# HALLODOC PLATFORM

A SUMMER INTERNSHIP

*Submitted by*

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*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

*in*

**Computer Engineering**

**V. V. P. Engineering College Rajkot.**

**Gujarat Technological University, Ahmedabad**

**April, 2024**

ID: 420657

# Vyavasayi Vidya Pratishthan Engineering College

**Kalavad Road, Virda Vajdi, Rajkot, Gujarat - 360005**

## CERTIFICATE

This is to certify that the project report submitted along with the project entitled **Backend Developer** has been carried out by **Deep Akabari 200470107001** under my guidance in partial fulfillment for the degree of Bachelor of Engineering in **Computer Engineering**, 8th Semester of Gujarat Technological University, Ahmedabad during the academic year 2023-24.

Prof. Amit Vyas
Internal Guide

Dr. Tejas Patalia
Head of the Department

# COMPANY CERTIFICATE

ID: 420657

# Vyavasayi Vidya Pratishthan Engineering College

**Kalavad Road, Virda Vajdi, Rajkot, Gujarat - 360005**

## DECLARATION

We hereby declare that the Internship report submitted along with the Internship entitled **Backend Intern** submitted in partial fulfilment for the degree of Bachelor of Engineering in Computer Engineer to Gujarat Technological University, Ahmedabad, is a bonafide record of original project work carriedout by me / us at Tatvasoft. under the supervision of Internal Guide: **Prof. Amit Vyas** & External Guide: **Mrs. Sweety Patel** and that no partof this report has been directly copied from any students' reports or taken from any other source, without providing due reference.

Deep Akabari

Name of the Student                                        Sign of Student

# ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion task would be incomplete without the mention of the people who made it possible, whose constant guidance, support and encouragement crown all the efforts with the success.

Our sincere thanks to Principal & H.O.D. of Computer Engineering **Dr. TEJAS PATALIA** Sir for having consented to be the guide and for their valuable guidance and support during the preparation of this internship.

Also, **Prof. Amit Vyas** of the CE Department helped us to work out on the software side of our project. Last but not the least, my industry mentor **Mrs. Sweety Patel** helped a lot for this project. My sincere dedication and keen desire to learn something new helped us to achieve success in the project.

I would also like to thank GOD, Our Family and Friends who have been a constant source of inspiration.

Thank You,

**Deep Akabari**

# ABSTRACT

*Industrial training is an important phase of a student life. A well planned, properly executed and evaluated industrial training helps a lot in developing a professional attitude. It develops an awareness of industrial approach to problem solving, based on a broad understanding of process and mode of operation of organization.*

*During a period of 12 weeks of training at Tatvasoft., I was assigned as a trainee Software developer. Throughout this industrial training, I have learned new technology such as NodeJS, Expressjs and MySQL database server. And with that, I developed the HalloDoc Platform Website.*

*So, Basically, HalloDoc Platform is a dynamic and user-friendly web platform designed to revolutionize the healthcare experience by providing seamless interaction between patients, healthcare providers, and administrators. This project aims to streamline healthcare services by offering a centralized hub for patients to request disease-related information, seek provider services, and access their medical history, all while enabling administrators to efficiently manage and oversee operations.*

*Overall, this internship provided valuable experience in NodeJS, Expressjs and MySQL database, and the skills gained are expected to be useful in future projects and career opportunities.*

# List of Figures

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# List of Abbreviations

| | |
|---|---|
| DB | Database |
| REST | Representational State Transfer |
| API | Application Programming interface |
| ORM | Object Relational Mapping |
| POS | Point Of Sale |

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# CHAPTER 1: OVERVIEW OF THE COMPANY

## 1.1 HISTORY

Tatvasoft is a Consummate Custom Software Development company delivering splendid business IT Solutions and related services to customers across the globe. Our development services are led by our dedicated and passionate team to provide best industry practices combined with technology expertise and business domain knowledge to drive digital transformation. Our proficiency in understanding business challenges and professional competence allows us to create a better experience for our customers.

Tatvasoft has emerged and marked our presence in different continents by providing Be spoke software development services to all major Industry Domains.

## 1.2 SCOPE OF WORK

Tatvasoft is a software development company that specializes in creating custom solutions for businesses. Their expertise lies in developing web applications, mobile applications, and traditional software. They leverage modern technologies to design these solutions, ensuring they are up-to-date and efficient.

Their services extend beyond development. Tatvasoft offers software testing to identify and fix any glitches before launch. They can also maintain your custom software, ensuring it runs smoothly and adapts to your evolving needs. With a global presence and a large team of skilled professionals, Tatvasoft caters to businesses of all sizes.

We are a Consummate Custom Software Development company delivering splendid business IT Solutions and related services to customers across the globe. Our development services are led by our dedicated and passionate team to provide best industry practices combined with technology expertise and business domain knowledge to drive digital transformation. Our proficiency in understanding business challenges and professional competence allows us to create a better experience for our customers.

## 1.3 CAPACITY OF PLANT

Tatvasoft may have infrastructure and resources in place to accommodate its workforce and support its operations efficiently. This could include office space equipped with modern technology, communication systems, and collaboration tools to facilitate teamwork and project management. Additionally, Tatvasoft may have data centers or cloud infrastructure to host and deploy software applications for clients.

# CHAPTER 2: OVERVIEW OF DIFFERENT DEPARTMENT OF THE ORGANIZATION

## 2.1 WORK BEING CARRIED OUT IN EACH DEPARTMENT

Tatvasoft with a large team and a need for efficient task management, implementing a structured approach to planning and execution is crucial. To ensure optimal productivity and timely delivery of products, Tatvasoft can adopt a systematic approach to task management.

As the team is very big, we are having hierarchy of person where our leaders assign us to start the development and after the successful completion of that we are assign that to QA and testing.

## 2.2 SCHEMATIC LAYOUT OF SEQUENCE OF OPERATION

Schematic layout which shows the sequence of operation for manufacturing of the end product.

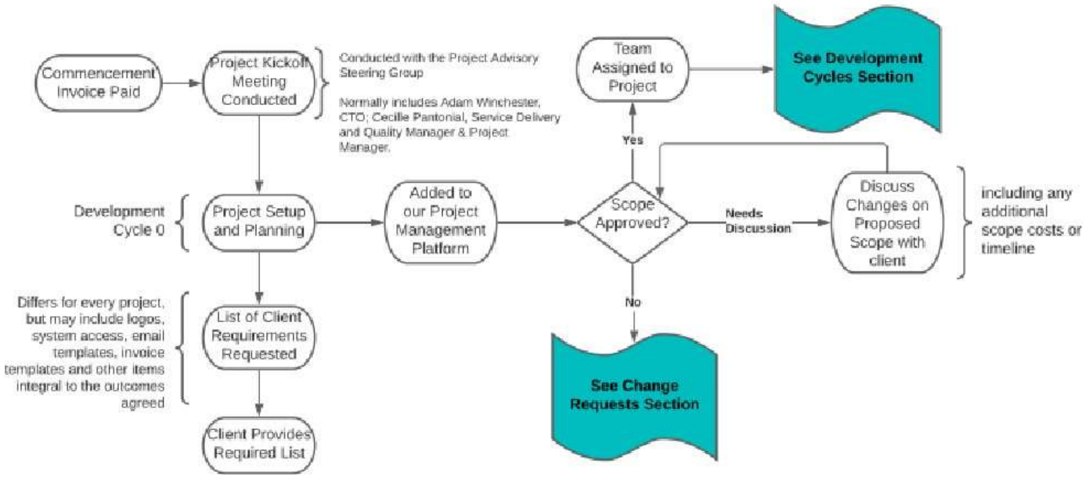

Commencement Invoice Paid
Project Kickoff Meeting Conducted
Conducted with the Project Advisory Steering Group
Normally includes Adam Winchester, CTO; Cecile Pantonial, Service Delivery and Quality Manager & Project Manager.
Team Assigned to Project
See Development Cycles Section
Yes
Development Cycle 0
Project Setup and Planning
Added to our Project Management Platform
Scope Approved?
Needs Discussion
Discuss Changes on Proposed Scope with client
including any additional scope costs or timeline
No
Differs for every project, but may include logos, system access, email templates, invoice templates and other items integral to the outcomes agreed
List of Client Requirements Requested
See Change Requests Section
Client Provides Required List

*Figure 2-1 layout of operation*

# CHAPTER 3: INTRODUCTION TO PROJECT

## 3.1 PROJECT SUMMARY

The "HalloDoc" project is an appointment booking platform designed to streamline the process of scheduling medical appointments for patients. The project involves three main user roles: admin, provider, and patient. Patients can create appointment requests detailing their health issues and preferences. The admin role oversees the platform, assigning and managing cases between patients and providers. Admins also have the ability to view and track patient cases, ensuring efficient allocation of resources. Providers, typically physicians or healthcare professionals, interact directly with patients after receiving assignments from the admin. They can review patient requests, provide diagnoses, and schedule appointments or treatments accordingly. The project aims to improve accessibility and efficiency in healthcare services by facilitating communication and coordination between patients, providers, and administrators through a user-friendly digital platform.

## 3.2 PURPOSE

The primary purpose of the HalloDoc platform is to provide a convenient and efficient solution for patients to schedule medical appointments and seek healthcare services. By offering an online platform for appointment booking, HalloDoc aims to streamline the process of accessing healthcare, reducing wait times, and improving overall patient experience. The platform serves as a bridge between patients and healthcare providers, facilitating communication and coordination to ensure timely access to medical care. Additionally, HalloDoc aims to enhance the efficiency of healthcare administration by automating appointment scheduling, case management, and communication between administrators, providers, and patients.

## 3.3 OBJECTIVE

One of the primary objectives of HalloDoc is to improve access to healthcare services by providing an easy-to-use online platform for scheduling medical appointments. By offering a digital solution, HalloDoc aims to make healthcare more accessible to patients, particularly those with mobility limitations or busy schedules.

