

## Deliverable 5

**Project Title: eMed-a complete pharmacy cart at your doorstep.**

**Group Team Name: Delta**

**Group Members:**

| S. No | Full Name                | Student ID | Email  |
|-------|--------------------------|------------|--|
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## REQUIREMENT SPECIFICATION FUNCTIONAL

### REQUIREMENTS:

- **User Authentication & Registration:** The user should be able to create an account with personal details. Users should have data privacy and be able to change their credentials.
- **Searching for Medication:** The user should be able to access the medicines list and choose the desired medication and should be able to purchase the medication.
- **Doctor Profiles and Appointment Scheduling:** The interface should have a detailed page that displays doctor profile and appointment scheduling information.
- **Blood Donation and Emergency needs:** The user should be able to access the blood donor's details. In case of an emergency, the user should be able to make an emergency blood request.
- **Admin Control Center:** The admin should be able to manage the user information and appointments and have overall control over the application.
- **User-Admin Communication:** The user should be able to access the live chat to resolve the queries, updates regarding scheduling the appointments medicine purchased.
- **Payment Gateway and Checkout Options:** The payment gateway should be provided to pay the bill for a medicine purchase and provide the shipping details.
- **Category Pages with SEO Optimization:** The platform should be integrated with the SEO to enhance the user experience where patients can easily fetch the medication history, and patient details.
- **Edit User Profile:** The user should be able to edit their profile after logging in.
- **Raise Issue:** User raises a request for any concerns/issues which will be logged and reviewed by the admin and provide response.

### NON- FUNCTIONAL REQUIREMENTS:

- **Performance:**
  - The e-health system shall serve each page to the user within 3 seconds of initiation under normal load conditions.
  - The platform will support up to 10,000 concurrent users without performance degradation.

- **Scalability:**
  - The system can scale horizontally to accommodate growing user numbers, especially during peak times like health emergencies.
- **Security:**
  - Sensitive data, such as patient information and payment details, will be encrypted both in transit and at rest.
  - The system will use multi-factor authentication (MFA) for user login, especially for administrative users.
- **Reliability:**
  - The website will ensure continuous availability for users to book appointments and request emergency services.
- **Usability:**
  - The website will provide a user-friendly interface accessible to users with minimal technical skills.
- **Maintainability:**
  - The website will have a modular architecture, making it easy to update individual components without affecting the entire system.
- **Backup and Recovery:**
  - In case of a system failure, a backup system will restore data within an hour to prevent data loss and minimize downtime.

## **USER INTERFACES:**

### **Interfaces:**

Readability should be good with all the devices.

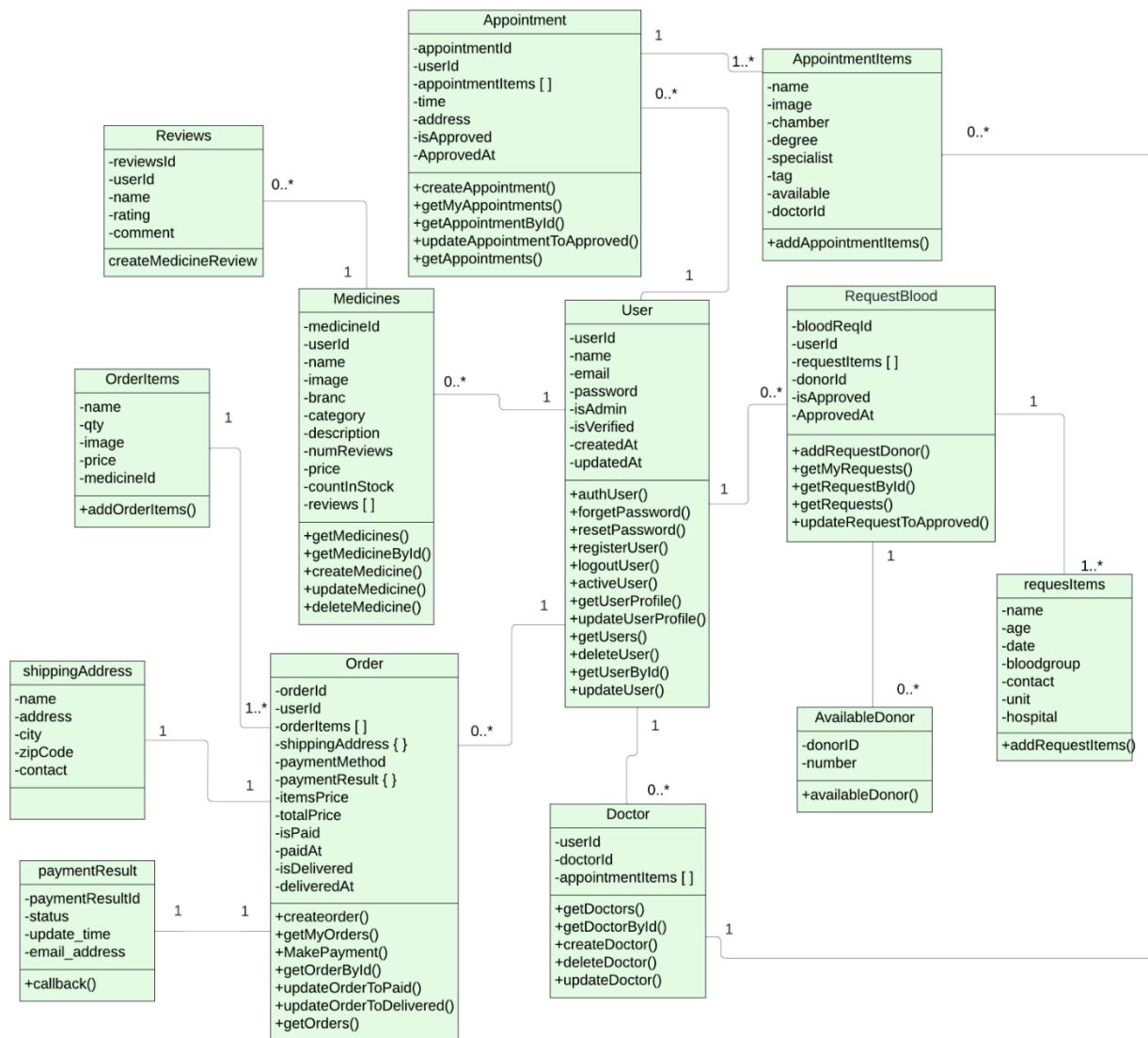
### **Breaking main components of UI for our website:**

- 1) Logo page with the title of our project.
- 2) Sign up and sign in options. Redirecting to forgot password if clicked on.
- 3) Medicine information page with a bar where we have options like:
  - Medicine
  - Doctor
  - Blood
  - Contact Us
  - Sign in
- 4) In that page of medicine, pictures of medicines along with some information to understand.
- 5) When clicked on a specific medicine we get a add to cart option with a reviews section
- 6) Shopping cart to check price and then shipping info, payment method
- 7) When selected doctor, doctors' information will get displayed

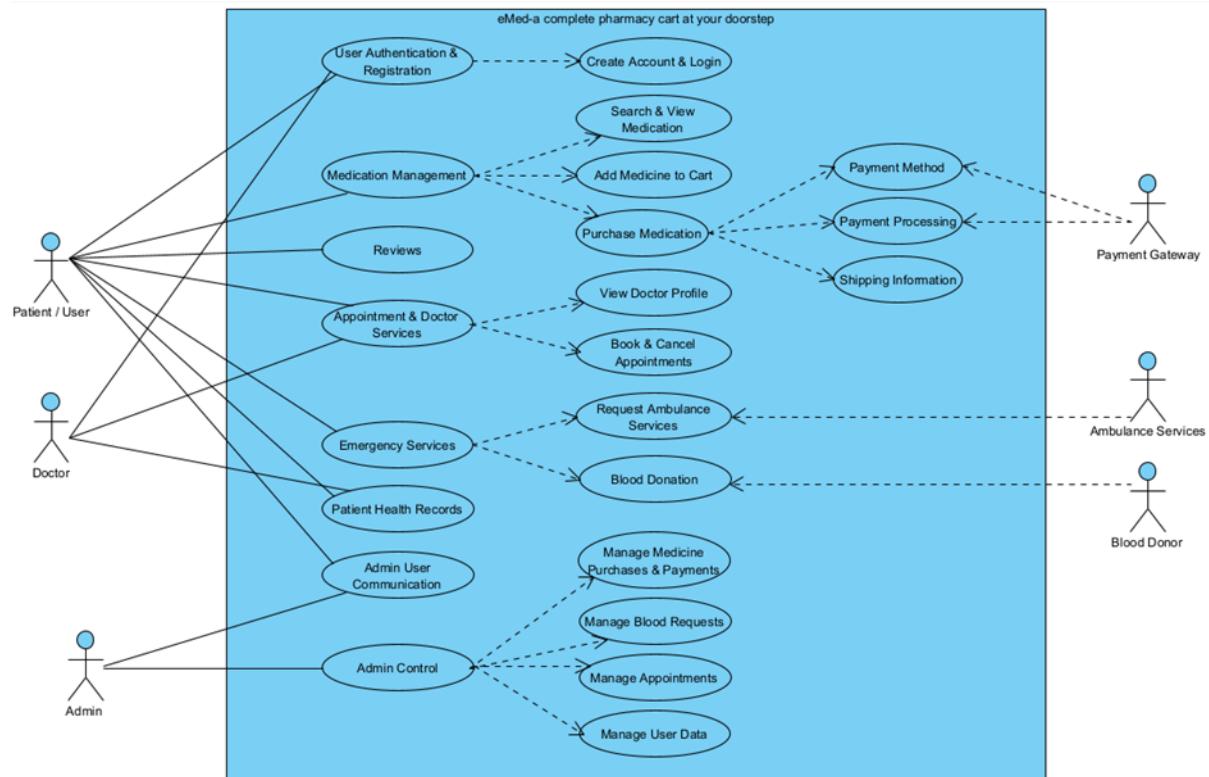
- 8) Booking an appointment page
- 9) Blood donors page with requesting blood
- 10) Admin pages for orders, appointments and blood requests.

