**Documentation on how to run the server**

**Author**: Kyle Ahn

!! Updated on Feb 11, 2018 !!

Currently, the master branch contains a working MVP that is ready for the first snapshot week. “Dist” file that is necessary to run the server on EC2 is already up.

**Running the web project on a local machine**

1. A working copy is in the master branch. You could easily clone it to your local machine.
2. After cloning the master branch, you would need to have node\_modules.
   1. First, install Node.js from <https://nodejs.org/en/>.
   2. After downloading and installing Node.js, you could confirm that Node.js and npm are installed by running,

$ node –v

$ npm –v

* 1. These commands should give you v8.9.4 for node and v5.6.0 ( for the current development environment ).

1. Once you have your npm and Node.js set up on your local machine, please go to ‘umbuy\project\umbuy\web>’ directory where you could see ‘package.json’.
2. Run ‘$ npm install’ to install the necessary files such as node\_modules which contain ‘express’, ‘mysql’, ‘aws-sdk’ and etc.
3. You can now get MySQL database ready by referring to how\_to\_setup\_database\_locally.docx.
4. If you have successfully installed everything, you should be able to run the server on localhost:4200 by now.
   1. You could run the following command to easily run the project on localhost. Please make sure you run this command on ‘umbuy\project\umbuy\web’ directory.

$ npm run localhost $username $password

Replace $username and $password with your username and password you use to login into your local database on your machine

* 1. You can run Karma testing by running,

$ ng test

* 1. Refer to how\_to\_setup\_tests\_on\_local\_machine.docx to setup your machine for system tests and then you can run e2e testing (system tests) by running,

3) $ npm run systemTests $username $password

Replace $username and $password with your username and password you use to login into your local database on your machine

* 1. You can build your own dist file by running,

$ ng build –prod

**Running Android Project on your local machine**

1. In order to run the android project, you will need to clone the GitHub project and open it in Android Studio. (Note the android project is under [project](https://github.com/AraiYuno/umbuy/tree/master/project)/[umbuy](https://github.com/AraiYuno/umbuy/tree/master/project/umbuy)/[mobile](https://github.com/AraiYuno/umbuy/tree/master/project/umbuy/mobile))
2. Build the project using Android Studio and run it with emulator. Then you are good to go.

**Running the project on AWS EC2.**

1. First, you need to complete the steps for “**Running the project on a local machine**” because you need “dist” directory to run the project on the server.
2. You could Ubuntu to connect to the server.
   1. Have your public key ready.
   2. Open your terminal and go to the directory where you have saved your public key.
   3. Run ‘chmod 400 KyleKeyValid.pem’ to have your public key recognised.
   4. Connect to the instance using its public DNS
      1. ssh -i "KyleKeyValid.pem" [ubuntu@ec2-18-217-86-148.us-east-2.compute.amazonaws.com](mailto:ubuntu@ec2-18-217-86-148.us-east-2.compute.amazonaws.com)
   5. login id is ‘ubuntu’
3. After connecting to the server successfully, go to ‘/home/ubuntu/deployment’. If you run ‘ls’, then you should be able to see ‘server.js’ file. In the same directory, please transfer your previously created ‘dist’ folder.
4. Run ‘node server.js’ to start the service. You could access the website at ec2-18-217-86-148.us-east-2.compute.amazonaws.com:9000.
   1. You should see ‘CONNECTED’ message in the console.

**Accessing MySQL on the server.**

1. If you have successfully connected to the server and are able to run ‘node server.js’, then you are able to connect to MySQL on the server as well.
2. Please run ‘mysql –u kyle –p’ to log into MySQL. The password is ‘team6best’.
3. Please use ‘sampledb’ as the database by running ‘USE sampledb;’.
4. You could see the tables, ‘advertisements’ and ‘users’, by running ‘SHOW TABLES;’ and you could see the definition of these tables by running ‘DESCRIBE <table\_name>;’.

**API Tests:**

Before Testing:

**APITEST is located at /umbuy/server/APITest/my-app/**

Follow the set-up guide to set up database locally.

Change the mysql user and password to your own in localhost.js

Note: localhost.js is located at /umbuy/server/APITest/my-app/src/main/resources

Install Maven on Mac:

brew install maven

to install build tool “Maven”

Install Maven on Windows:

Download maven from http://maven.apache.org/. Unzip it to the folder you want it to live

Add both *M2\_HOME* and *MAVEN\_HOME* variables to the Windows environment using system properties, and point it to your Maven folder.

Update the PATH variable by appending the Maven bin folder – *%M2\_HOME%\bin*, so that you can run the Maven’s command everywhere.

To verify it run:

mvn -v

**Note**: file structure was generated by maven using ✗ “mvn archetype:generate -DgroupId=umbuy -DartifactId=my-app -DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false”

Run API Testing:

One command: mvn test

This will install node/npm, connect to test database and delete every entry inside test table, run nodejs server at background, and then do api testing.