## 3.4 SCOPE

- The scope of the HalloDoc platform encompasses three main user roles: patients, providers, and administrators. Patients have the ability to create appointment requests, detailing their health issues and preferences, through the platform. They can also view available providers, schedule appointments, and receive updates on the status of their requests. Providers, including physicians and healthcare professionals, interact directly with patients after receiving assignments from administrators. They can review patient requests, provide diagnoses, and schedule appointments or treatments accordingly. Administrators oversee the platform's operation, managing user accounts, assigning cases to providers, and monitoring overall system performance.
- The scope of the HalloDoc platform extends to various features and functionalities aimed at enhancing the user experience and improving healthcare service delivery. These features may include real-time appointment scheduling, secure messaging between patients and providers, electronic medical records management, and integration with existing healthcare systems. Additionally, the platform may offer advanced capabilities such as telemedicine consultations, prescription management, and insurance verification to further streamline the healthcare delivery process.

## 3.5 TECHNOLOGY

Technologies and frameworks:

- MySQL
- NodeJS
- Expressjs
- MongoDB

Tools:

- Visual Studio Code
- MySQL Server
- MongoDB compass
- Postman
- Github

Platform:

1. Local development server.

## 3.6 INTERNSHIP PLANNING

In my internship, I started with some software installation and Servers Setups. Then I got my Learning task of Typescript, Expressjs, Nodejs, and implemented the mini projects and coding challenges.

**Level 1 -** Core: JavaScript, ES-6, Typescript

**Level 2 - Advanced:** NodeJS and it's packages

# CHAPTER 4: SYSTEM ANALYSIS

## 4.1 STUDY OF CURRENT SYSTEM

- Appointment Booking: The HalloDoc platform allows patients to create appointment requests, detailing their health concerns and preferences. Providers, such as physicians and healthcare professionals, can review these requests and schedule appointments accordingly. The system facilitates seamless communication between patients and providers, streamlining the appointment booking process and improving accessibility to healthcare services.
- Case Management: Administrators play a crucial role in the HalloDoc platform, overseeing case management and allocation between patients and providers. They have the authority to assign cases to specific providers based on expertise and availability, ensuring efficient resource allocation and timely delivery of care. Additionally, administrators can track the status of patient cases.
- Communication Channels: The HalloDoc platform offers various communication channels to facilitate interaction among patients, providers, and administrators. These channels may include secure messaging, email notifications, and real-time chat functionalities.
- User Interface and Experience: The HalloDoc platform features a user-friendly interface designed to enhance usability and accessibility for patients, providers, and administrators. Intuitive navigation, clear layout, and responsive design elements contribute to a positive user experience.

## 4.2 PROBLEM AND WEAKNESS OF CURRENT SYSTEM

- There are many modules which are complex to understand
- Need some simplified views and screens so customers can easily understand the functionality.
- Manual systems are not scalable and may not be suitable for growing businesses.
- If both providers accept the service request at a time.
- Some libraries used are old so need to upgrade them to latest versions
- Lack of integration.

## 4.3 REQUIREMENTS OF NEW SYSTEM

- Redesign of Admin module
- Need to add more regions for users
- Add more physicians for better treatment.
- Will provide a new notification panel to users and email notifications also

## Non-Functional Requirements:

### Security

Security is primary requirement of any system. This platform must maintain process data in secure way so unauthorized entities do not have illegal access of it.

### Performance

Performance requirements define how well the system performs certain functions under specific conditions. Examples are speed of response, throughput, execution time and storage capacity. Like most quality attributes, performance requirements are key elements when designing and testing the product. This platform should be designed in such a way that its performance is smooth for users.

### Scalability

Scalability is a property of a system that describes the ability to appropriately handle increasing (and decreasing) workloads. Scalability competes with and complements other non-functional requirements such as availability, reliability, and performance. This platform must be designed in such way that it is able to scale well with increasing/decreasing accesses, users etc.

### Availability

System must be available to authorized users when it required. This platform must be designed in such a way that it is always available to authorized user and should handle abnormal scenarios well by displaying proper message to users. In any abnormal situations, user’s data should not be lost.

## 4.4 LIST OF MAIN MODULES

The main modules involved in this application are:

- App Panel
- User Module
- Admin Panel
- Physician Panel

# CHAPTER 5: SYSTEM DESIGN

## 5.1 System Design & methodology

**Requirements Gathering:**

The first step in designing the HalloDoc platform is to gather requirements from stakeholders, including patients, healthcare providers, and administrators. This involves conducting interviews, surveys, and workshops to understand user needs, preferences, and pain points.

**System Architecture:**

Based on the gathered requirements, the system architecture for the HalloDoc platform is designed. This involves determining the overall structure of the system, including its components, modules, and interfaces. The architecture should be scalable, flexible, and capable of supporting the platform's functionalities, such as appointment booking, case management, communication, and reporting.

**Technology Stack Selection:**

The next step is to select the appropriate technology stack for implementing the HalloDoc platform. This includes choosing programming languages, frameworks, databases, and other tools and technologies based on factors such as performance, scalability, security, and ease of development. Common technologies used in healthcare platforms may include Node.js, MySQL, MongoDB.

**Development Methodology:**

The development of the HalloDoc platform follows an agile methodology, such as Scrum or Kanban, to ensure iterative development and continuous improvement.

**User Interface (UI) and User Experience (UX):**

Features a user-friendly interface designed for ease of navigation, configuration, and management.

Prioritizes intuitive design, responsiveness, and accessibility to enhance user satisfaction and adoption.

## 5.2 Database Design

- There is different collection for each component available in the system and their data is stored uniformly in the respective collection.
- Designing the database for the HalloDoc platform is to create an Entity-relationship diagram (ERD). The ERD visually represents the entities (such as patients, providers, appointments) in the system and their relationships.
- They are connected to each other using references and objected and we can combine data using aggregation or lookup queries on the collections of databases.
- Indexes should be created on the database tables to improve query performance and optimize data retrieval. Indexes help speed up data access by providing quick lookup of rows based on indexed columns. It's important to carefully select which columns to index based on the types of queries commonly performed on the database
- Postgres is also used for storing different analytics and message contents of users for better scalability and huge records storing.

# CHAPTER 6: IMPLEMENTATION

## 6.1 IMPLEMENTATION PLATFORM

Following are the implementation platforms, which is used during my internship:

- **Visual Studio Code**

  Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages (such as C++, C#, Java, Python, PHP, Go) and runtimes (such as .NET and Unity).

- **Typescript**

  In Node.js, querying databases such as MySQL is typically done using TypeScript. Node.js provides various libraries and modules for interacting with MySQL databases, such as MySQL, mysql2, or Sequelize. Developers can use TypeScript to construct SQL queries dynamically and execute them against the MySQL database to retrieve, insert, update, or delete data.

- **GIT**

  Git is a specific open-source version control system created by Linus Torvalds in 2005. Specifically, Git is a distributed version control system, which means that the entire codebase and history is available on every developer’s computer, which allows for easy branching and merging.

- **Postman**

  Postman and Node.js work together effectively to streamline your API development process. While Postman isn't a Node.js library, it excels at designing and testing APIs. You can use Postman to send HTTP requests that mimic real-world scenarios, allowing you to test your Node.js API's functionality thoroughly.

## 6.2 TECHNOLOGY

- **JavaScript Introduction**

Unlike JavaScript's loose typing, TypeScript allows you to define data types for variables, functions, and objects. This improves code clarity, helps prevent runtime errors, and provides better tooling support like code completion and refactoring.

TypeScript embraces modern JavaScript features like arrow functions, destructuring, and modules. This allows you to write concise and expressive code that aligns with current web development practices.

- **NodeJS Introduction**

Node.js is an open-source, cross-platform, JavaScript runtime environment that allows developers to run JavaScript on the server-side. It was created by Ryan Dahl in 2009, and since then it has become increasingly popular due to its performance, scalability, and versatility.

One of the key features of Node.js is its event-driven, non-blocking I/O model, which makes it possible to handle a large number of concurrent connections with very little overhead. This makes Node.js ideal for building real-time web applications, such as chat applications, online games, and collaboration tools.