## UML Diagrams:

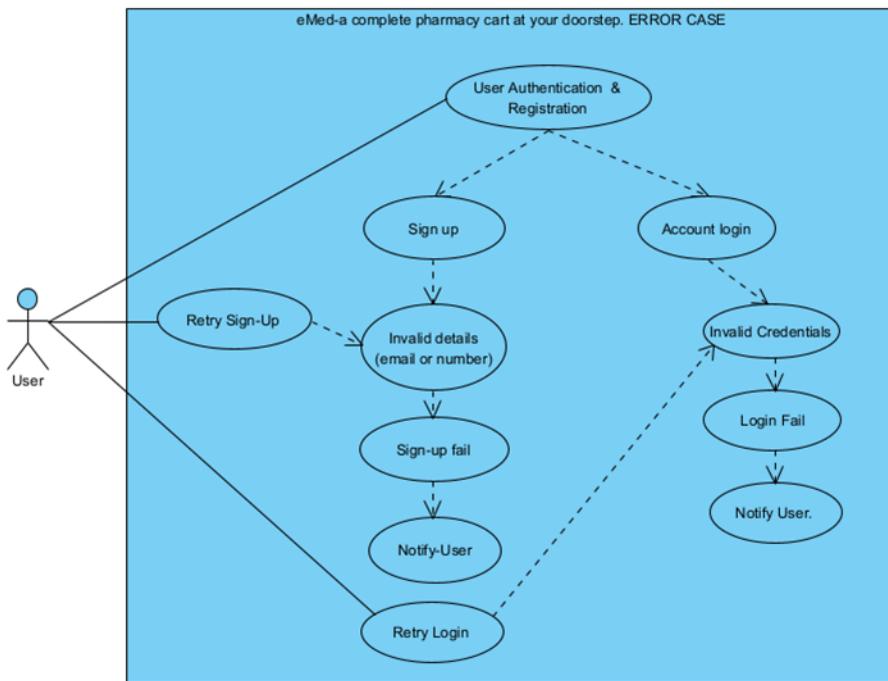
### Class Diagram:



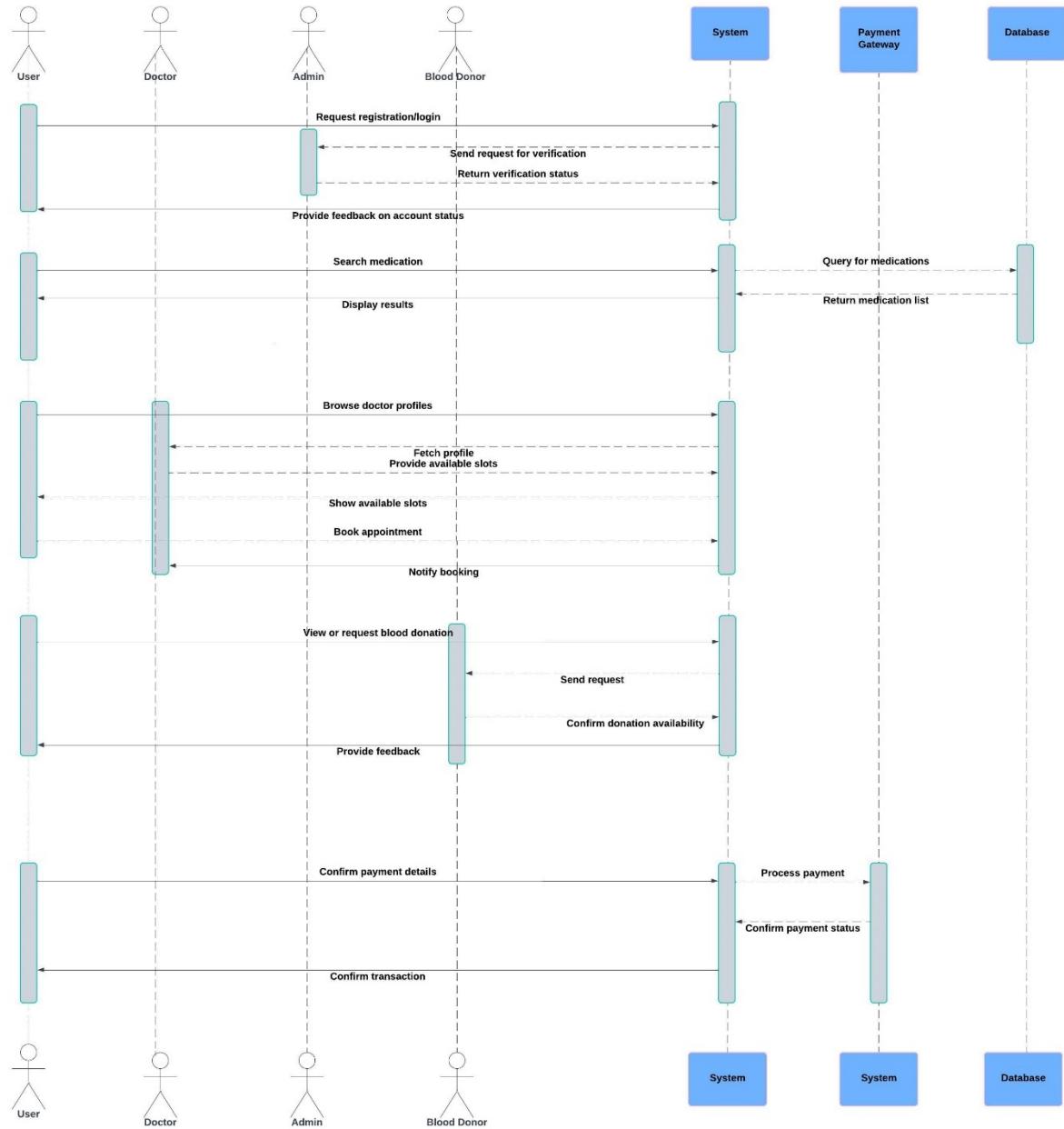
## Use Case Diagram:



## Use Case Error Diagram:



### Sequence Diagram:



**Test cases:**

| No. | Functionality                  | Input   | Output                             | Expected Outcome   | Pass/Fail |
|-----|--------------------------------|---|------------------------------------|--|-----------|
| 1   | Appointment Overlap Prevention | Schedule an appointment in an already booked slot | Booking error                      | Display error message indicating the time slot is unavailable                        | Pass      |
| 2   | Blood Donation Search          | Search for blood donors by blood type (e.g., O+)  | List of donors matching blood type | Display list of donors with matching blood types and contact option                  | Pass      |
| 3   | Appointment Status Update      | Mark an appointment as completed                  | Appointment marked as completed    | Appointment status updated to "Completed" and reflected in both user and admin views | Pass      |
| 4   | Testimonials Submission        | Submit a testimonial as a patient                 | Testimonial submitted              | Testimonial appears on patient testimonials page                                     | Pass      |
| 5   | Prescription Order Placement   | Order a prescription medicine                     | Order confirmation                 | Prescription order placed and confirmation email sent                                | Pass      |
| 6   | Real-time Health Monitoring    | View real-time health data for a patient          | Health data displayed              | Patient's health data (e.g., vitals) displayed in real-time                          | Pass      |
| 7   | Doctor Dashboard Access        | Log in as a doctor and access dashboard           | Dashboard loaded                   | Doctor's dashboard displays upcoming appointments                                    | Pass      |

|    |  |  |  |   |      |
|----|--|--|--|---|------|
|    |  |  |  | and patient interactions  |      |
| 8  | Secure Admin Controls                                | Admin attempts to modify restricted content            | Access denied                                    | Admin receives an error message if they lack permission to modify restricted data | Pass |
| 9  | UI Enhancements Verification                         | Access the UI on different devices                     | UI loads appropriately                           | UI is responsive and displays correctly on desktop, tablet, and mobile            | Pass |
| 10 | MongoDB Connection Stability                         | Restart MongoDB and check platform functionality       | Platform continues to function without data loss | MongoDB restarts smoothly, and all data and functionality remain intact           | Pass |
| 11 | Stripe Payment Processing (Valid/Insufficient Funds) | Process payment using stripe                           | Payment success                                  | Payment processed with stripe and transaction confirmation displayed              | Pass |
| 12 | Stripe Payment Error Handling                        | Attempt payment with insufficient stripe payment funds | Payment error                                    | Error message displayed indicating insufficient funds or payment failure          | Pass |

## **User Manual:**

How to use our website.

