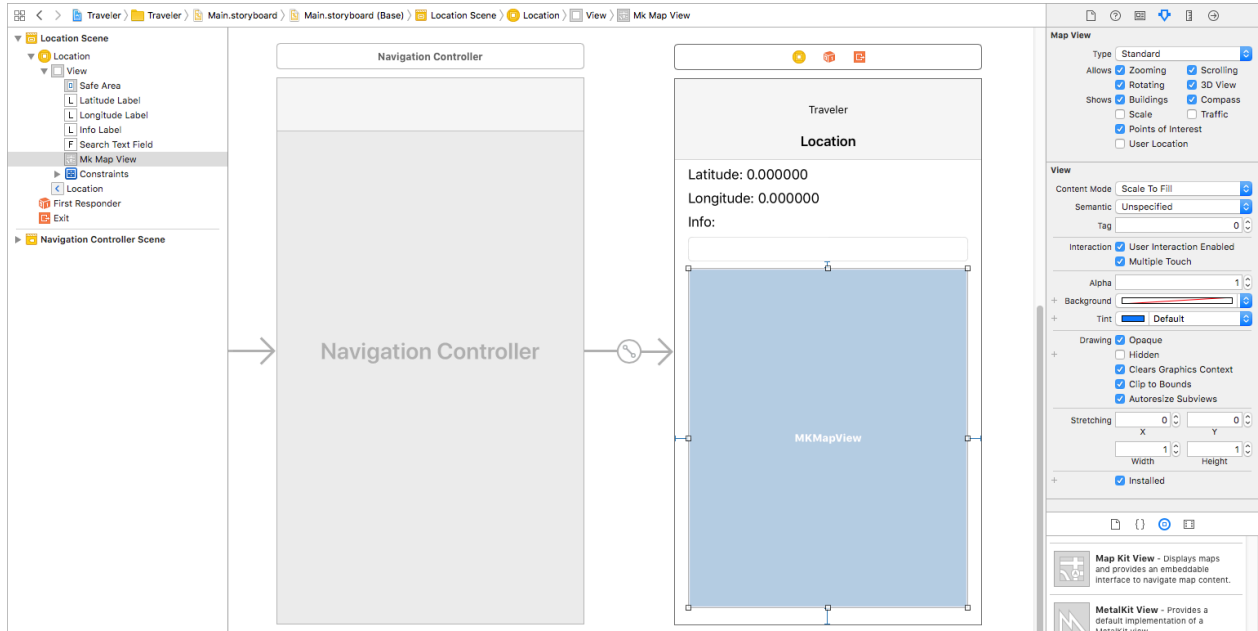
Due: March 27, 2018 (11:59pm)

General Instructions: Rename your project folder to be lastname-firstname. Create a compressed zip file of this entire directory and submit as an attachment under Content → Homework 9 for this course on the Blackboard Learn system by the above deadline. You may submit multiple times, but only the most recent entry submitted before the above deadline will be graded. Make sure all files are actually copied into the app directory and not just referenced elsewhere on your computer.

For this homework you will implement a standalone app that tracks the user's location and searches for nearby services. See screenshots below. Specifically,

1. Embed the Main view in a Navigation controller and give it a title and prompt. Below the navigation bar are two labels for displaying the user's current latitude and longitude, and a third label that will display geocoding information about the current location. Below that should be a text field taking the full width of the screen and with some placeholder text like "Enter search keywords". Then taking up the remaining area of the view should be a MKMapView. You may assume the app will only be run in the portrait orientation.
2. Add the necessary code to allow the app to access the user's location. The app only needs to get "When In Use" authorization, which should prompt the user the first time the app runs. As the location is updated, the Latitude and Longitude labels should be updated on the view to six decimal precision. Also, with each location update, the app should use reverse geocoding to lookup information about that location and show the name of the first placemark returned in the Info label.
3. Set the MKMapView to show and track the user's location.
4. Whenever the user enters text in the search field and taps Return, this should initiate a MapKit search request for nearby places related to the search keywords. These places should be added to the MapView and any previous annotations removed.

Screenshot: Storyboard



Screenshots: App