## 6.3 OUTCOMES

### Login page:

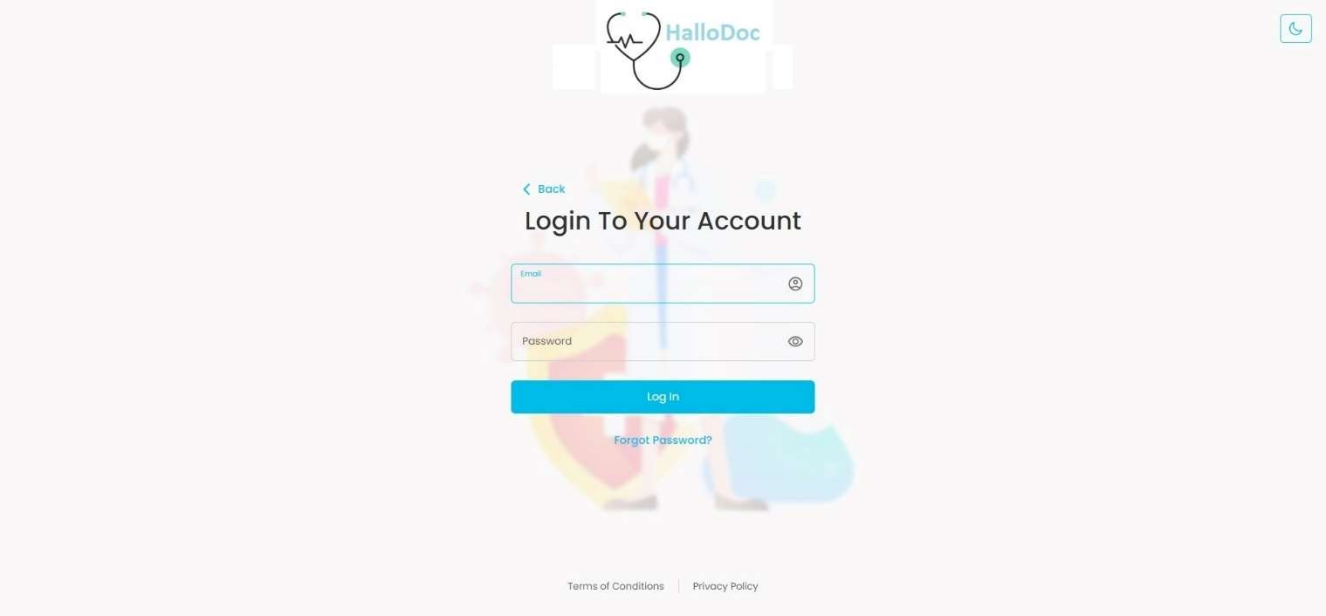
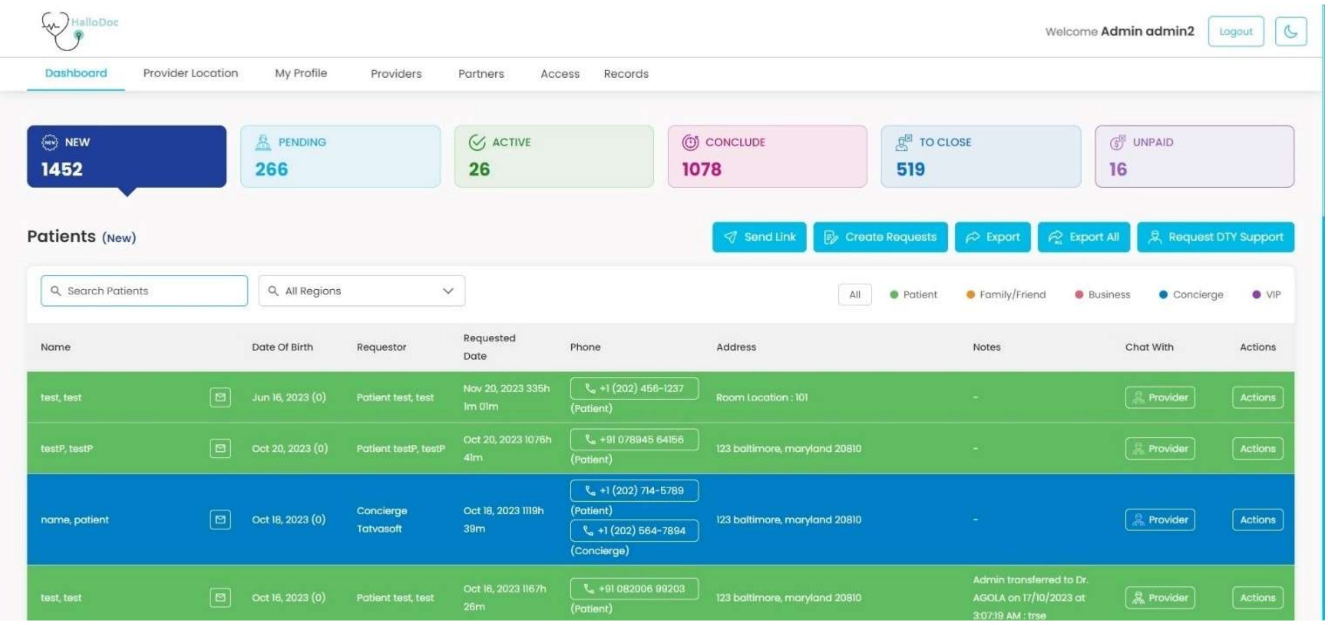


*Figure 6-1 Login page:*

### Admin Panel:

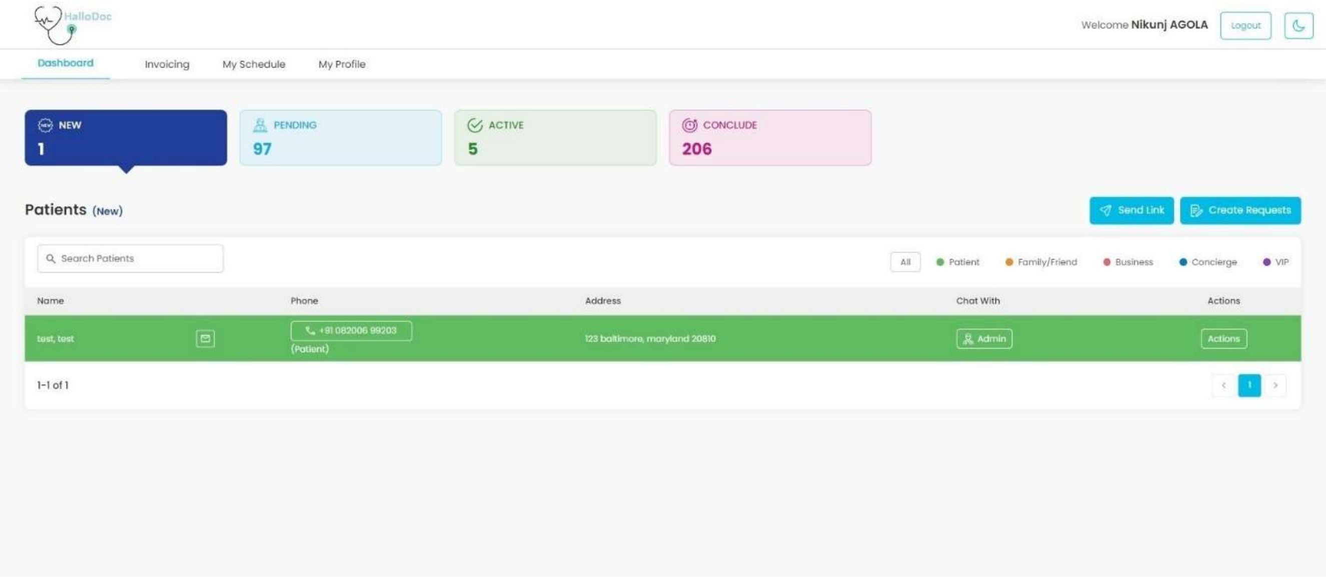


Patients (New)

| Name | Date Of Birth | Requestor | Requested Date | Phone | Address | Notes | Chat With | Actions |
|---|---|---|---|---|---|---|---|---|
| test, test | Jun 16, 2023 (0) | Patient test, test | Nov 20, 2023 335h 1m 01m | +1 (202) 456-1237 (Patient) | Room Location : 101 | - | Provider | Actions |
| testP, testP | Oct 20, 2023 (0) | Patient testP, testP | Oct 20, 2023 1076h 41m | +91 078945 64156 (Patient) | 123 baltimore, maryland 20810 | - | Provider | Actions |
| name, patient | Oct 18, 2023 (0) | Concierge Tatvasoft | Oct 18, 2023 1119h 39m | +1 (202) 714-5789 (Patient)<br>+1 (202) 564-7894 (Concierge) | 123 baltimore, maryland 20810 | - | Provider | Actions |
| test, test | Oct 16, 2023 (0) | Patient test, test | Oct 16, 2023 1167h 26m | +91 082006 99203 (Patient) | 123 baltimore, maryland 20810 | Admin transferred to Dr. AGOLA on 17/10/2023 at 3:07:19 AM : trse | Provider | Actions |

*Figure 6-2 Admin panel*

## Provider panel:



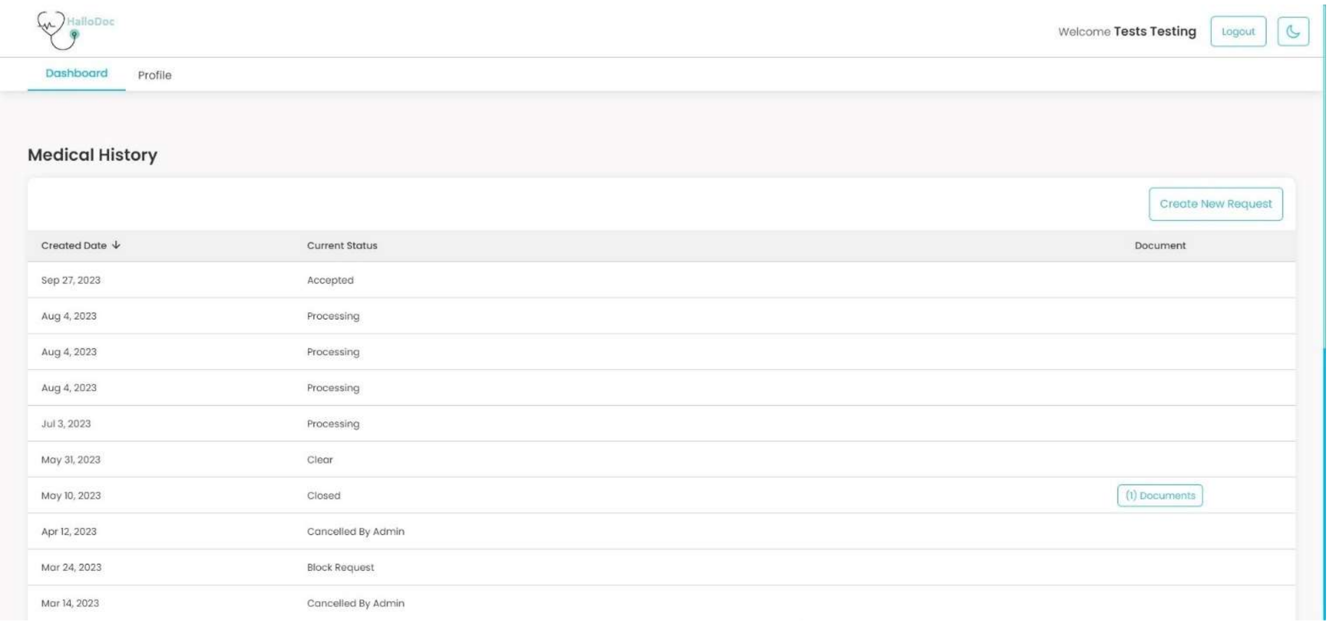
Patients (New)

| Name | Phone | Address | Chat With | Actions |
|---|---|---|---|---|
| test, test | ☎ +91 082006 99203<br>(Patient) | 123 baltimore, maryland 20810 | Admin | Actions |

