Screen Sketches

3_hosen_5

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Saint Cy’s Hospital

Actors

Patient

- Signin/Signup
    - Let users make and access accounts
- Pharmacy
    - Let users view medicines
- Cart/Checkout
    - Let users purchase medicines
- Schedule Appointments
    - Let users schedule appointments with a doctor
- Messages
    - Let users send messages to their doctors
- Notifications
    - Tells users when their appointments are coming up, their prescriptions are ready, or they have new lab results
- Reports/Records
    - Let users see their treatment plan, prescribed medicines, and lab results

Doctor

- Signin
    - Let doctors access their account
- Write Prescriptions
    - Let doctors prescribe medicines for
- Patient Histories
    - Let doctors modify and read patient histories
- Messages
    - Let doctors send messages to their patients
- Notifications
    - Tells doctors when their appointments are coming up
- Appointments
    - Let doctors schedule and cancel appointments

Admin

- CRUD for accounts

    - Create, Read, Update, and Delete user accounts
- CRUD for medicines
    - Create, Read, Update, and Delete user accounts
- Display Logged Errors
    - Display all errors from the backend, on the frontend
- Notifications
    - Notify admins if a critical failure occurs on the server

Non-Functional Reqs

Safety

- Safety is extremely important for our app. We handle a lot of sensitive user information, such as patient histories, credit card numbers, or insurance information

Usability

- It’s important that a hospital app is easy to use, visually uncluttered, and accessible to all kinds of people in order to work efficiently.

Reliability

- It’s very important for a hospital app to be reliable, as it deals with patient health. If the app was unreliable, it could cause real damage to patients, both mentally and physically.

Tables

Users: Primary table that stores all the users of the application.

- ID - Primary Key
- UserName - Unique Identifier
- Email - Unique
- Password - Hashed
- User_Type - The type of user - PATIENT, DOCTOR, or ADMIN
- Phone

Patients: A Table that stores all the patients. Upon signup, if the user is a patient it's put in this table along with the users table.

- ID - Same ID as the user table
- UserName - Same UserName as the user table
- Name - Name which is PUT later on in settings.
- DOB
- Gender
- Medication
- Medical Record Number
- Symptoms

Admin: A Table that stores all the admins. The admin role has to be assigned from the database.

- ID - Same ID as the user table
- UserName - Same UserName as the user table
- Name - Name which is PUT later on in settings.
- Status - If the admin is online or offline
- LastLogin - Last Login time of the admin
- Permissions - If the admin has access to things like patient history, etc.

Doctor: A Table that stores all the doctors. The doctor role has to be assigned from the database or by an Admin

- ID - Same ID as the user table
- UserName - Same UserName as the user table
- Name - Name which is PUT later on in settings.
- Speciality - What the doctor specializes in (Surgeon, Nurse, Nutritionist, etc.)
- Phone Number

Reports: Table that is linked to the patients table. Stores all reports of the patients that are given by the doctor.

- ID - Primary Key for each report
- Date - When the report was made
- Result - What was the outcome of the report
- Report type - What is the appointment for (Example - Nose Bleed)

Pharmacy Products: A table that stores all the products in the pharmacy. It can be operated on using CRUD operations. Makes the pharmacy dynamic.

- ID - Unique product ID
- Dosage
- Product Name - Chemical Name
- General Name - Commonly known as
- Image URL - Link to the image of the product.
- Price

Cart: Stores the cart data of all the users with the UserID to identify which items are in which user's cart.

- User ID - Same ID as the user table
- Product ID - Same ID as the pharmacy products table
- Quantity - The quantity of the product.
- Price
- Creation Date - When the item was stored in the cart.

Error Log: A table that is called whenever the application reaches a catch block. It logs the error details in the table, which can be accessed on the admin portal.

