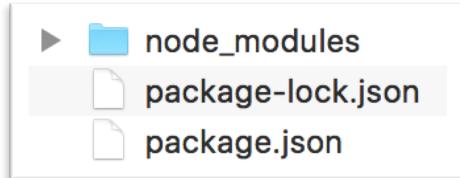


1. Open command line, get to “client” directory.
2. Then npm install dependencies for the project with command “npm install”

```
Spencerde-MacBook-Pro:client Spencer$ npm install
(1 [====]) " fetchMetadata: sill pacote range manifest for decamelize@^2.0.0 fetched in 182ms
```

After installation, package should include node modules folder and package-lock file.



3. Create a new window for connecting to MongoDB on local device, with command “mongod”

```
Spencerde-MacBook-Pro:~ Spencer$ mongod
```

After the connection is established, it should show “waiting for port” message at the bottom.

```
2018-12-10T14:47:06.577+0000 I NETWORK [initandlisten] waiting for connections on port 27017
```

4. Create another window to start MongoDB monitor in command line with command “mongo”

```
Spencerde-MacBook-Pro:~ Spencer$ mongo
```

After the monitor has started, it should be showing monitoring message

```
To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
> 
```

5. To run this project, insert the database and collection provided below:
 - a. > use colorCollection

```
To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
> use colorCollection
```

\

- b. > db.colorCollection.insertMany([
 {_id:1,color:'rgb(255, 0, 0)',names:'red'},
 {_id:2,color:'rgb(255, 255, 0)',names:'yellow'},
 {_id:3,color:'rgb(255, 255, 255)',names:'white'},
 {_id:4,color:'rgb(0, 230, 0)',names:'green'},
 {_id:5,color:'rgb(0, 0, 255)',names:'blue'},
 {_id:6,color:'rgb(0, 0, 0)',names:'black'},
 {_id:7,color:'rgb(255, 165, 0)',names:'orange'},
 {_id:8,color:'rgb(128, 0, 128)',names:'purple'},
 {_id:9,color:'rgb(255, 192, 203)',names:'pink'}])
- c. > use objectCollection
- d. > db.objectCollection.insertMany([
 { _id:1, objectName:'egg' },
 { _id:2, objectName:'triangle' },
 { _id:3, objectName:'Circle' },
 { _id:4, objectName:'Square' },
 { _id:5, objectName:'pac-man' }])

After the insertion of 2 collection, check with command

“db.colorCollection.find().pretty()” and “db.objectCollection.find().pretty()”

```
> use colorCollection
switched to db colorCollection
> db.colorCollection.find().pretty()
{ "_id" : 1, "color" : "rgb(255, 0, 0)", "names" : "red" }
{ "_id" : 2, "color" : "rgb(255, 255, 0)", "names" : "yellow" }
{ "_id" : 4, "color" : "rgb(0, 230, 0)", "names" : "green" }
{ "_id" : 3, "color" : "rgb(255, 255, 255)", "names" : "white" }
{ "_id" : 5, "color" : "rgb(0, 0, 255)", "names" : "blue" }
{ "_id" : 6, "color" : "rgb(0, 0, 0)", "names" : "black" }
{ "_id" : 7, "color" : "rgb(255, 165, 0)", "names" : "orange" }
{ "_id" : 8, "color" : "rgb(128, 0, 128)", "names" : "purple" }
{ "_id" : 9, "color" : "rgb(255, 192, 203)", "names" : "pink" }
> use objectCollection
switched to db objectCollection
> db.objectCollection.find().pretty()
{ "_id" : 1, "objectName" : "egg" }
{ "_id" : 2, "objectName" : "triangle" }
{ "_id" : 3, "objectName" : "Circle" }
{ "_id" : 4, "objectName" : "Square" }
{ "_id" : 5, "objectName" : "pac-man" }
```

6. Open another window using the “Client” directory to start web server with command “node server.js”

```
glaroam2-153-87:client Spencer$ node server.js
```

After starting the server, it should be showing web server listening to port

```
body-parser deprecated bodyParser: use individual json/urlencoded middlewares server.js:8:31
body-parser deprecated undefined extended: provide extended option node_modules/body-parser/index.js:105:29
Listening on port 4444
```

7. Finally, go back to the first window opened for installing the package, start the client side with command “npm start”

```
Spencerde-MacBook-Pro:client Spencer$ npm start
```

After npm has start the client side, message below will show, the client side can start to run the application.

```
Compiled successfully!
```

```
You can now view client in the browser.
```

```
Local:          http://localhost:3000/  
On Your Network: http://172.30.153.87:3000/
```

```
Note that the development build is not optimized.  
To create a production build, use npm run build.
```