1-1 of 1

*Figure 6-3 Provider panel*

## Patient Panel:

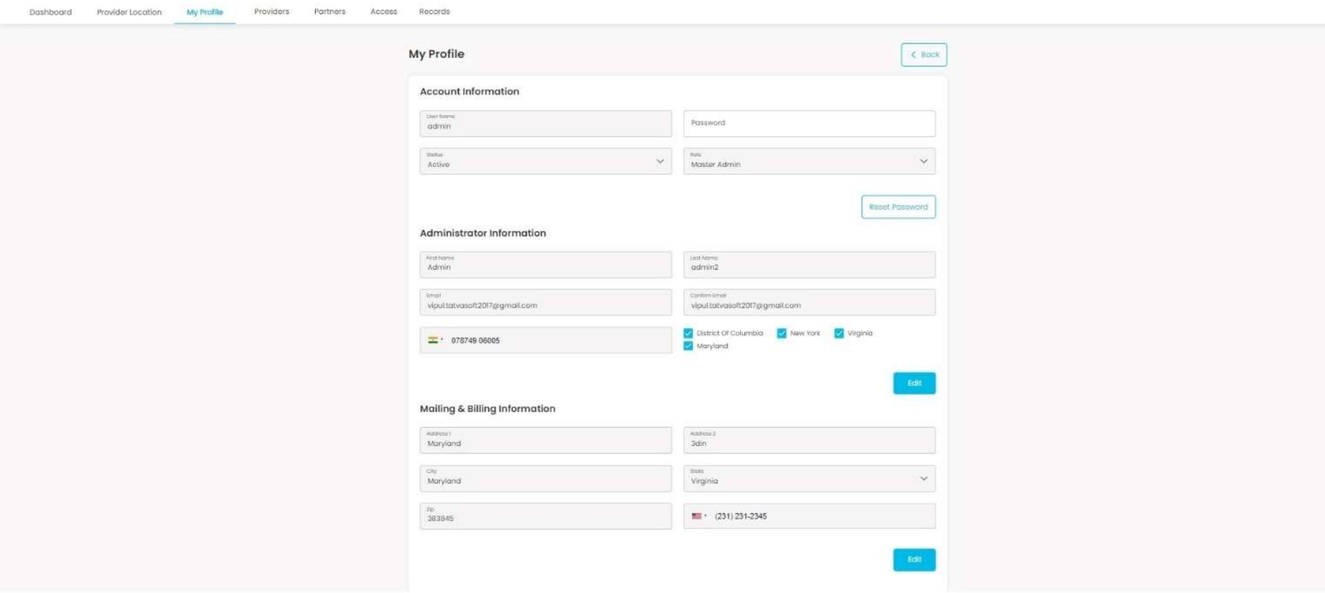


Medical History

| Created Date ↓ | Current Status | Document |
|---|---|---|
| Sep 27, 2023 | Accepted | |
| Aug 4, 2023 | Processing | |
| Aug 4, 2023 | Processing | |
| Aug 4, 2023 | Processing | |
| Jul 3, 2023 | Processing | |
| May 31, 2023 | Clear | |
| May 10, 2023 | Closed | (1) Documents |
| Apr 12, 2023 | Cancelled By Admin | |
| Mar 24, 2023 | Block Request | |
| Mar 14, 2023 | Cancelled By Admin | |

*Figure 6-4 Patient panel*

## My Profile:



My Profile

Account Information

User Name
admin

Password

Status
Active

Role
Master Admin

Administrator Information

First Name
Admin

Last Name
admin2

Email
vipul.tatvasoft2017@gmail.com

Confirm Email
vipul.tatvasoft2017@gmail.com

078749 06005

☑ District Of Columbia ☑ New York ☑ Virginia
☑ Maryland

Mailing & Billing Information

Address 1
Maryland

Address 2
3din

City
Maryland

State
Virginia

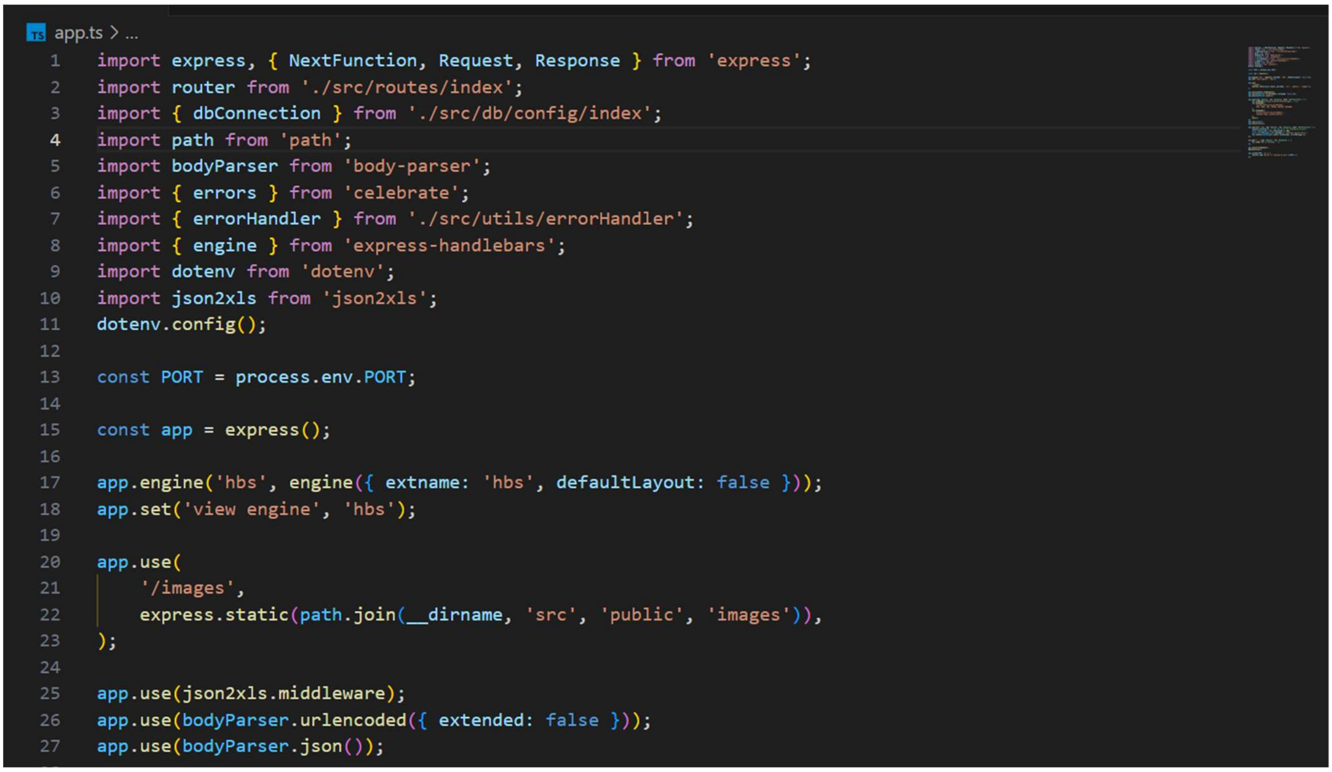
Zip
383845

(231) 231-2345

*Figure 6-5 My Profile*

### Code & Postman Implementation:

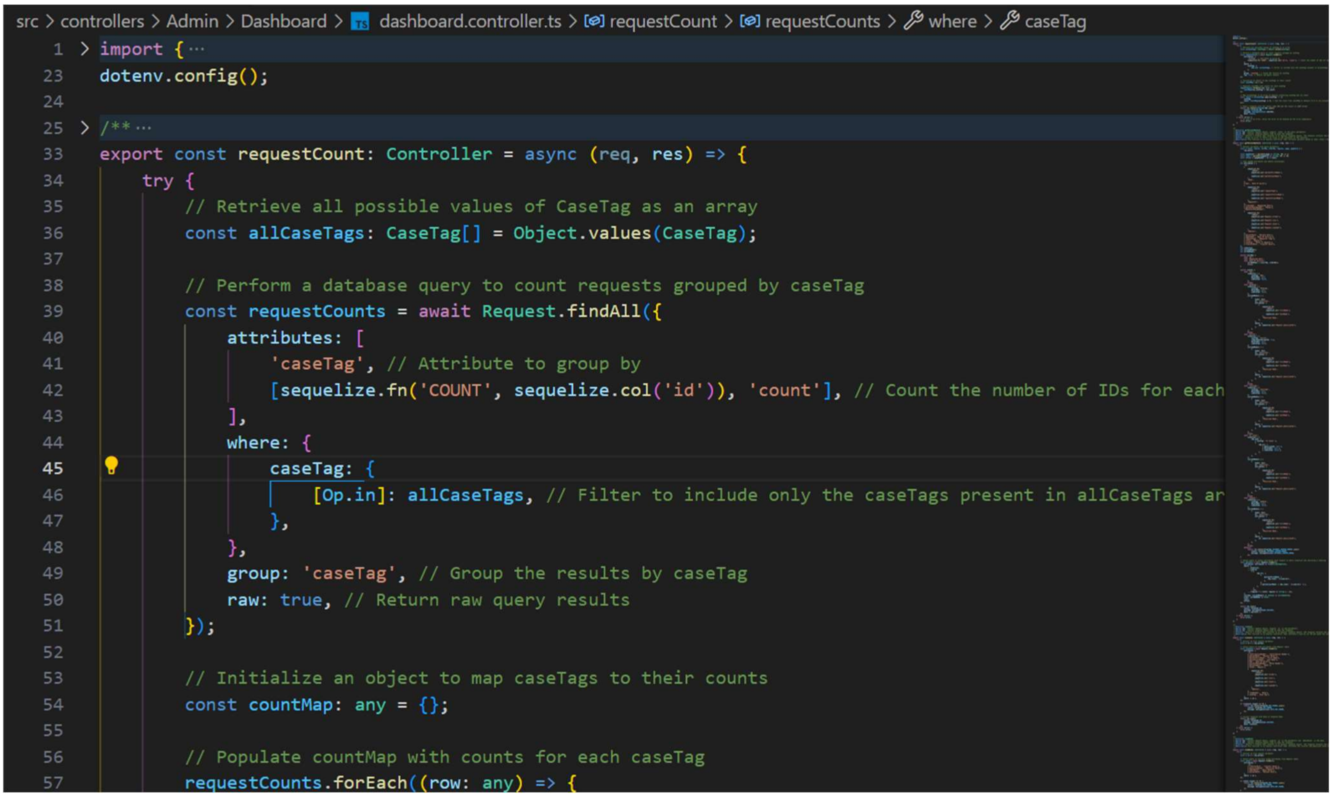
### App.ts (Entry Point):



```typescript
import express, { NextFunction, Request, Response } from 'express';
import router from './src/routes/index';
import { dbConnection } from './src/db/config/index';
import path from 'path';
import bodyParser from 'body-parser';
import { errors } from 'celebrate';
import { errorHandler } from './src/utils/errorHandler';
import { engine } from 'express-handlebars';
import dotenv from 'dotenv';
import json2xls from 'json2xls';
dotenv.config();

const PORT = process.env.PORT;

const app = express();

app.engine('hbs', engine({ extname: 'hbs', defaultLayout: false }));
app.set('view engine', 'hbs');

app.use(
    '/images',
    express.static(path.join(__dirname, 'src', 'public', 'images')),
);

app.use(json2xls.middleware);
app.use(bodyParser.urlencoded({ extended: false }));
app.use(bodyParser.json());
```

