**Documentation on how to run the server**

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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 project on a local machine**

1. A working MVP 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 ‘jackage.json’.
2. Run ‘$ npm install’ to install the necessary files such as node\_modules which contain ‘express’, ‘mysql’, ‘aws-sdk’ and etc.
3. 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 ‘web’ directory.

$ ng serve

* 1. You can run Karma testing by running,

$ ng test

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

$ ng build –prod

**Set-up the Database locally**

1. Once you are able to run ‘ng serve’ successfully, you can now get MySQL database ready.
2. – Stefan – Please write the precedures to set up the database.

**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 ‘4350-project-group6/project/umbuy/web’. 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.
5. To run server.js forever in the server for deployment, you need to use a “screen” command. How it works is it offers a user to open several separate terminal instances inside one single terminal window manager and user can detach it so you can restore it without losing anything you have done on the screen (So we can run the server.js forever!!!).
   1. sudo apt-get install screen (in case you don’t have screen)
   2. Usage:
      1. $ screen
      2. $ node /path/to/server.js
      3. ctrl + a and ctrl + d to detach screen
   3. To get it back:
      1. If you have more than one screen:
         1. $ screen –ls to see all the screens and their pid
         2. $ screen –r [pid]
      2. to stop a screen, simply: $ kill [pid]

**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>;’.