- ID - Primary Key
- Creation Date - When the error occurred
- Error File Name - Name of the file in which the error occurred
- Method Name - Name of the method in which the error occurred
- Error Line Number - The line where the error occurred
- Error Message - What the error was
- Stack Trace - The whole exception stack

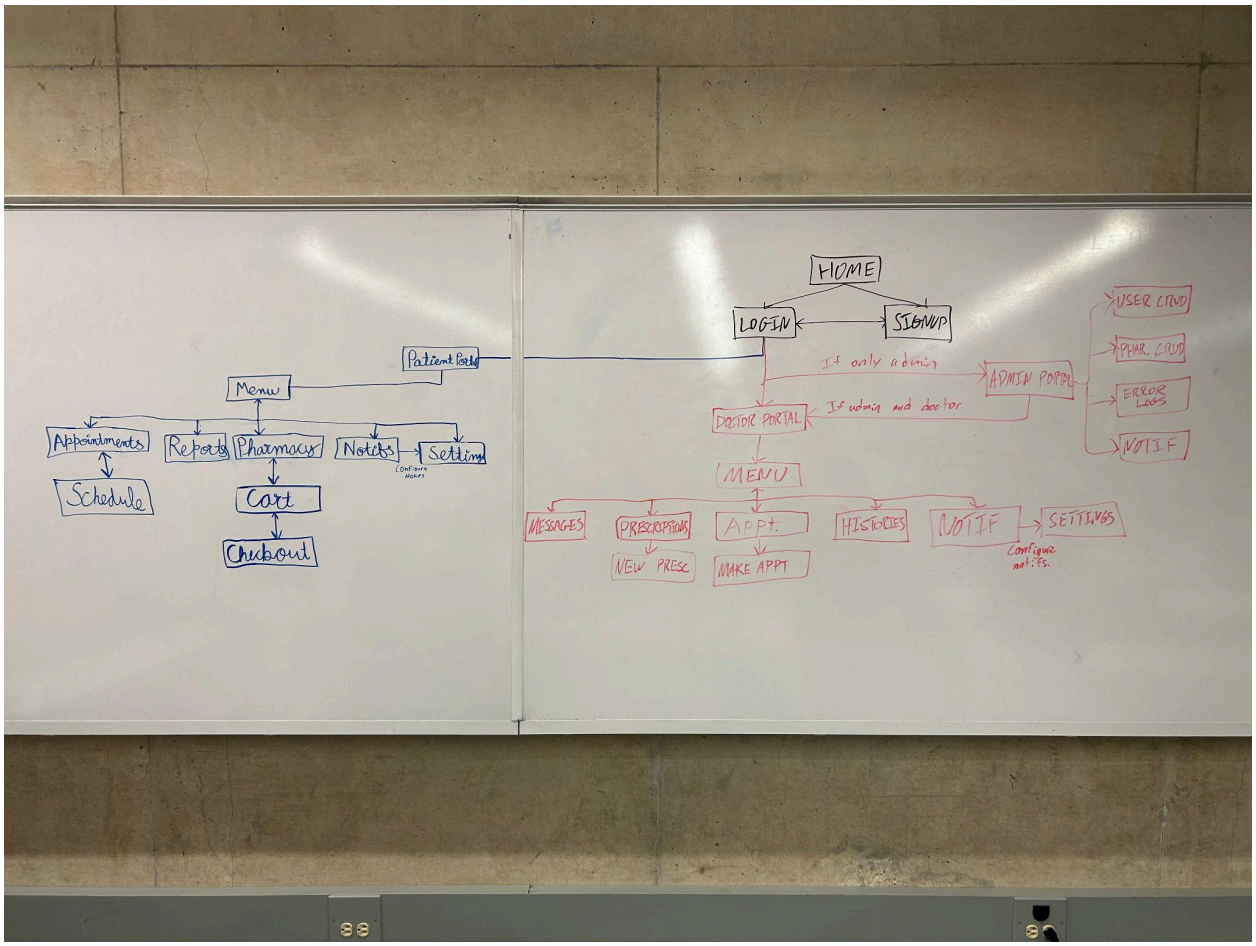
Notifications: A Table that logs all the notifications sent through the application.