*Figure 6-6 App.ts (Entry Point)*

## Dashboard controller:

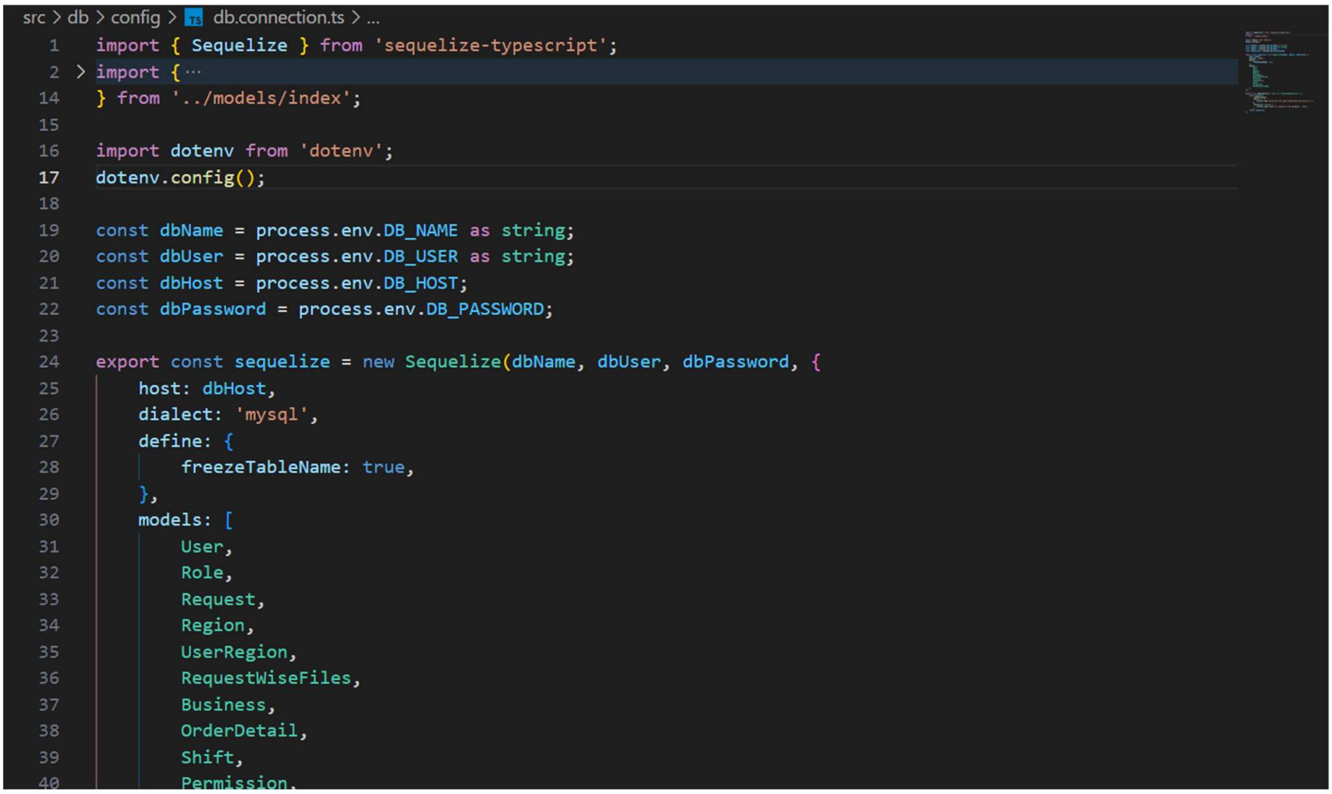


src > controllers > Admin > Dashboard > dashboard.controller.ts > requestCount > requestCounts > where > caseTag

```
import {···
dotenv.config();

/**···
export const requestCount: Controller = async (req, res) => {
    try {
        // Retrieve all possible values of CaseTag as an array
        const allCaseTags: CaseTag[] = Object.values(CaseTag);

        // Perform a database query to count requests grouped by caseTag
        const requestCounts = await Request.findAll({
            attributes: [
                'caseTag', // Attribute to group by
                [sequelize.fn('COUNT', sequelize.col('id')), 'count'], // Count the number of IDs for each
            ],
            where: {
                caseTag: {
                    [Op.in]: allCaseTags, // Filter to include only the caseTags present in allCaseTags ar
                },
            },
            group: 'caseTag', // Group the results by caseTag
            raw: true, // Return raw query results
        });

        // Initialize an object to map caseTags to their counts
        const countMap: any = {};

        // Populate countMap with counts for each caseTag
        requestCounts.forEach((row: any) => {
```

*Figure 6-7 Dashboard Controller*

## DB Connection:

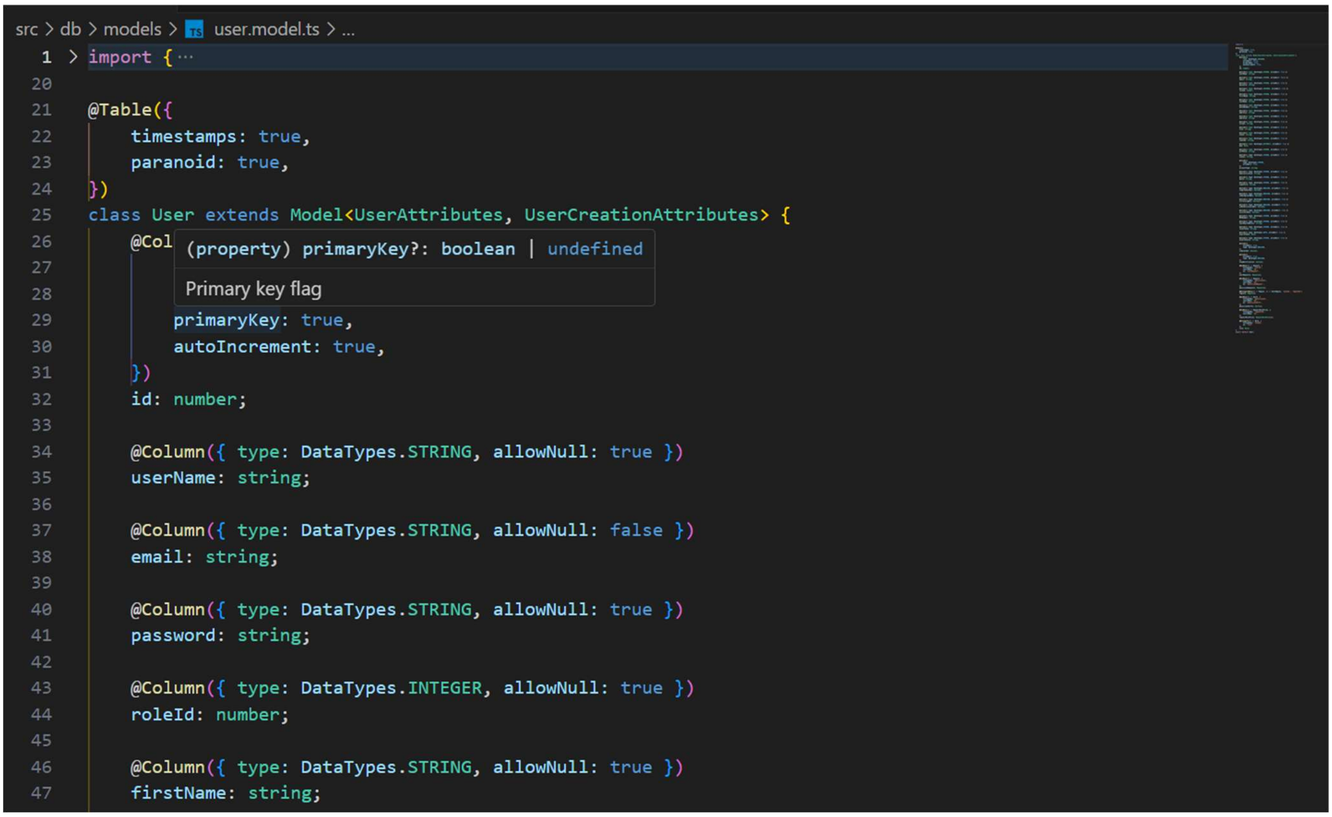


src > db > config > db.connection.ts > ...

```
import { Sequelize } from 'sequelize-typescript';
import {···
} from '../models/index';

import dotenv from 'dotenv';
dotenv.config();

const dbName = process.env.DB_NAME as string;
const dbUser = process.env.DB_USER as string;
const dbHost = process.env.DB_HOST;
const dbPassword = process.env.DB_PASSWORD;

export const sequelize = new Sequelize(dbName, dbUser, dbPassword, {
    host: dbHost,
    dialect: 'mysql',
    define: {
        freezeTableName: true,
    },
    models: [
        User,
        Role,
        Request,
        Region,
        UserRegion,
        RequestWiseFiles,
        Business,
        OrderDetail,
        Shift,
        Permission,
```