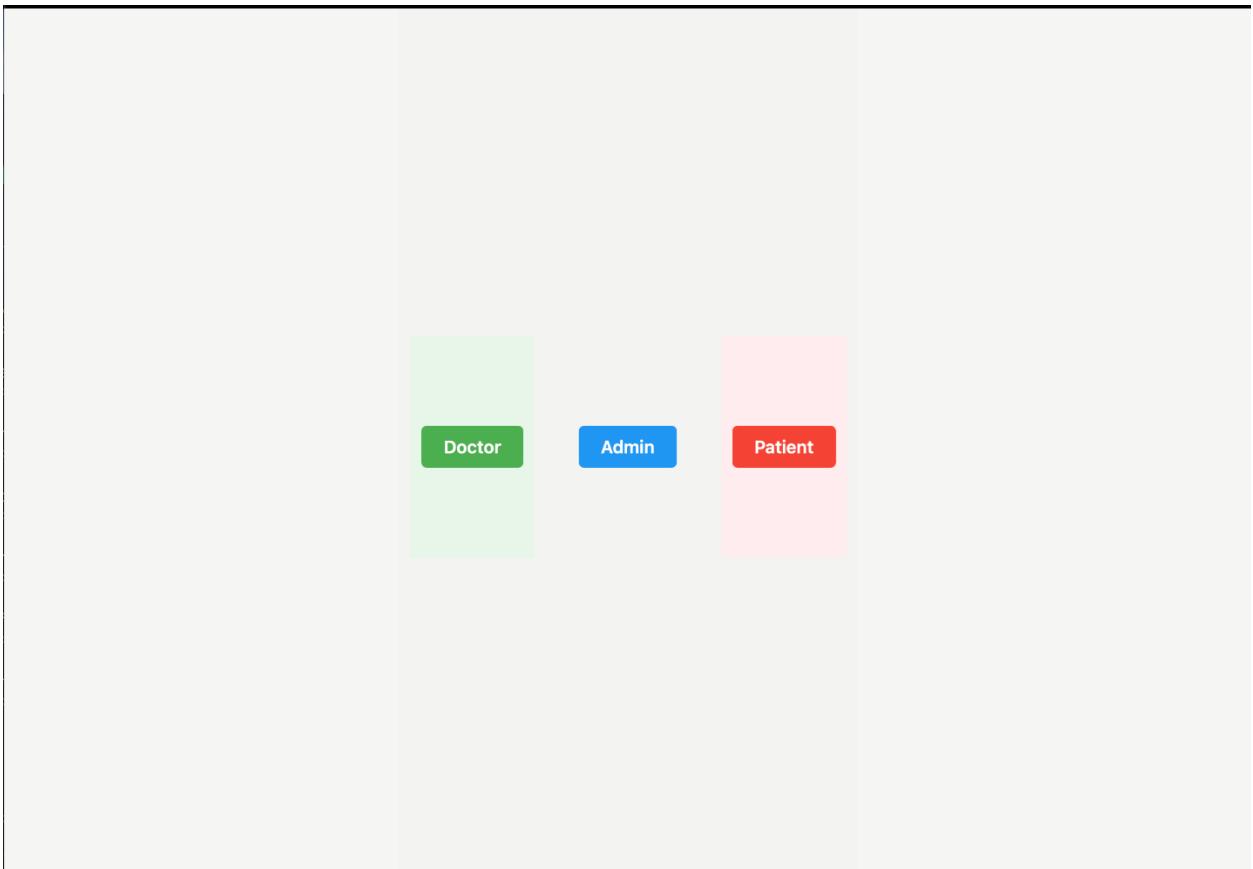
### **General:**

Every new user or an existing user that interacts with our Emed pharmacy website will must and should have an account which is composed of unique credentials. This will consist of a completely unique username, or an email address provided by the user and that should come with a unique password.

In our website, our administrator or the one who manages of databases will be able to create the accounts of our current existing doctors while the patients / users will get to create their very own accounts. In addition, our users when logging in must specify their blood group so that whenever they choose to be a blood donor, the patients who require emergency blood could easily be mapped to those donors.

### **Front Option page:**

- a. Here, our page will provide us with three options and user is allowed to pick his role .
- b. Here the user will be presented with options like admin , patient and doctor , which means that the website can have three different types of persons that uses our website.
- c. Here, each role after logging in can be having his own use pages on the website , like the user gets the general page where he gets to order medicines or to book an appointment , whereas the doctor is taken to his page where he/she is being presented with the appointments he / she is being scheduled with .
- d. Each different type of user will be containing their own features which are very important in our project .
- e. Admin page will be composed of listing all the number appointments and number of donors we currently have and also the number of patients and doctors .
- f. THis admin page will allow us to gain valuable insights on how many patients we have received and how many doctors we have to keep those all patients occupied.
- g. In the doctors side , the page will have all the appointments the doctor is currently being appointed with and we can also have the option where the doctor can cancel the appointments.
- h. The patient page is completely as described which has all options to buy medicine or make appointments or have a checkout on the medicine.



### **The User Signup:**

#### **A) How to sign up as a new user:**

1. At the top right corner, we have a login/register to give both options to a new user or an existing user.
2. Click on the login/register button to get redirected to a new page where we can either sign up or login.
3. Now, fill in the required details and then enter confirm.
4. This now takes us to the landing home page with us signed in with a message saying welcome back [username]

# Sign up

Ganesh

ganeshgundekarla@gmail.com

8177218764

B+

2556 cerros ln

Denton

TX

76207

Emergency Contact Name

Emergency Contact Phone

Sign up as a Blood Donor

**Confirm!**

**B) How to login from an existing user:**

1. In the home page on the top right corner, click on the login/register button which directs us to login or signup page.
2. Now switch to login mode.
3. In the login page, enter your email address and password.
4. Now click on Let's go! Button.

[Log in](#)  [Sign up](#)

## Log in

Email

Password

Let's go!

### C)Steps on how to book an appointment:

1. In the home page, as you slide down, under the 'Make an Appointment' section, select 'Book now' to make an appointment.
2. Fill in the required details and enter your appointment date and time.
3. You are also presented with an option to select / choose your required doctor with his expertise in that field and press 'BOOK APPOINTMENT'
4. Then, in our phase 2 we also added a view your appointment page where we can be able to view all our upcoming appointments.

The image shows a mobile application for managing medical appointments. At the top, there is a navigation bar with a back arrow and the text "Medical Transcription Doctor Appointment". Below the navigation bar is a "View Appointments" button.

The main section is titled "Book Your Appointment". It contains the following fields:

- Your Name\*: ganesh
- Email Address\*: ganeshgundekarla@gmail.com
- Appointment Date\*: 02/12/2024
- Appointment Time\*: 12:30
- Select Doctor\*
- Additional Notes

At the bottom of this section is a blue "BOOK APPOINTMENT" button.

Below the booking form is a horizontal line. To the left of the line is the text "Your Appointments". To the right is a blue "Schedule Appointment" button.