- Notification ID - Primary Key
- User ID - Same ID as the user table
- Notification Date - When the notification was sent out
- Message - The message of the notification

Relations -

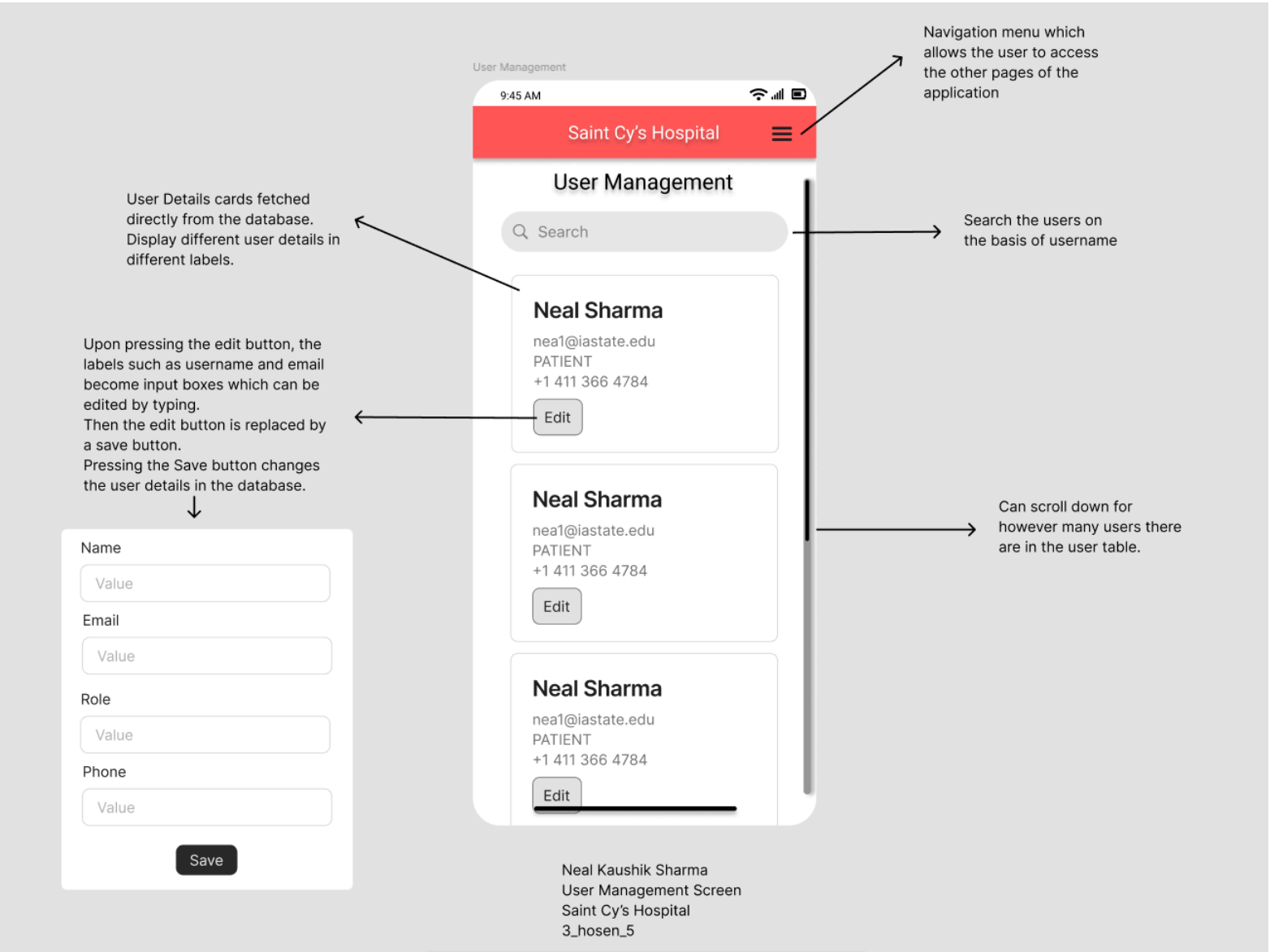
One-to-one - User - Patient, User - Doctor, User - Admin
One-to-many - Report - Patient, Report - Doctor
Many-to-many - User - Cart, User - Notification

Screen Flow


Patient Portal
Menu
Appointments
Reports
Pharmacy
Notifs
Settings
Schedule
Cart
Checkout
HOME
LOGIN
SIGNUP
If only admin
ADMIN PORTAL
If admin and doctor
DOCTOR PORTAL
USER CRUD
PHAR. CRUD
ERROR LOGS
NOTIF
MENU
MESSAGES
PRESCRIPTIONS
APPT.
HISTORIES
NOTIF
SETTINGS
VIEW PRESC
MAKE APPT