*Figure 6-8 DB Connection*

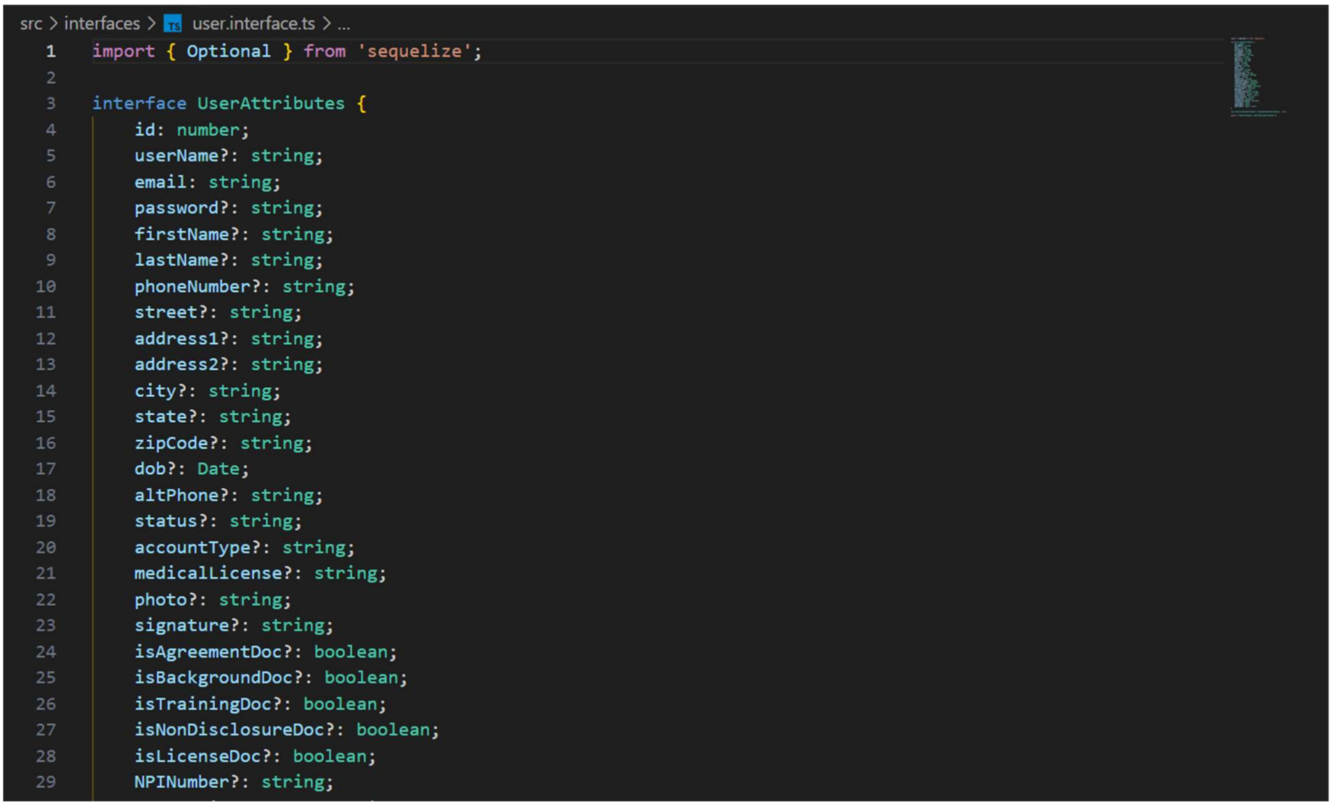
### User Model (table):


src > db > models > user.model.ts > ...
(property) primaryKey?: boolean | undefined
Primary key flag

```
import {⋯

@Table({
    timestamps: true,
    paranoid: true,
})
class User extends Model<UserAttributes, UserCreationAttributes> {
    @Col


        primaryKey: true,
        autoIncrement: true,
    })
    id: number;

    @Column({ type: DataTypes.STRING, allowNull: true })
    userName: string;

    @Column({ type: DataTypes.STRING, allowNull: false })
    email: string;

    @Column({ type: DataTypes.STRING, allowNull: true })
    password: string;

    @Column({ type: DataTypes.INTEGER, allowNull: true })
    roleId: number;

    @Column({ type: DataTypes.STRING, allowNull: true })
    firstName: string;
```

*Figure 6-9 User model (table)*

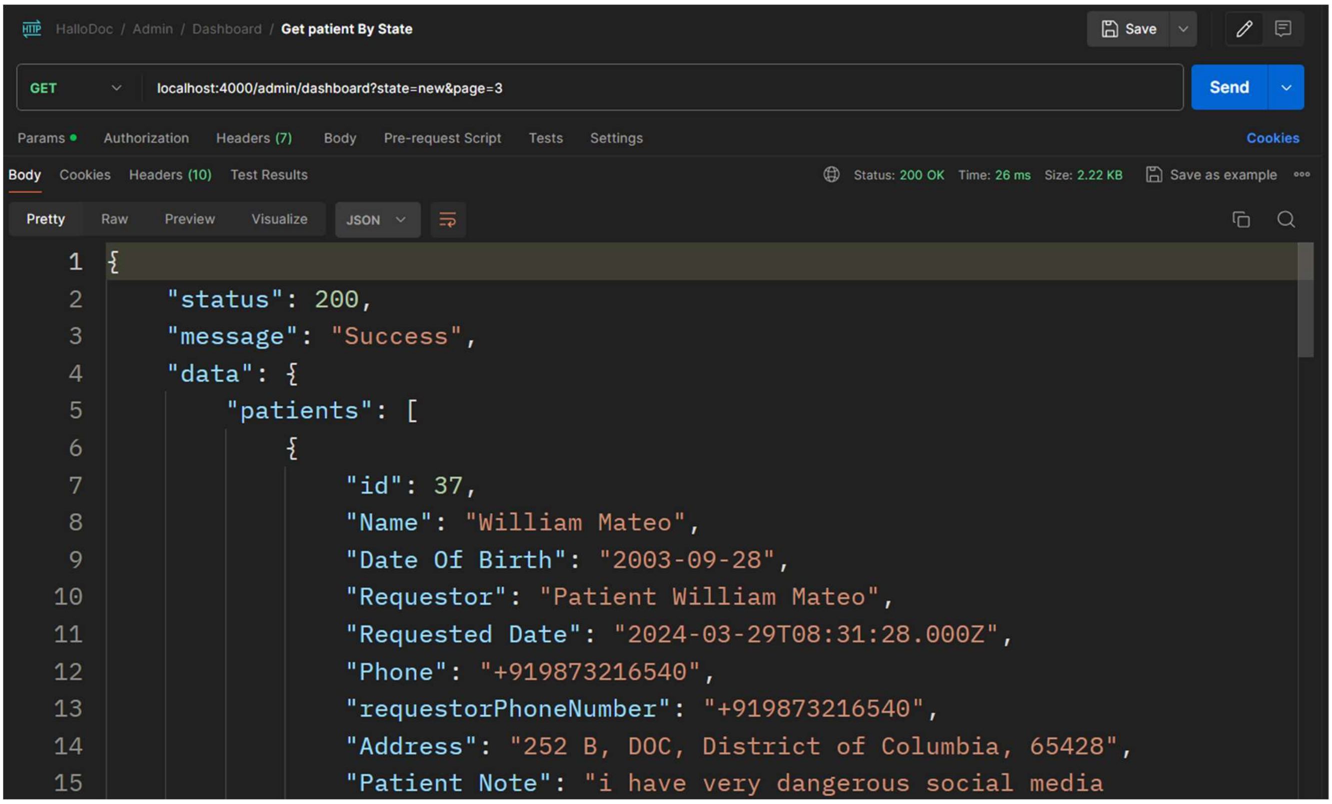
### User interface:



```
import { Optional } from 'sequelize';

interface UserAttributes {
    id: number;
    userName?: string;
    email: string;
    password?: string;
    firstName?: string;
    lastName?: string;
    phoneNumber?: string;
    street?: string;
    address1?: string;
    address2?: string;
    city?: string;
    state?: string;
    zipCode?: string;
    dob?: Date;
    altPhone?: string;
    status?: string;
    accountType?: string;
    medicalLicense?: string;
    photo?: string;
    signature?: string;
    isAgreementDoc?: boolean;
    isBackgroundDoc?: boolean;
    isTrainingDoc?: boolean;
    isNonDisclosureDoc?: boolean;
    isLicenseDoc?: boolean;
    NPINumber?: string;
```

*Figure 6-10 User interface*

### Dashboard (Postman):



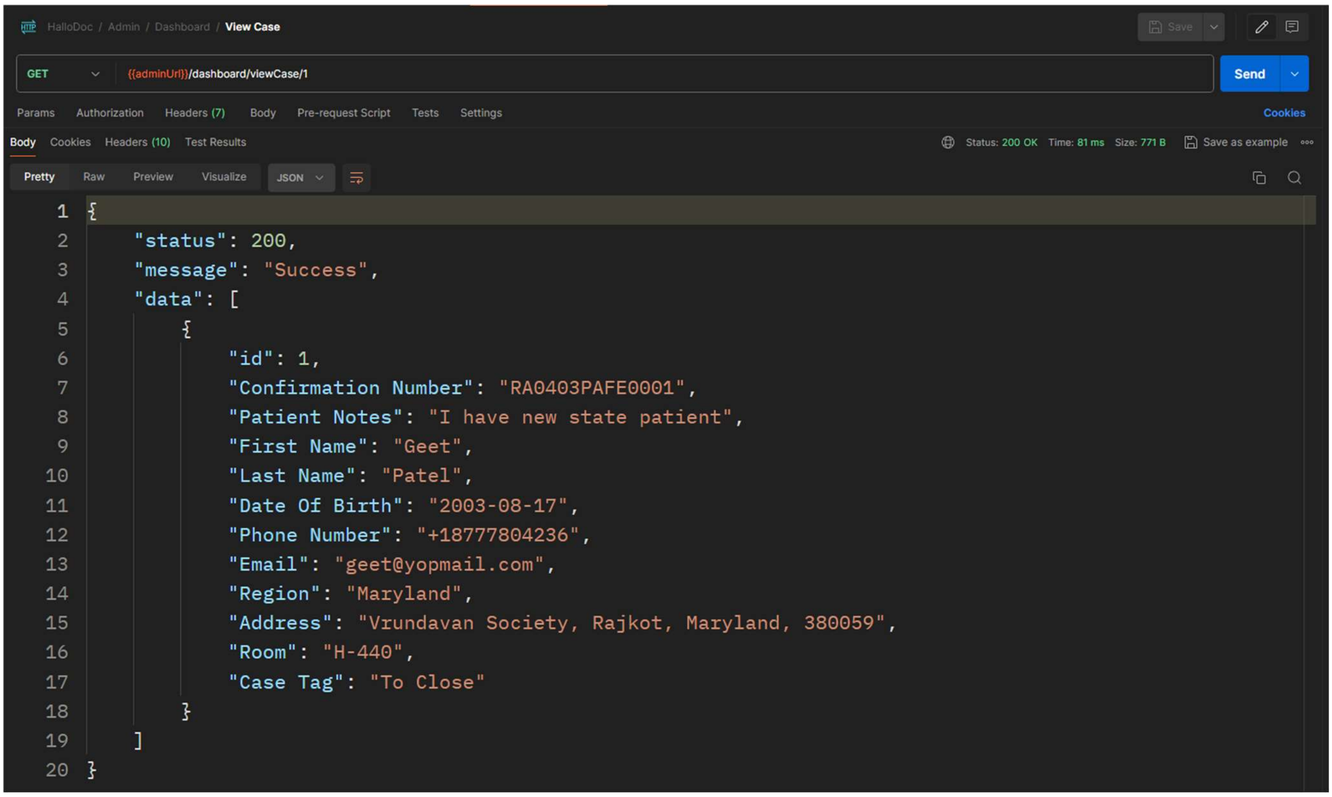
GET localhost:4000/admin/dashboard?state=new&page=3