The main content area is divided into three sections:

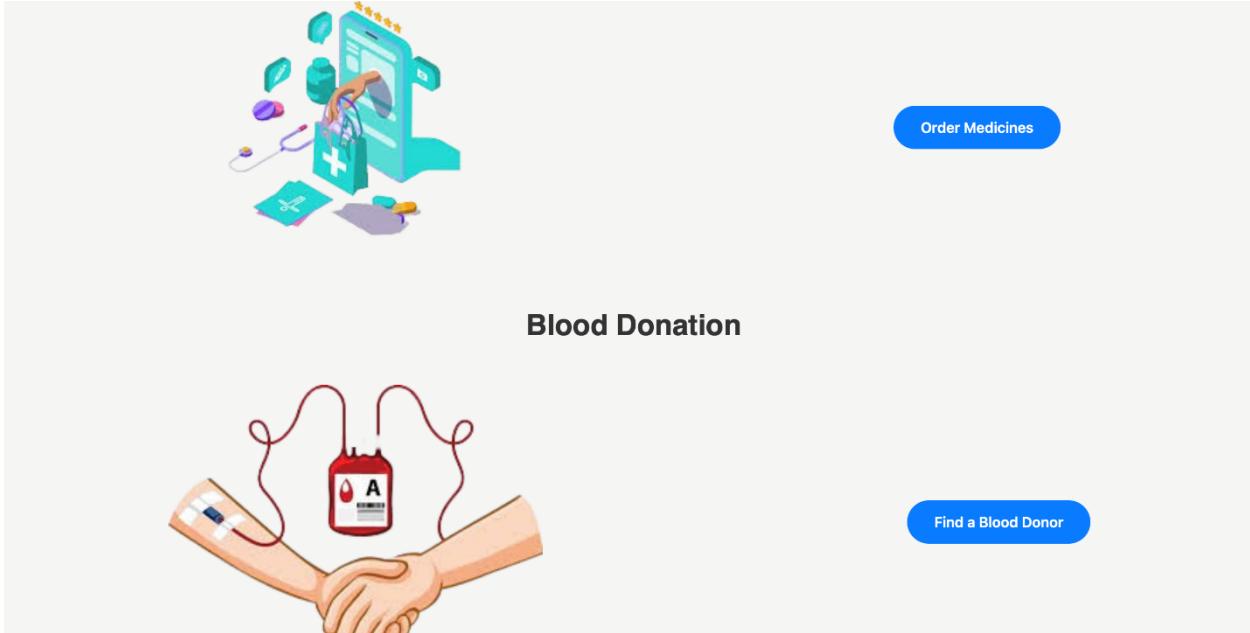
- Scheduled**: A card displays an appointment for "11/12/2024" at "09:59" with "ganesh Doc". The notes say "Ear pain". There are "Scheduled" and "Cancel" buttons.
- Completed**: The text "No completed appointments."
- Cancelled**: The text "No cancelled appointments."

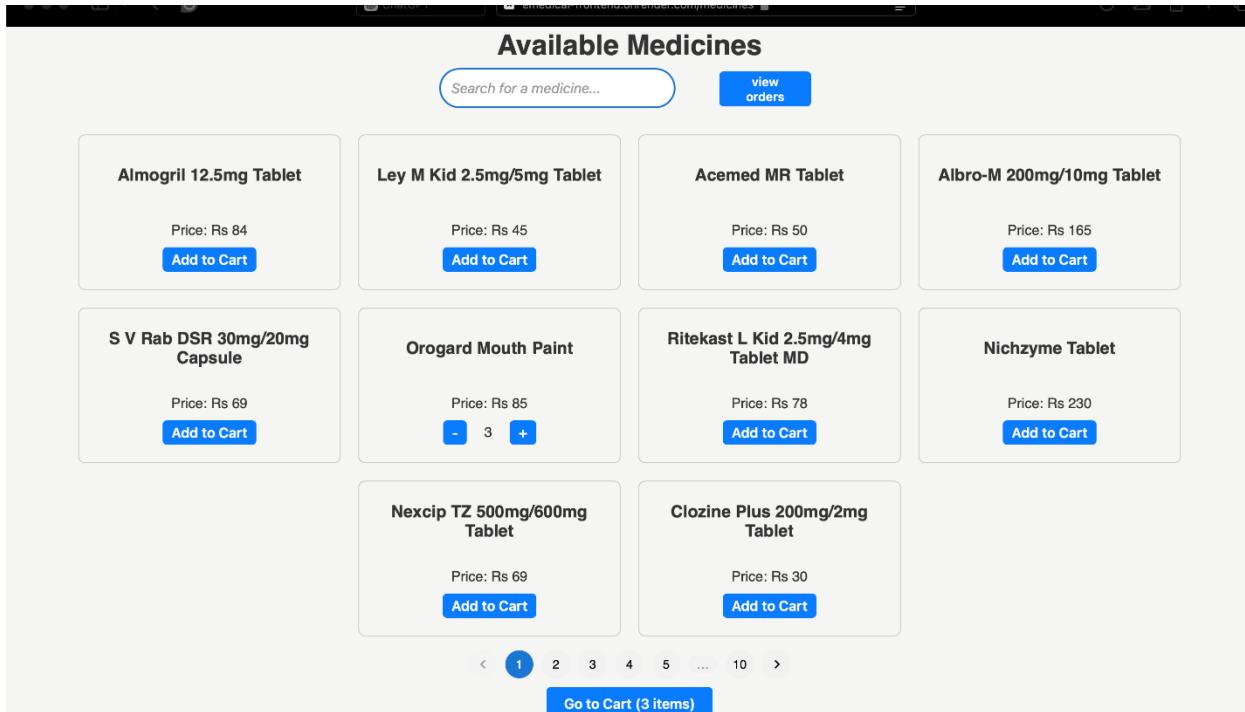
5. Here, we will be able to see all our appointments and then we can also schedule another appointment.

#### D) Steps on how to order medicines:

1. In the landing page at the bottom we will be having a 'Order Medicines' section where we can order medicines which are available currently.
2. After this we get redirected from the landing page to the medicines page where we are presented with a wide variety of medicines.
3. Here, we can choose the medicine with the number of tablets, and it can be added to the cart.
4. After we are done, we can press 'Go to Cart' which takes us to the cart page.

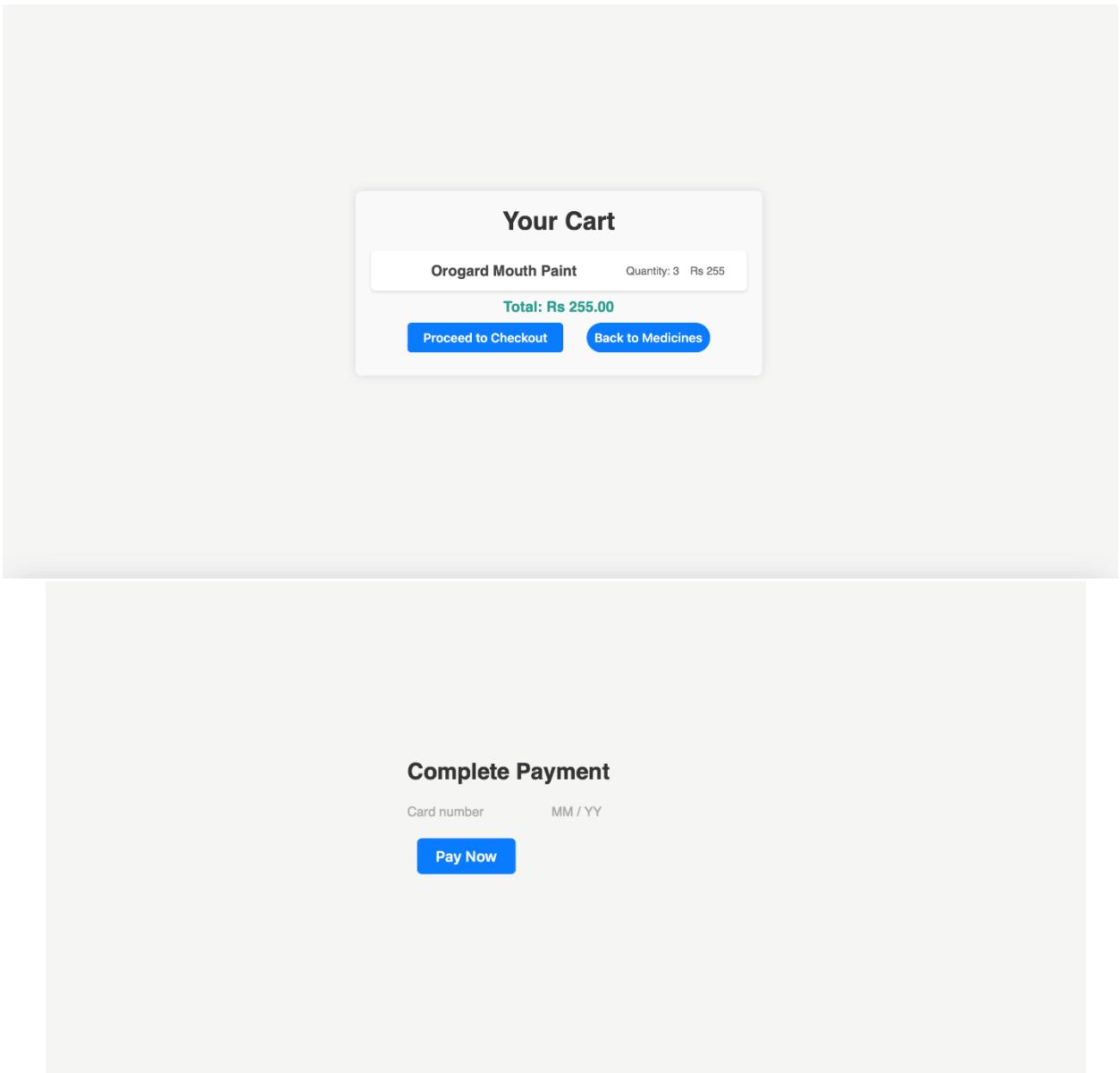
Here we have a proceed to checkout page which takes us to the final billing stage which will be implemented later.