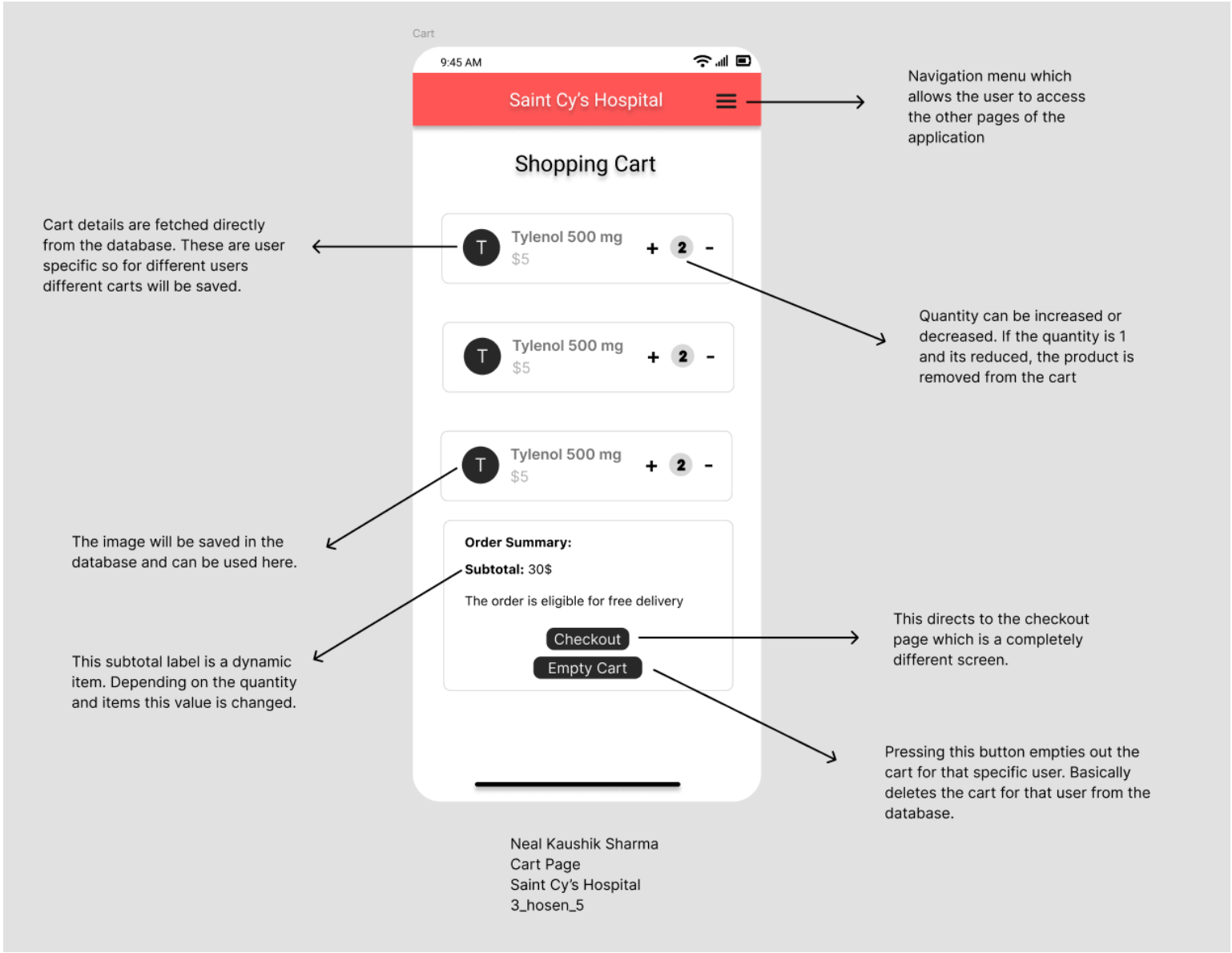
Neal Kaushik Sharma

User Management Screen - Will be visible for the admin



Neal Kaushik Sharma

Cart Screen - Will be visible for the Patients / Customers/
Accessible from the Pharmacy Page, where users can add items to the cart.