Status: 200 OK Time: 26 ms Size: 2.22 KB

```
{
    "status": 200,
    "message": "Success",
    "data": {
        "patients": [
            {
                "id": 37,
                "Name": "William Mateo",
                "Date Of Birth": "2003-09-28",
                "Requestor": "Patient William Mateo",
                "Requested Date": "2024-03-29T08:31:28.000Z",
                "Phone": "+919873216540",
                "requestorPhoneNumber": "+919873216540",
                "Address": "252 B, DOC, District of Columbia, 65428",
                "Patient Note": "i have very dangerous social media
```

*Figure 6-11 Dashboard (Postman)*

### View Case:



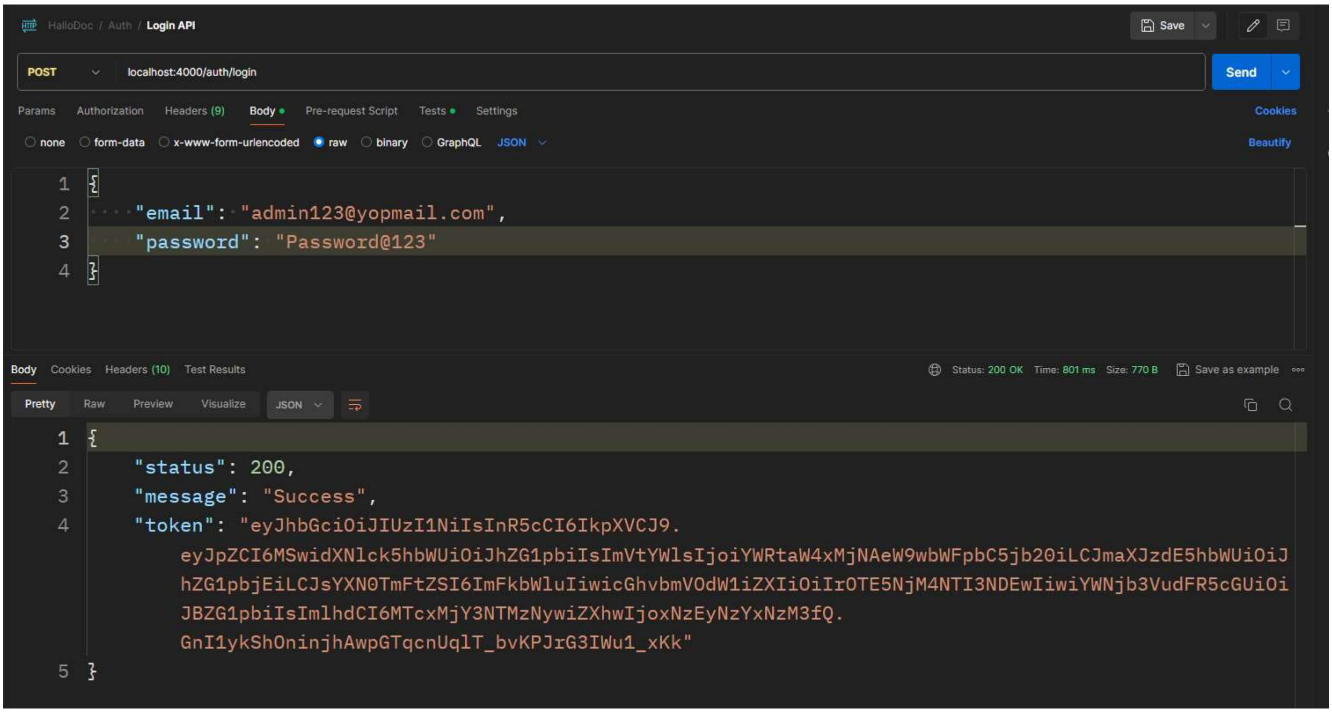
GET {{adminUrl}}/dashboard/viewCase/1

Status: 200 OK Time: 81 ms Size: 771 B

```
{
    "status": 200,
    "message": "Success",
    "data": [
        {
            "id": 1,
            "Confirmation Number": "RA0403PAFE0001",
            "Patient Notes": "I have new state patient",
            "First Name": "Geet",
            "Last Name": "Patel",
            "Date Of Birth": "2003-08-17",
            "Phone Number": "+18777804236",
            "Email": "geet@yopmail.com",
            "Region": "Maryland",
            "Address": "Vrundavan Society, Rajkot, Maryland, 380059",
            "Room": "H-440",
            "Case Tag": "To Close"
        }
    ]
}
```

*Figure 6-12 View Case*

## Login Page in Postman:



POST localhost:4000/auth/login

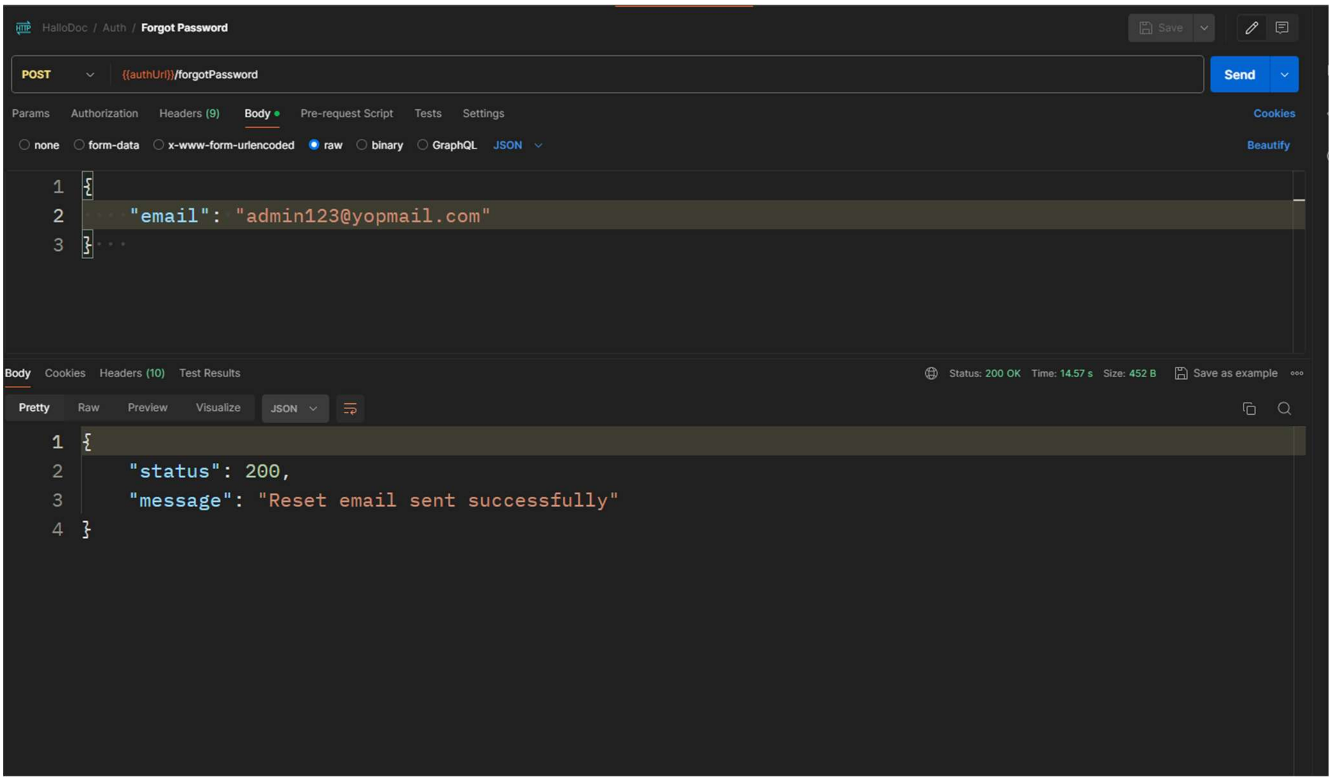
```
{
    "email": "admin123@yopmail.com",
    "password": "Password@123"
}
```

Status: 200 OK Time: 801 ms Size: 770 B

```
{
    "status": 200,
    "message": "Success",
    "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.
        eyJpZCI6MSwidXNlck5hbWUiOiJhZG1pbiIsImVtYWlsIjoiYWRtaW4xMjNAeW9wbWFpbC5jb20iLCJmaXJzdE5hbWUiOiJ
        hZG1pbjEiLCJsYXN0TmFtZSI6ImFkbWluIiwicGhvbmVOdW1iZXIiOiIrOTE5NjM4NTI3NDEwIiwiYWNjb3VudFR5cGUiOi
        JBZG1pbiIsImlhdCI6MTcxMjY3NTMzNywiZXhwIjoxNzEyNzYxNzM3fQ.
        GnI1ykShOninjhAwpGTqcnUqlT_bvKPJrG3IWu1_xKk"
}
```

*Figure 6-13 Login Page (Postman)*

## Forgot Password:



POST {{authUrl}}/forgotPassword

```
{
    "email": "admin123@yopmail.com"
}
```

Status: 200 OK Time: 14.57 s Size: 452 B

```
{
    "status": 200,
    "message": "Reset email sent successfully"
}
```

*Figure 6-14 Forgot Password*

# CHAPTER 7: TESTING

## 7.1 Testing Strategy

Testing is an important part of any software development project, including point of sale system. Here are some types of testing that can be conducted on a point of sale for restaurant project:

1. Functional testing: This type of testing ensures that all the features and functionalities of the system are working as intended. This can include testing live orders, take order, manage the bar menu, adding category or new item, managing bartenders, giving order through chatbot.
2. Unit testing: This type of testing is done to ensure all the functions that are used in the feature are working as expected and feature is also giving output as expected.
3. E2E testing: This type of testing is done to ensure that the apis of the system are working as expected and comparing the response of the api with the expected response. Here we tested apis for live order, take order, add category and menu item, manage bartender.