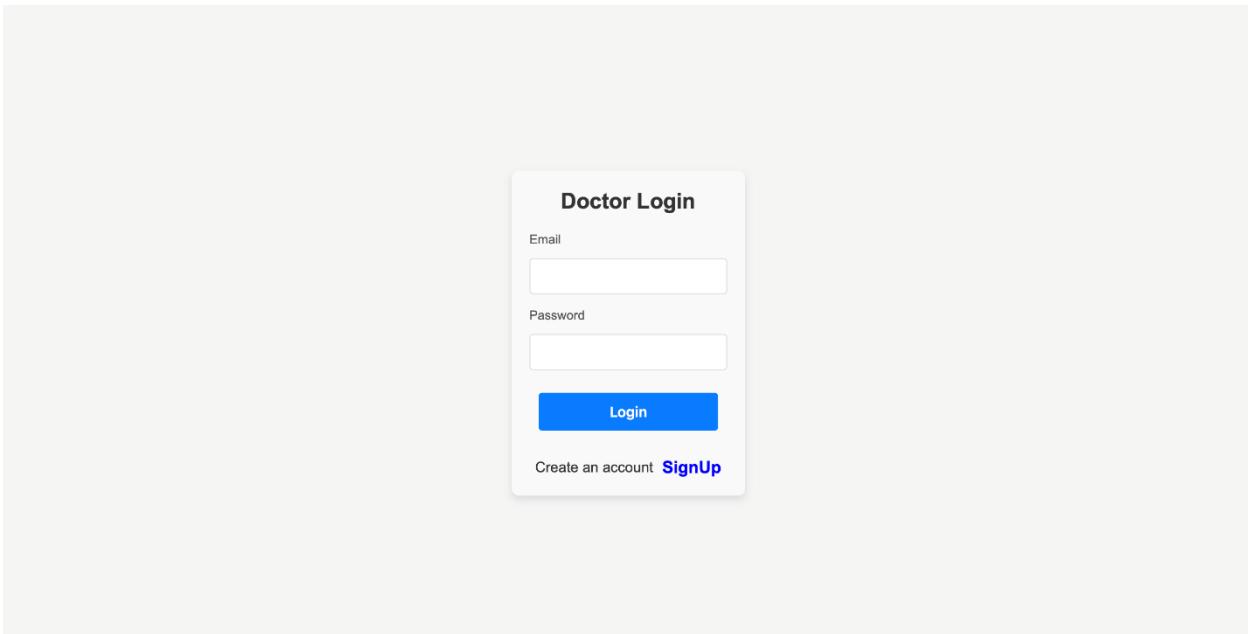
### Proceed to Checkout page: using stripe:

- Here, after getting our order done and proceeding to our cart, then we are able to checkout through the order medicines page, and we can enter our details.
- Then, on this part, we need to enter the card details which includes our code with the month and year of expiration of our card.
- Then upon entry of successful card details and the month and the year, the order gets done and will be successfully submitted.
- Stripe access and process payments using credit cards and it makes sure that it will securely handle payment information , it also provides us with a client side libs that help us tokenize some highly sensitive information , and encryption is being done which is then sent to the stripe which even stripe cannot be able to decode it .



#### Doctor login / signup:

- a. After the user, what if a doctor will try to access our website and
- b. If he is new, he / she is required to sign up which takes you to a page where you are allowed to sign in with the qualifications and details of his previous qualifications.
- c. Then, he / she is logged into his page where he / she is presented with the details of his/her appointments.
- d. Then, we will be able to login into the doctor's page as the doctor's side of our website which looks like this, Then the doctor will be presented with a dashboard where he will be presented with all the upcoming events, and all will be presented in a summary view.



Dashboard view:

A black header bar with the "GIVEU" logo on the left, and "Appointments" and "Contact" links in the center. On the right side, there is a "Logout" button.

## Welcome, Dr Doctor

Thank you for your dedication and tireless service in providing care to your patients. We deeply appreciate your efforts!

An illustration of a doctor with multiple arms, each holding a different medical item: a stethoscope, a bottle of pills, a test tube rack, a DNA helix, a laptop, and a microscope.

### Doctor Dashboard

Total Appointments

3

Upcoming Appointments

0

Treated Patients

0

Cancelled Appointments

2

[Screenshot](#)

The Doctor also can have the access to his / her upcoming appointments

## Doctor's Appointments

Start Date  End Date  **CLEAR FILTER**

### Scheduled

No scheduled appointments.

### Completed

**13/11/2024**

Time: 16:35  
Patient: aj  
Notes: ear pain

**Completed** **Details**

### Cancelled

**12/11/2024**

Time: 14:03  
Patient: ganesh002  
Notes: kighkig

**Cancelled** **Details**

**10/11/2024**

Time: 23:00  
Patient: s  
Notes: its fine now

**Cancelled** **Details**

Total Appointments

**3**

Upcoming Appointments

**0**

Treated Patients

**0**

Cancelled Appointments

**2**

## Appointments

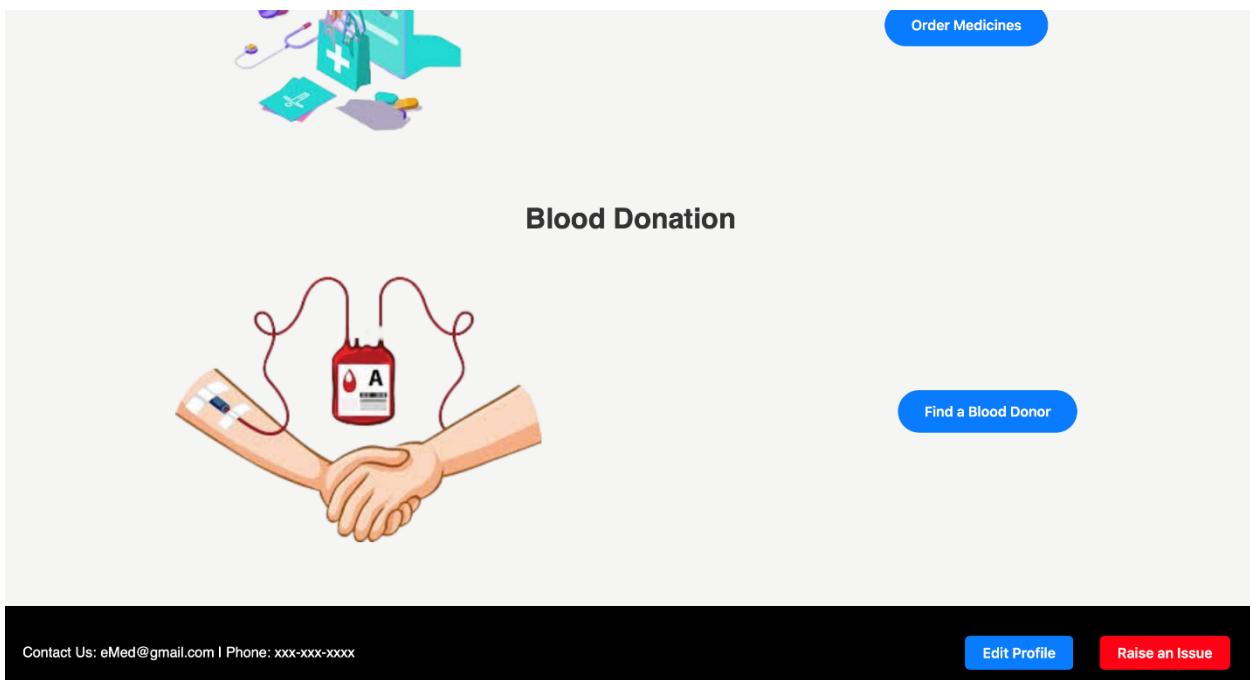
Manage your appointments and stay organized for better care.

**View Appointments**



### Blood Donors page:

- a. In our page, blood donors can be able to donate their blood by signing up for them in the signup page itself by clicking on the option that says 'sign in as a blood donor' which makes the patient as a blood donor as well.
- b. Then, we can show up with all the donors which are available to able to contact them and get some support on blood donation.