Neal Kaushik Sharma
Cart Page
Saint Cy's Hospital
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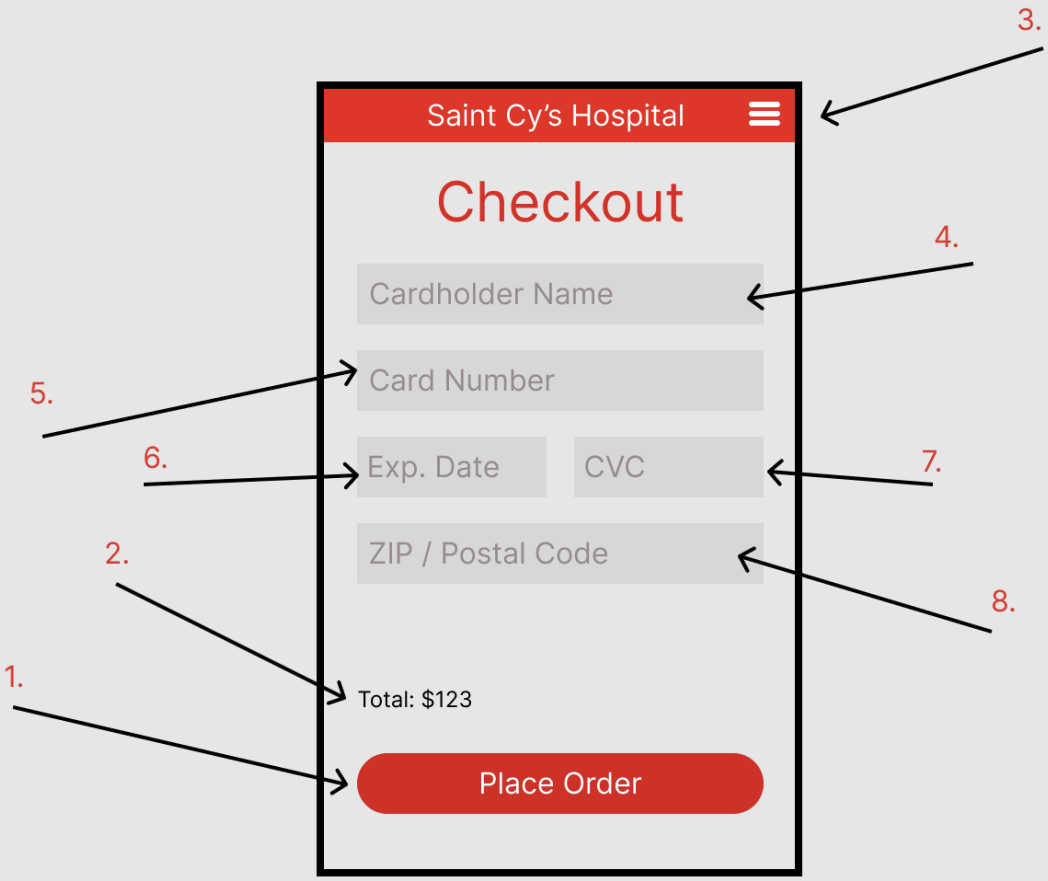
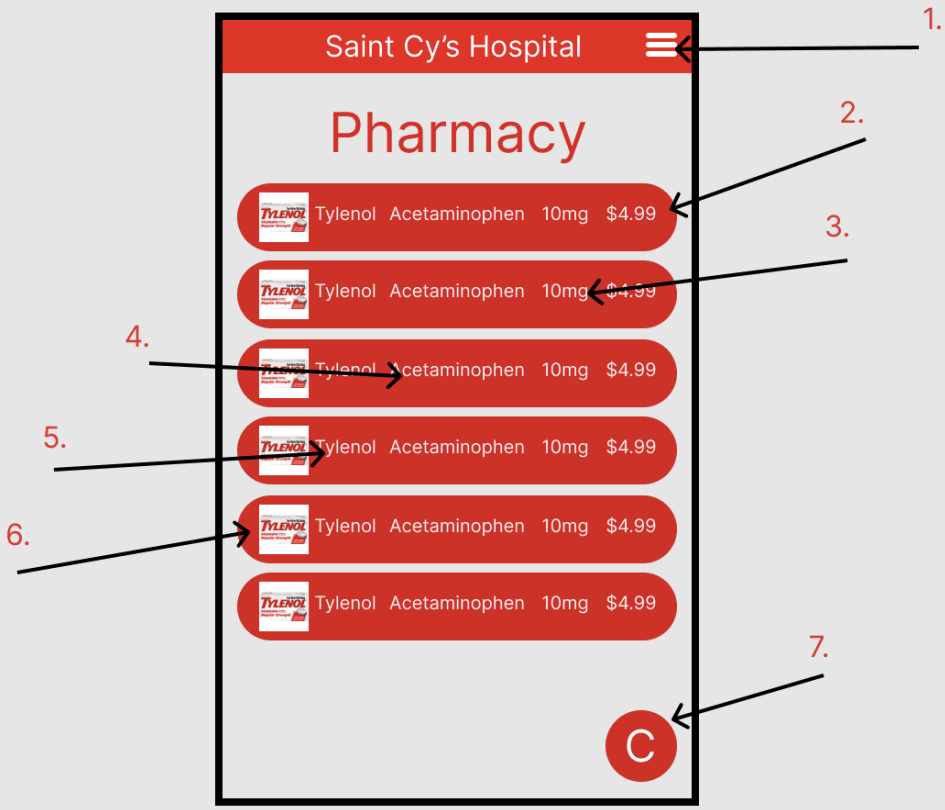
Trice Buchanan