### Test Cases

| Test Description | Steps | Expected Result | Actual Result | Pass/ Fail |
|---|---|---|---|---|
| Verify user login functionality | Open the application login page.<br>Enter a valid email in the email field.<br>Enter the corresponding password in the password field.<br>Click the "Login" button | The application redirects the user to the main dashboard after a successful login. | The user is successfully logged in and redirected to the main dashboard. | Pass |

| Test Description | Steps | Expected Result | Actual Result | Pass/ Fail |
|---|---|---|---|---|
| Assign Case | From New state, click one of the patient requests click actions.<br>Then click Assign Case and after fill necessary information click send button. | Request goes to the Pending state with Physician Name | As Expected | Pass |
| View Case | From New state, click on one of the patient request action button.<br>Then click on view case to view patient illness. | Get all the details of patient with confirmation number. | As expected | Pass |
| Transfer Request | From Pending State, Click one of the patient request.<br>And then click on transfer case and fill necessary information and click send button. | After successfully transfer request, physician name changes. | As expected | Pass |
| Send Agreement | From Pending State, Click on send Agreement of one the patient request.<br>Then patient email and sms message with accept agreement | After accepting agreement physician start treatment of patient and give best advice according to illness. | As expected | Pass |

*7.1 Test Cases*

# CHAPTER 8: CONCLUSION AND DISCUSSION

## 8.1 OVERALL ANALYSIS OF INTERNSHIP VIABILITIES

The internship program has acquired a lot of knowledge related to improving practical skills. The different types of exercise and projects I worked on in the last three months of the internship have increased my knowledge of Data Science. I am very happy to be able to implement what I learned at university in the working industry. In this real situation, I was able to apply our theoretical knowledge.

I was able to satisfy my curiosity about how to develop any project from scratch through this internship. I am very thankful for the wonderful opportunity from **Tatvasoft Pvt. Ltd.** and I hope this experience will surely help me in my future and also in shaping my career.

The training program has been well-structured, with a comprehensive syllabus that covers essential topics in chatbot development, including MongoDB, NodeJS, Twilio. The trainers are experienced professionals who have provided valuable guidance and mentorship to interns, enabling them to gain a deeper understanding of the subject matter.

## 8.2 SUMMARY OF INTERNSHIP

In January 2024, I began my internship at **Tatvasoft Pvt. Ltd.** Working at the office, I found inspiration in my everyday journeys thanks to a fantastic work environment. The personnel were pleasant, helpful, compassionate, and truthful. It was an opportunity for me to demonstrate my worth as an employee, a trustworthy co-worker, and a dedicated student. It was also a chance for me to obtain crucial office experience that I had lacked in my previous jobs.

My versatility was one of the most significant abilities I learned. Working across several technologies is typical in corporations, and that is precisely what I did. During my internship, I worked on an internship project.

As I completed more chores, I was given additional responsibilities, and I was always excited to get new assignments. The encouragement and honest responses I received were more than enough to put me at ease. I am grateful to all of my Protium co-workers for giving me the opportunity to grow both personally and professionally.

Overall, the internship at Tatvasoft was a valuable learning experience that helped me enhance my skills and knowledge in the field of software development. Iam grateful for the opportunity and look forward to applying the skills and knowledge gained during the internship in my future endeavors.

## 8.3 LIMITATION AND FUTURE ENHANCEMENT

**Limitations**:

During the internship, we faced a few limitations that affected the overall productivity and efficiency of the project. One of the major limitations was the limited availability of physicians and regions where our project works, which restricted our ability to explore all the features and functionalities of the tools and technologies used in the project. Additionally, due to the limited scope of the project, we could not fully explore all the potential use cases of the HalloDoc platform.

**Future Enhancements**:

Despite the limitations, we identified several areas where the project can be enhanced in the future. Firstly, we recommend exploring more advanced features of the tools and technologies used, such as integrating machine learning algorithms for better understand patient illness and with video recording. Secondly, we suggest expanding the scope of the project to include more use cases, such as customer support and with fast treatment.

# REFERENCES

1) https://www.tatvasoft.com/
2) Training Portal
3) https://developer.mozilla.org/en-US/docs/Web/JavaScript
4) https://www.udemy.com/course/nodejs-the-complete-guide/
5) https://nodejs.org/docs/latest/api/
6) https://stackoverflow.com/
7) https://www.mongodb.com/docs/guides/

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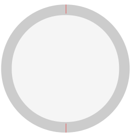

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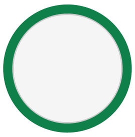

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ABSTRACT Artificial training is an important phase of a pupil life. A well planned, duly executed and estimated artificial training helps a lot in developing a professional station. It develops an mindfulness of artificial approach to problem working, grounded on a broad understanding of process and mode of operation of association. During a period of 12 weeks of training atTatvasoft., I was assigned as a trainee Software inventor. Throughout this artificial training, I've learned new technology similar as NodeJS, Expressjs and MySQL database garçon. And with that, I developed the HalloDoc Platform Website. CHAPTER 1 OVERVIEW OF THE COMPANY HISTORY Tatvasoft is a Consummate Custom Software Development company delivering splendid business IT results and related services to guests across the globe. Our development services are led by our devoted and passionate platoon to give stylish assiduity practices combined with technology moxie and business sphere knowledge to drive digital metamorphosis. Our proficiency in understanding business challenges and professional capability allows us to produce a better experience for our guests. Tatvasoft has surfaced and marked our presence in different mainlands by furnishing Be spoke software development services to all major Assiduity disciplines. CHAPTER 2 preface TO INTERNSHIP externship SUMMARY GTU provides the occasion to get experience before scholars step into professional life. In January 2024, I began my externship at TatvasoftPvt. Ltd. Working at the office, I set up alleviation in my everyday peregrinations thanks to a fantastic work terrain. It was an occasion for me to demonstrate my worth as an hand, a secure coworker, and a devoted pupil. PURPOSE Excelling in examinations and earning a degree alone may not be enough to succeed in moment's job request. Real world experience through externships is pivotal for professional growth, expanding knowledge, and determining the right career path. compass externships offer precious openings to gain real- world experience, expand knowledge and determine career direction in moment's job request. They bridge the gap between academic literacy and plant chops, furnishing essential professional development for success in the ultramodern employment geography. ideal The main ideal of this externship was to make campaigners work-ready in web development using NodeJS Backend frame. I was substantially concentrated on practical and tone- literacy. I aimed to make my programming base and write law by following rendering norms. From an individual hand's point of view, the main points are Be skillful in one or further areas of moxie. Develop soft chops like taking public speaking enterprise, taking responsibility for some work task/ event and numerous further. To gain leadership quality. CHAPTER 3 TOOLS & TECHNOLOGIES withExpress.js NodeJS withExpress.js allows inventors to make web operations using Typescript on the garçon- side.Expess.js provides a featherlight frame for handling HTTP requests, routing, middleware integration, and other web operation features. inventors can fluently produce peaceful APIs, web services, and full- mound web operations using NodeJS withExpress.js. Querying with Typescript InNode.js, querying databases similar as MySQL is generally done using TypeScript.Node.js provides colorful libraries and modules for interacting with MySQL databases, similar as mysql, mysql2, or Sequelize. inventors can use TypeScript to construct SQL queries stoutly and execute them against the MySQL database to recoup, fit , update, or cancel data. MySQL Database Management MySQL offers a dependable and scalable database result forNode.js operations. inventors can use MySQL to store and manage data in relational tables. MySQL supports features similar as deals, indexing, and replication, which are essential for erecting robust and high- performance operations. WithNode.js and MySQL, inventors can make data- driven operations with ease. Backend Technology Backend technology refers to the garçon- side factors of a web operation that are responsible for recycling requests, managing data, and generating responses to be transferred back to the customer- side. It generally involves programming languages, fabrics, and databases that work together to handle the sense and functionality of an operation. MySQL MySQL is a popular open- source relational database operation system( RDBMS) that uses Structured Query Language( SQL) for managing and manipulating data. It provides a dependable, scalable, and high- performance database result for colorful operations. MySQL organizes data into tables with rows and columns and supports features similar as deals, indexing, and replication. CHAPTER 4 SYSTEM ANALYSIS STUDY OF CURRENT SYSTEM First thing is that the Analysis model is the study of Being Systems, which is available. Without study of being system analysis models can not do. Then I produce Database to manage the request, case and stoner. All Admin must have logged in to pierce the system. Admin can manage places, patient request, provider shifts and rules for the whole system. Case can see their whole medical history in dashboard also produce new request for him her or someone differently. FEATURES OF NEW SYSTEM The features that are available in the Website. Admin Panel Management Provider panel operation Case panel operation CHAPTER 5 SYSTEM DESIGN ABSTRACT OF SYSTEM Development Tools Visual Studio law, MySQL database Communication between database and operation system needs the internet connection into the system. Because all the data will be available in the garçon INTERFACE DESIGN Admin Module It's amulti-vendore-medical system conforming of admin, case and provider modules. It manages patient request, provider shift, biographies and patient cases. CHAPTER 7 TESTING TESTING STRATEGIES The ideal of this testing plan is to insure that the sentiment analysis model is accurate and performs well in classifying the sentiment of textbook inputs. The testing plan will cover colorful scripts and inputs to estimate the model's performance and identify any issues or bugs that need to be addressed. In this following testing were done Unit Testing System Testing TESTING RESULT AND ANALYSIS Dashboard of admin spots are busy. Because numerous cases request at the same time with that we can add this case request in specific cache after that it can add to website The following are a many effects to test bus Refresh After Adding New Request shoot a POST request to add a new request. shoot a posterior GET request to recoup the streamlined list of requests.

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