### Blood Donors

Filter by Blood Group: All

s

City: denton  
Phone: 1234567891

O+

Request

lucky

City: Denton  
Phone: 8177218764

B+

Request

ganesh002

City: Denton  
Phone: 8177218764

B+

Request

aj

City: denton  
Phone: 9406294715

AB+

Request

Kalyan Raju Keerthipati

City: DENTON  
Phone: 6823550235

AB+

Request

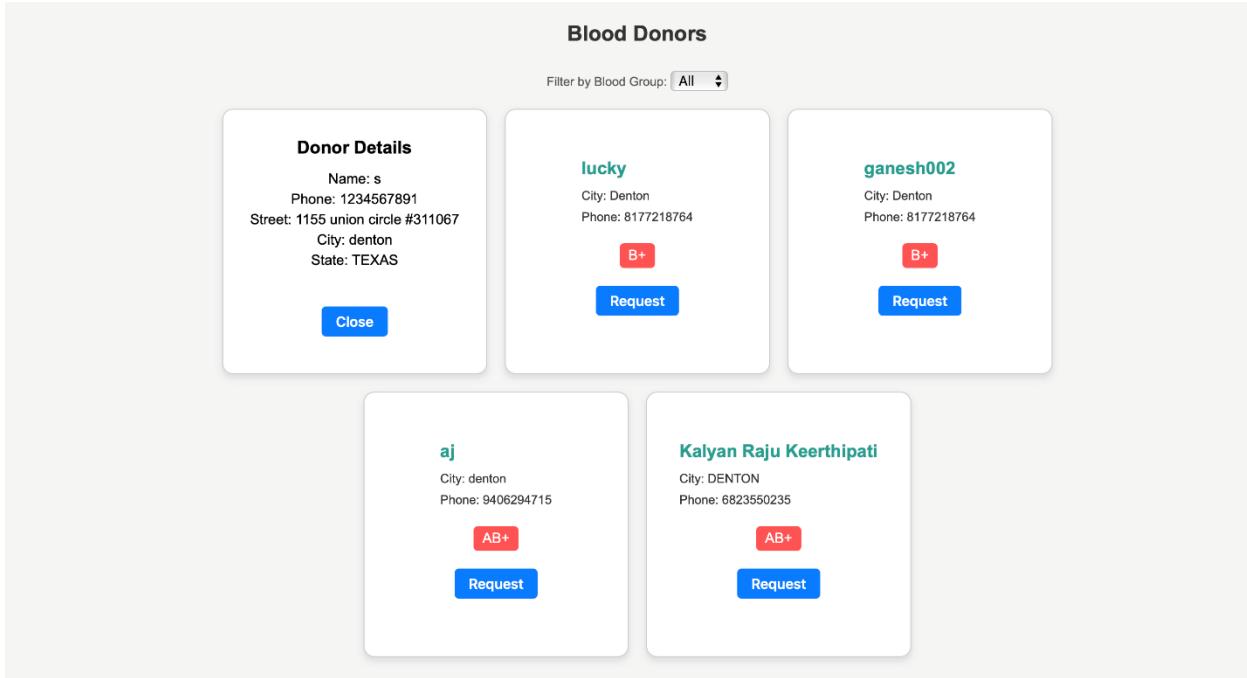
we have also implemented a search filter that lets you sort out the donors based on the blood type :

### Blood Donors

Filter by Blood Group: B-

No donors found for the selected blood group.

We can request for the blood using getting in touch with them.



#### Admin Users page:

- Our website admin can be able to manage and view everything that has happened in the website.
  - In our intro page, where we can be able to login into the admin page which is secured and only our admin can be able to do it.
  - When the admin logs into the website, the admin gets presented with multiple logs on recent activity that's been going with the website.
  - Here, the admin can be able to have an overview of everything going on with the donors, appointments and patients logged in and the number of doctors present.
  - This way we are being presented with all the important information on the admin page like all the registered users and all the registered doctors.
- F. We will be able to see all the registered number of users along with their important information and even the registered doctor's information is presented on a page properly.

## Admin Dashboard

[Logout](#)

### Overview

#### Total Doctors

6

#### Total Patients

9

#### Total Appointments

14

#### Total Blood Donors

6

#### Scheduled Appointments

2

#### Completed Appointments

5

#### Cancelled Appointments

7

### Manage

#### Manage Doctors

View and manage all doctors in the system.

#### Manage Patients

View and manage all patients in the system.

#### Manage Appointments

Track and manage all appointments.

#### Blood Donors

View and manage registered blood donors.

#### Generate Reports

Generate reports for appointments and donor requests.

### Admin Login

Username:

adminEmed

Password:

\*\*\*\*\*

[Login](#)

In this phase we have given most of the rights to the admin by being able to add or delete records present in our database . It is a privilege that is provided solely to the admin. Admin can manipulate the users , the patients list .

**Users List**

|   |  |  |  |
|---|--|--|--|
| <b>ganesh</b><br>Email: ganeshgundekaria@gmail.com<br>Phone: 8177218764<br>Address: Denton, tx<br>Blood Group: B+<br>Emergency Contact: dhan - 1234567890 | <b>ganes</b><br>Email: gnevercodes@gmail.com<br>Phone: 1234567890<br>Address: Denton, tx<br>Blood Group: B+<br>Emergency Contact: aju - 1234567891           | <b>s</b><br>Email: kalyanraju90@gmail.com<br>Phone: 1234567891<br>Address: denton, TEXAS<br>Blood Group: O+<br>Emergency Contact: -          | <b>Test User</b><br>Email: testuser@example.com<br>Phone: 1234567890<br>Address: Test City, Test State<br>Blood Group: O+<br>Emergency Contact: Emergency Contact - 0987654321 |
| <b>lucky</b><br>Email: ganesh906907@gmail.com<br>Phone: 8177218764<br>Address: Denton, tx<br>Blood Group: B+<br>Emergency Contact: ganesh - 8177218764    | <b>ganesh002</b><br>Email: ganeshgani3717@gmail.com<br>Phone: 8177218764<br>Address: Denton, tx<br>Blood Group: B+<br>Emergency Contact: ganesh - 8177218764 | <b>aj</b><br>Email: ajay@gmail.com<br>Phone: 9406294715<br>Address: denton, TX<br>Blood Group: AB+<br>Emergency Contact: Kalyan - 1234567890 | <b>VishnuPriya</b><br>Email: vishnuvulichi@gmail.com<br>Phone: 6347495098<br>Address: Irving, Texas<br>Blood Group: B+<br>Emergency Contact: VishnuPriya - 6347495098          |

**Kalyan Raju Keerthipati**

Are you sure you want to delete this doctor?

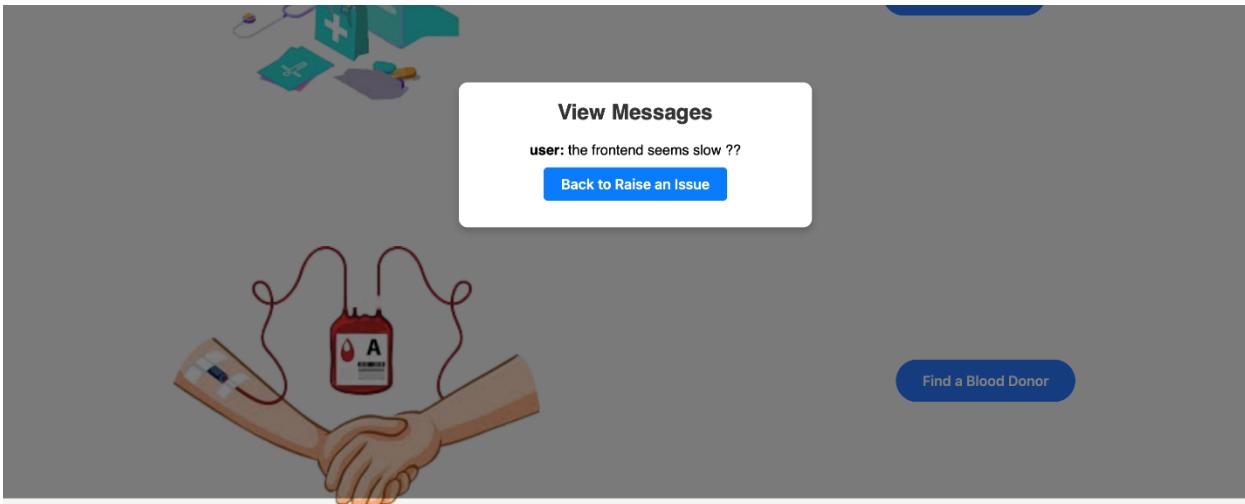
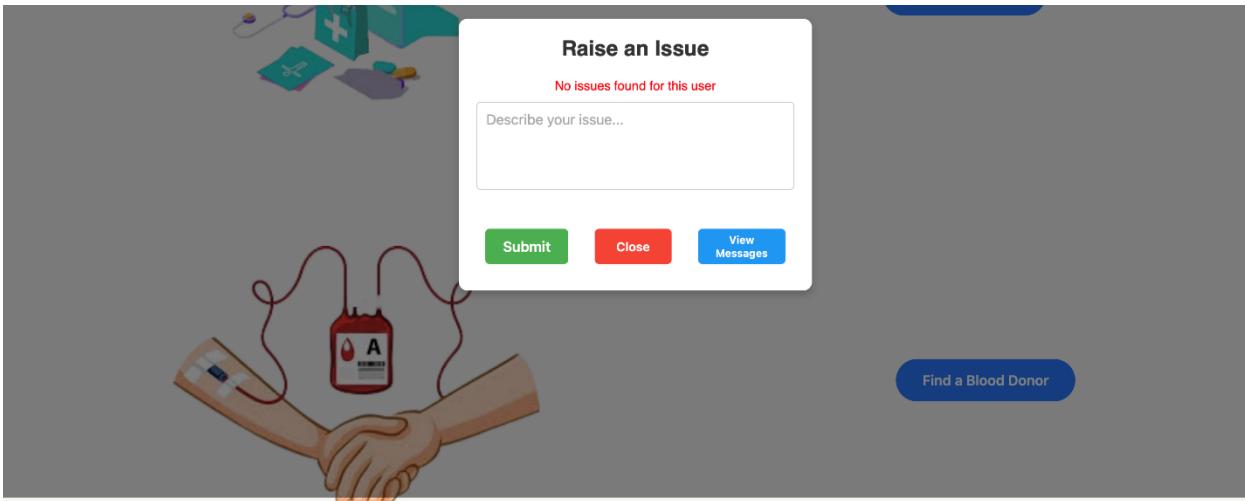
Cancel OK

