Maintenance Documentation

Application Structure:

1. Backend:
   1. Firebase - a backend service that provides data storage, file storage, authentication, and static website hosting for your Angular app.
2. Frontend:
   1. AngularFire- the officially supported AngularJS binding for Firebase.
   2. Bootstrap *-* framework for designing websites and web applications.
3. Dependencies: We have two kinds of dependencies in this project: Tools and Angular framework code.

* We get the tools we depend upon via npm, the [Node package manager](https://www.npmjs.org/).
* We get the Angular code via bower, a [client-side code package manager](http://bower.io/).

1. Server Platform:
   1. Node.js - Runtime Environment for easily building fast and scalable network applications.It uses an event-driven, non-blocking I/O model.
2. How to get started:
   1. Download the project from Github.
   2. All the dependencies, components, and plugin are already installed for current code version. Additional functionality might require other dependencies and plugin to be installed.
   3. Before starting the application you will need to install Angularjs version 1.2, node.js (latest version), bower\_components, and JDK (Java Development Kit) for E2E testing.
   4. In order to make step “c” easier, we’ve followed the following link

<https://github.com/angular/angular-seed>

* This Angular seed project will provide you all the initial setup to quickly get started on your project, and will also pre configure “npm” and “bower”.
  1. Command: “npm install” // It’ll also call bower install in the background
  2. Using command line, go to the directory Source and run the following commands:
     1. npm start

G. Browse to the app at [localhost:8000/index.html](http://localhost:8000/index.html)

1. Unit Testing with Karma and Jasmine
   1. Navigate to the Source folder of the application.
   2. Make sure you have node.js install
   3. Make sure all the bower\_components dependencies are installed.
   4. Run the following commands
   5. npm install karma --save-dev // Installing Karma
   6. npm install -g karma-cli // For windows if you want to use the command line.
   7. npm install karma-jasmine karma-chrome-launcher --save-dev // Installing karma plug ins to enable the Jasmine test framework and Google chrome as target browser.
   8. Write Tests.
   9. karma init karma.conf.js // Karma testing configuration file. Do add all the testing and other code files that you want to test. Also, karma config is the base path for adding other file paths.
   10. karma start karma.conf.js //For running test.

URL for Testing references:

* <http://www.bradoncode.com/blog/2015/05/19/karma-angularjs-testing/>
* https://github.com/angular/angular-seed/

7. End to End testing with Protractor and Jasmine

* Navigate to the Source folder of your application.
* Make sure you have node.js installed.
* Run the following commands.
* sudo npm install -g protractor // Installing protractor globally
* sudo webdriver-manager update //Installing webdriver globally
* webdriver-manager start // Starting the Selenium server
* Go to “protractor.conf.js” file directory. // Configuration file for e2e testing
* protractor protractor.conf.js // Running all the test.

8. Debugging : We used Google Chrome, and inspect the console for debugging, stepping in and over.