The problem presented to us was to design a mobile application for The Village Of Pinecrest’s Pinecrest Gardens. My part of this problem was to come up with an elegant way to connect the front-end of the mobile application to a CMS that was set-up to provide the administrators an easy way to update the application. I was also in charge of creating a mobile map for users to use within the park.

For implementation of my parts I utilized the following software components.

**HTML & CSS** – for page creation and styling

**Phonegap** – Used to tap into the native technologies of the Iphone and Android OS’, primarily used to tie into GPS of phone systems. Enabled us to use one code base to support multiple mobile platforms

**JavaScript with jQuery** – used to create the linking to the backend of the CMS to be able to update textual changes in the application. Also used to create the locations dropdown selector and manipulations of the map.

**Leaflet.js** – an open source mapping framework. Used to display image of park and plot locations and user location.

**Lawnchair.js** – used to create persistent storage on the phone to create a local database.

Testing for this project was broken up into 3 sections, unit testing, integration testing, and system testing. Unit Testing – unit testing saw that the individual modules created worked as specified by the requirements.

Integration Testing – sought to test that the the backend of the mobile application was functioning as expected with the backend of the CMS. Due to the amount of integration that was needed in the application we utilized the big bang approach to integration testing.

System Testing – System testing consisted primarily of exploratory testing of the map and the textual updating.

After months of work we successfully created a mobile application that helped solve the problem presented to us. We tried to implement an elegant solution that has a modern look and function.