**All Registered Doctors**

|  |  |   |
|--|--|---|
| <b>ganesh Doc</b><br>Email: ganesh1@gmail.com<br>Specialty: ENT<br>Phone: 6823550235<br>Clinic Address: Epochon Eagle<br>Experience: 10 years                                | <b>ganesh</b><br>Email: ganeshgundekaria@gmail.com<br>Specialty: psychology<br>Phone: 8177218764   | <b>ganesh01</b><br>Email: ganeshgani3717@gmail.com<br>Specialty: psychology<br>Phone: 8177218764<br>Clinic Address: 2556 cerros ln<br>Experience: 3 years |
| <b>AJAY KUMAR REDDY SAMMETA</b><br>Email: ajay@gmail.com<br>Specialty: dermatologist<br>Phone: 9406294715<br>Clinic Address: 425 I O O F St APT 1414<br>Experience: 13 years | <b>kkr</b><br>Email: k@gmail.com<br>Specialty: surgeon<br>Phone: 5555555555<br>Clinic Address: 903 Avenue C Apt 1120<br>Experience: 13 years | <b>s</b><br>Email: ss@gmail.com<br>Specialty: Dentist<br>Phone: 1234566789<br>Clinic Address: 903 Avenue C Apt 1120<br>Experience: 5 years                |

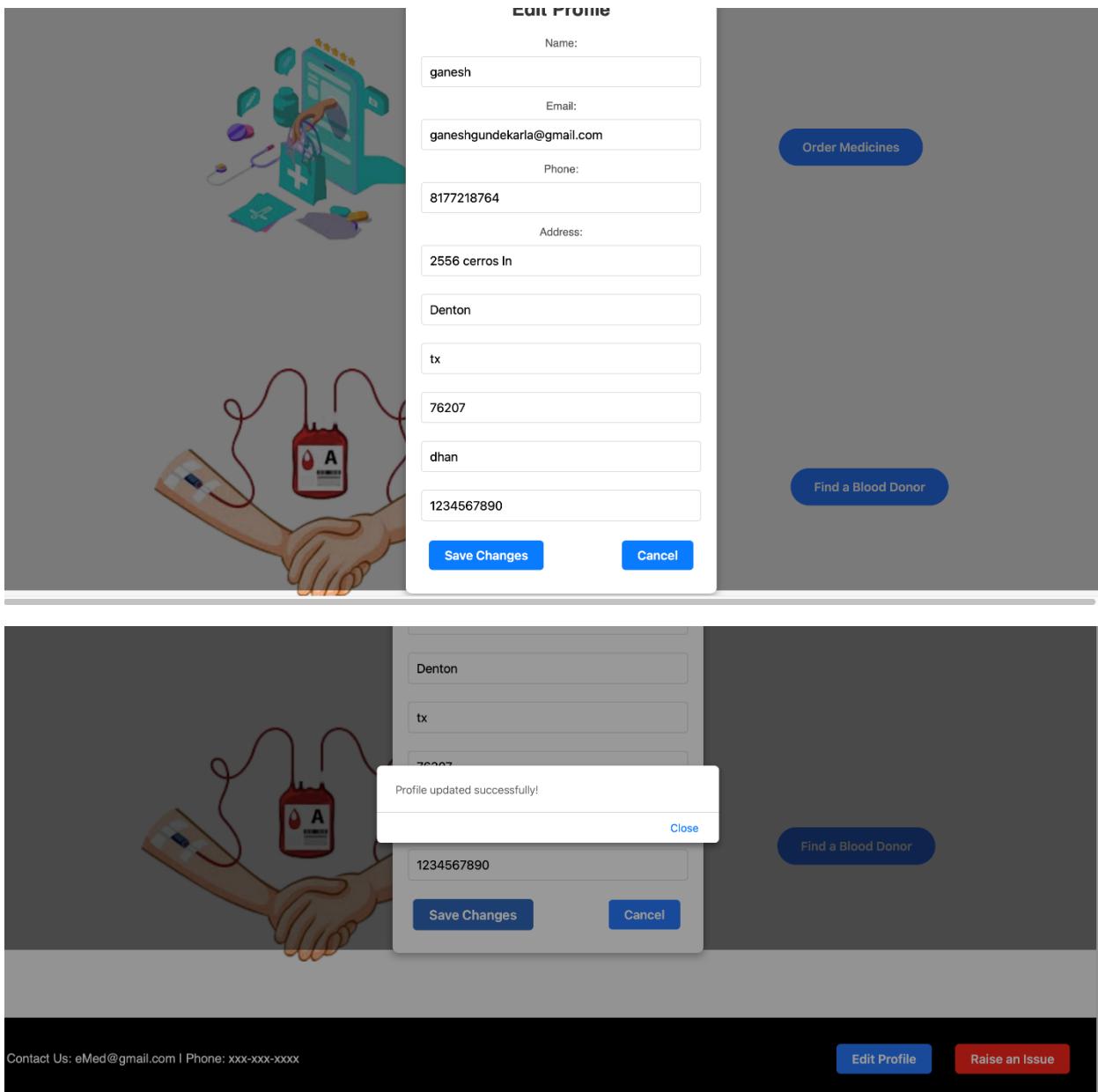
Added functionality : Raise an issue :

- Here , user feedback can be crucial when it comes to running a website and the user reviews must be carefully considered in order to expand our website.
- Hence , we have added a user review which is allowed only when we are logged in and it takes all the feedback from it to the admin so that the admin can make necessary changes .
- This way the user gets to interact with the admin and can make this website much more interactive.



Added functionality : edit our profile :

- a. Once the user or doctor is logged in , he / she can now edit their profile by clicking on to the edit profile button and making necessary changes.
- b. These changes are being updated in the backend too.



### Instructions to compile and run code:

Ensure **Node.js** and **MongoDB** are installed.

- Launch MongoDB with **MongoDB** if it's not running.
- As we are updating an existing setup, pull the latest code changes with the following command:  
**git pull origin main**
- Then navigate to project folder **cd SOFTWARE\_ENGINEERING\_PROJECT\_group7/src**
- Then run the new dependencies **npm install**. This ensures that all the packages required are installed.
- Navigate to backend file location and start the server **node server.js**

- In new terminal navigate to frontend directory **cd frontend** and run **npm start**
- Finally, open browser and navigate to [\*\*https://localhost:3000\*\*](https://localhost:3000)

#### **Instructions to run test Cases:**

- Ensure **Node.js** and **MongoDB** are installed, and the application is fully set up with all dependencies.
- Open a terminal and go to the project folder  
 cd SOFTWARE\_ENGINEERING\_PROJECT\_group7/src
- And then Install common testing libraries for backend testing, and **Jest** for frontend.
- Write testcases for each of the test files.
- Execute the following command to run backend tests  
 npx mocha tests --timeout 10000
- Similarly for frontend add test.js files in the frontend src directory for each component or module.
- Use the command **npm test** to execute the jest. This will detect and run all test.js files
- After running all the test cases check which tests passed or failed in the terminal output and for any failing read the error messages and debug code accordingly.

#### **Ending Feature Summary:**

##### **Implemented features:**

- User authentication & Registration:
  - a. This feature enables users to register users can log in once registered.
  - b. User can see his/her orders, appointments, and other information by logging in.

Progress: It has been executed successfully without any limitations.

