**Group Project Requirements: Due Week 8, Monday**

1. Download, install and configure the platform software that each team has selected (PhoneGap, Sencha, Ionic or Lungo). *[it is up to the team to decide if each member wants to install the software or just one member]*
2. Test the software with one of the web app applications that you have developed in the class or you can create a new web app for this assignment.
3. Write the word document explaining the process of installing, configuring and testing web apps. Also, provide your feedback about the software e.g., features/functionality that you like or any recommendations for improvement.
4. You will be making 10-15 minutes PowerPoint presentation about the platform, pros and cons, etc.
5. Demo to the class on your Laptop.

**Frameworks to Build Mobile Application With HTML, CSS & JavaScript**

1. **Cordova/PhoneGap**

PhoneGap is based on Cordova. Cordova/PhoneGap provides a set of JavaScript API’s that connect to the device’s native functions such as Camera, Compass, Contacts and Geolocation. Cordova/PhoneGap lets you build a mobile application without the native programming language; instead you can use a framework like jQuery Mobile. It will compile your app using the platform’s SDK and will be ready to install on the platform it supports including iOS, Android, Windows Phone, Blackberry and Web OS.

1. **Ionic**

Ionic is an HTML5 mobile framework with focus on performance, by leveraging hardware acceleration, and it requires no third-party JS library. It works best together with Angular.js to build an interactive app.

1. **Lungo**

Lungo is a lightweight mobile framework based on HTML5 and CSS3. It has nice default styles that you can use as a starting point to design your mobile app. Aside from the mobile UI components, Lungo brings a number of javaScript APIs to control your app. Lungo supports the iOS, Android, Blackberry and Firefox OS platforms.

1. **Sencha Touch**

Sencha Touch is a mobile framework powered by HTML5 and CSS3, providing APIs, animation, and components that are compatible with the current mobile platforms and browsers. Sencha Touch supports both Codova and PhoneGap; you can compile your app, and submit your app to the respective platform’s App Stores. In addition, Sencha Touch provides a set of themes for iOS, Android, Blackberry, Windows Phone, and a variety of other platforms to help your app feel like a native app.