

Table of Contents

<i>Application Overview:</i>	2
<i>Application Technologies:</i>	2
<i>Appointment Creation:</i>	2
<i>Appointment View:</i>	2
<i>Availability:</i>	2
<i>Project Structure:</i>	2
Backend Structure	3
Front end structure:	3
<i>How to Get Started (Running the project)</i>	3
<i>Adding Seed Data:</i>	4

Application Overview:

This application is a Hospital Management System. In this system there are two types of users namely doctors and patient. The doctors have the ability to set their availability for the upcoming week and on the basis of it time slots are made and the patient can set an appointment by selecting the symptoms and based upon the symptoms, He gets a doctor suggested. Afterwards the patient selects the doctor and the day and time slot and makes the appointment. The appointments are visible in the doctors dashboard.

Application Technologies:

React JS is used as the front end framework along with semantic UI and Bootstrap as front end design library and Node.js is used in the backend server along with MySQL database. The Front end is divided into components namely dashboard, authentication etc.

These components send the request to the backend node.js routes which has inturn create, update delete the relevant information of doctors and patients in the MySQL database.

Appointment Creation:

To create an appointment, the user will login as a patient using credentials provided in /backend/seedUsers.js which contains all the users of the software. Afterwards he will be provided a form in which he would mention the symptoms and select a doctor, a day and a time slot and his appointment will be created.

Appointment View:

In order to view the appointment, the user will login as doctor using credentials provided in /backend/seedUsers.js. Afterwards, he would go to the show appointment tab in the sidebar which will display a table showing all his weeks appointments with the patientName, appointment day and time slot.

Availability:

In order to set the availability the user will login as doctor and go to the set Availability and set the start Date, start Time, start Day and the end Day. Afterwards the current week availability will be set and time slots will be created in the models folder. Note that after updating availability the previous time slots are deleted as well as the previous appointments and newer ones will be added.

Project Structure:

The project structure is given in the image below.

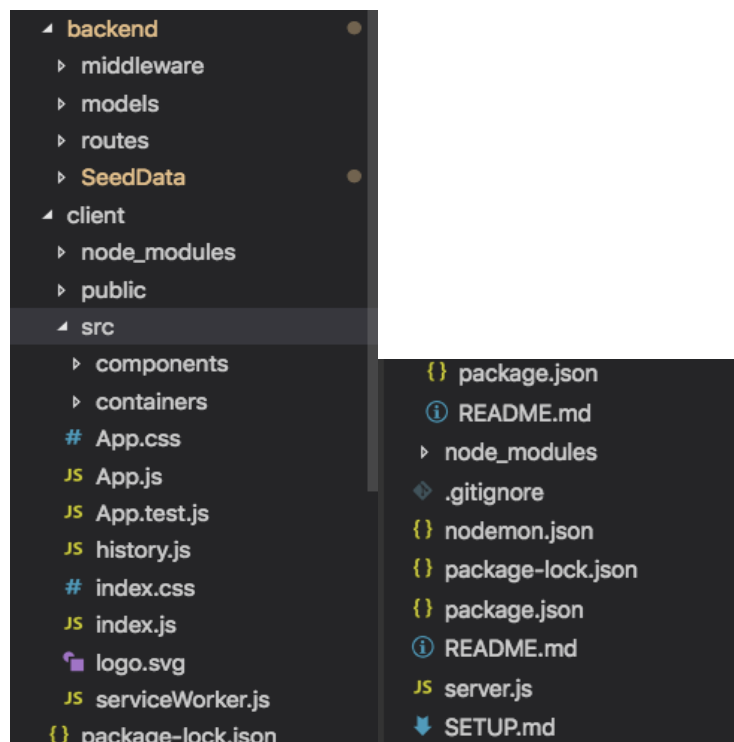
Backend Structure

The backend folder has a middleware folder containing the verify token for each secure authenticated route.

The models folder contains the database structures for different tables namely: users, patients, doctors, slots , symptoms and appointments all of which are seeded upon server restart.

The routes folder contains the authentication routes as well as routes to create and delete appointments, set and update availability etc.

The Seed data folder contains the data added into the MySQL tables upon server restart. This data is in the form of JavaScript array of objects and loaded each time server is restarted.



Front end structure:

The front-end structure contains the containers folder which has all the availability, login, dashboard forms. The app.js contains the token verification part which sends request to backend middleware.

How to Get Started (Running the project)

Note: You need to install node, npm and MySQL (Community Edition) before proceeding with this tutorial).

In order to run the project I have shared a video as well. But I would write the steps here:

- 1) Clone repository from GitHub provided to you in a folder.
- 2) Go to the root folder of the project and on your command line in Windows or Mac on terminal and type following:

```
npm start
cd client
npm start
cd ..
npm install nodemon concurrently --save
npm run dev
```
- 3) Now the project will be started and the seed data will be loaded inside it.

Adding Seed Data:

To view the data in database you use MySQL command line client and login with password which is mostly root and do

use hospital;

General

select * from tablename;

Specific:

select * from appointments;

select * from slots;

To Add more seed data simply go to the seed data folder in backend and in seed users and add more JavaScript objects in the array given as added previously. Note that keep the format of the data the same.