- Medicine Browsing & Purchase:
  - a. Users can search and browse medicines that are available to purchase.
  - b. This feature enables customers to check their required medicines, add medications to a cart, and proceed further for checkout.

Progress: Completed: it has been executed successfully without any limitations, the part where we add the browsing functionality is a bit confusing to us but we pulled that off.

- Appointment Scheduling with doctors:
  - a. This feature shows detailed doctor profiles with information about the specialties, qualifications, and availability of each doctor.
  - b. Allows customers to book doctor appointments according to their preferences and availability.
  - c. Fundamental UI/UX: Simple and appealing visuals are being used to make the website look good.

Progress: Completed: here, making an appointment with the existing doctors is a challenging task we have encountered, although we have managed to get it working, it is a good functionality when it comes to an Embedded website as it can be one of the important features.

- Product Management Improvements:

- a. Allow admin users to edit or remove products.
- b. Implement search functionality for users to find products by name or category.

Progress: Completed We have created a separate landing page for the admin and we have created and granted most of the privileges to the admin. Like the view to entire existing users and doctors, and the list of donors available. The admin can be able to remove users and doctors, if I would be doing this continuation for the next semester, we would like to add more privileges to the admin as the admin can have more grip on the website.

- Checkout Process:

- a. Enable users to proceed through checkout using their shopping cart.
- b. Prompt users to provide payment and shipping information.
- c. Upon successful checkout, send confirmation emails with order details.

Progress: Completed: We have implemented a Stripe payment as a client-side and we have integrated it perfectly, it uses some cards to initiate a payment, and we get to see all the orders on our site with all the prices listed making sure that we have real-time communication.

- User Experience Improvements:

- a. Implement mobile responsiveness to ensure smooth use on all devices.
- b. Add accessibility features like alt text for images and keyboard navigation, ensuring WCAG compliance's Performance optimization to reduce load times, targeting a sub-3 second response time for page loads.

Progress: We have a bit to integrate this feature, and although it is done, we must integrate this website on mobile devices, it runs well and there are no errors.

- User Profile Enhancement:

- a. Improve the user profile system to deliver customized services and a better overall user experience.
- b. Enable users to check their order history and appointment history easily.
- c. Set up user preferences for e-mail for order.

Progress: Completed Successfully: here we made sure that there are customized services integrated like Order history, view appointments, leave an issue, email for orders, etc, and also a rating system for doctors when users have completed their appointment.

- Enhanced Search and Smart Filter System:

- a. Implement advanced search and filtering for finding medicines, doctors, and blood donors.

- b. Create a text search in MongoDB to find drugs by name, category, and symptoms.

Progress: Completed: As we have integrated lots of medicines, we have enabled a smart filtering system and we have integrated it in multiple pages like the medicines pages, view appointments, and blood donors. This is a feature that we think is important and we will use this feature if we continue integrating this feature in multiple areas.

- Real-Time Features:

- a. Make sure that real-time communication channels are secure and handle high traffic smoothly.

Progress: Completed: We made sure that there is a proper communication

Between pages and we made sure that we made a common communication ground between the patient, admin and doctor.

- User Feedback and Review System:

- a. Improve the feedback mechanism to provide better service and quality control.
- b. Allow users to leave detailed reviews and feedback on their experience.
- c. Add a rating system for doctors, medicines, and services provided by the platform.

Progress: completed: We made sure to integrate a raise an issue feature where we get to report all the bugs to the admin, and this makes us get to know really about the website's bugs and hope to fix them. If we continue this project, we will aim to implement a live chat that requires python language to integrate along with the raise an issue feature.

- Profile updates:

- a. Allow all the users to be able to update their profile information after they are once logged in.
- b. Make sure that the backend database has been updated with the updated information.

Progress: completed, this is one is a simple yet fundamental feature that is done properly in user pages.

## **Unimplemented Fea**

### **Future Plans:**

- a. Live chat which will be integrated with our raise an issue feature.
- b. Optimize database design to reduce redundancy.
- c. Emergency services requests like calls to the emergency response services.

- d. We plan to integrate remote health monitoring in our project where we could monitor patients' health remotely which I think would be the most challenging feature.

#### **Reflection:**

#### **Accomplished Work:**

The implementation of additional functionalities, such as user feedback collection, profile editing, and blood donor filtering, was successfully completed. Enhancements to the admin panel were made to improve the management of users, doctors, and appointments. Detailed instructions for compiling, running, and testing the code were also finalized to ensure smooth operation.

#### **Work Done:**

This deliverable was completed through effective teamwork and collaboration. Each team member contributed their skills, and modular design principles were followed to simplify integration and testing processes. Regular updates ensured the smooth addition of new features.

#### **Improvement which was needed:**

Edge case testing could have been addressed more thoroughly to prevent potential issues. Communication regarding code dependencies and configurations could be enhanced for better synchronization and efficiency in future phases.

#### **Roles Assignment:**

| Task                                     | Top preference           |
|--|--------------------------|
| <b>Project Management Lead</b>           | Rishika Kandrigal        |
| <b>Requirements Lead</b>                 | Ganesh Gundekarla        |
| <b>Design Lead</b>                       | Vivek Nelluri            |
| <b>Implementation Lead for front-end</b> | Ganesh Gundekarla        |
| <b>Implementation Lead for back-end</b>  | Vishnu Priya Vulichi     |
| <b>Configuration Management Lead</b>     | Vivek Nelluri            |
| <b>Testing Lead</b>                      | Shabana Syed             |
| <b>Documentation Lead</b>                | Ajay Kumar Reddy Sammeta |
| <b>Demo and Presentation Lead</b>        | Pranav Chalasani         |
| <b>System Administrator Lead</b>         | Md Ariful Hasan          |

#### **SKILLS ASSIGNMENT:**

| Language/Technology            | Assigned to:   |
|--------------------------------|--|
| <b>Node.js with Express.js</b> | Ganesh Gundekarla, Pranav Chalasani                    |
| <b>MongoDB (via Mongoose)</b>  | Vishnu Priya Vulichi, Shabana Syed                     |
| <b>React.js</b>                | Ganesh Gundekarla, Rishika Kandrigal, Pranav Chalasani |

|  |  |
|--|--|
| <b>Axios for API requests</b>              | Vishnu Priya Vulichi, Ajay Kumar Reddy Sammeta |
| <b>Stripe Payment option (client-side)</b> | Ajay Kumar Reddy Sammeta, Ganesh Gundekarla    |
| <b>JavaScript Object Notation</b>          | Md Ariful Hasan, Vivek Nelluri                 |
| <b>JavaScript</b>                          | Vivek Nelluri, Md Ariful Hasan                 |
| <b>HTML5, CSS</b>                          | Shabana Syed, Rishika Kandrigal                |

#### Team members Description:

| Member name       | Contribution description  | Overall Contribution (%) | Note (if applicable) |
|-------------------|---|--------------------------|----------------------|
| Shabana Syed      | I have contributed front end part, worked on blood donors page, doctors information page and enhanced the user experience with website carousel which lead to the seamless user experience and smooth navigation throughout the website. Contributed to the sequence diagram.   | 12.5%                    |                      |
| Ganesh Gundekarla | Worked myself into setting up the backend and configuring it, also took care of deployment of the server, scheduling the logic has been done along with the creation of databases and models whilst maintaining a modular design and code organization. I also made sure that we have a testing suite as well as dependency management. | 12.5%                    |                      |
| Rishika Kandrigal | worked on front-end design, enhancing user experience across multiple pages and ensured responsive designs, consistent layouts, and intuitive interfaces. optimized usability and maintained visual coherence throughout the application.   | 12.5%                    |                      |
| Md Ariful Hasan   | Worked on the refelation part, documenting objectives, challenges, and achievements, and providing insights for future improvements to support the project's evolution.   | 12.5%                    |                      |

|                          |   |       |  |
|--------------------------|---|-------|--|
| Vishnu Priya Vulichi     | Worked on the front end for the payment form on user interface, and user orders. Added functionality to raise an issue by the user. Also implemented front-end code using axios API requests for handling user and doctor appointments. Refactored code for login, signup, and medicine pages.  | 12.5% |  |
| Vivek Nelluri            | I have worked on components that contribute to the management and display of blood donation-related information in the application, with user interactivity for filtering and managing donor requests in addition. I worked on compilation instructions to run code and test cases.   | 12.5% |  |
| Pranav Chalasani         | I worked primarily on writing and organizing the <b>test cases</b> for various features, ensuring that the platform meets its functional and non-functional requirements. I also collaborated closely with the team to create <b>test coverage reports</b> and make sure that new features were well-tested and aligned with quality standards. | 12.5% |  |
| Ajay Kumar Reddy Sammeta | I contributed by building a cart, checkout confirmation, Login & landing pages for doctors. I ensured a smooth and user-friendly experience with clear and intuitive navigation through the main sections of the application. Other than this I worked on Use-Case Diagram.   | 12.5% |  |