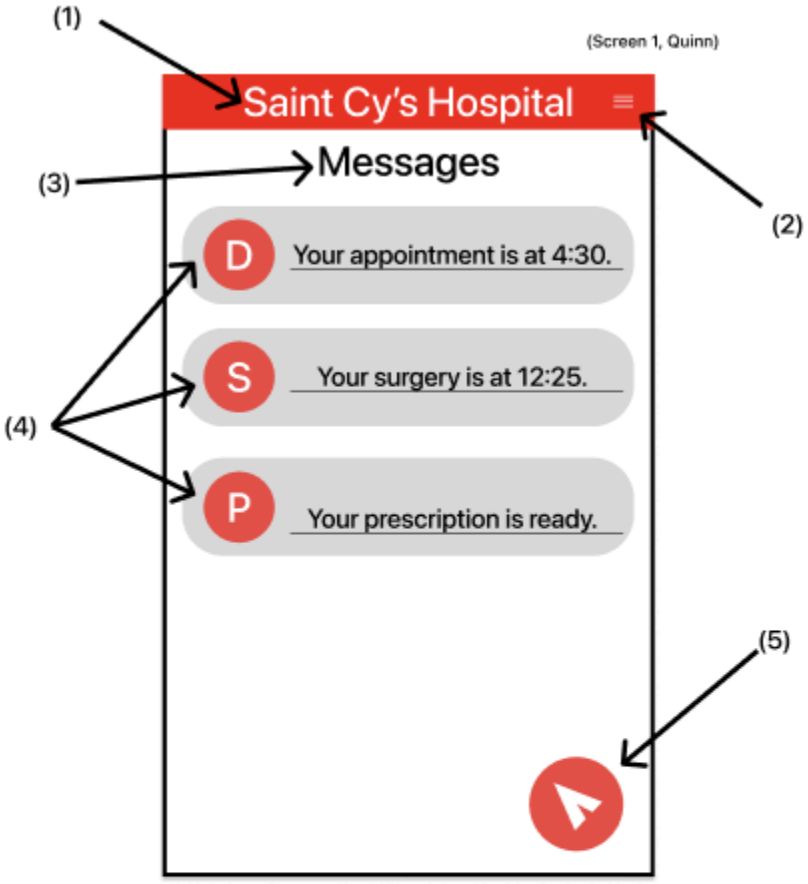
This screen is accessed from the cart. It cannot be accessed from the menu (3). On this page, users must input their name (4), card number (4), expiration date (6), CVC code (7), and their ZIP code (8). Displayed below that will be the total cost of the purchase they are about to make (2). Then they will be able to click the place order button (1). which will begin a (secure) call to the backend to process payment. They will get a notification that their prescription is being filled, as well as a notification when it is ready to pick up.

Trice Buchanan



This screen can be accessed by anybody with a patient account. It displays a list of currently available generic drugs, and if they have a current prescription for a drug, it will also show up here (such as a controlled substance). Each drug displays an image (6), brand name (5), generic name (4), dosage (3), and price (2). There is also the normal navigation up above to the right (1). They may then access their cart from the bottom right (7).

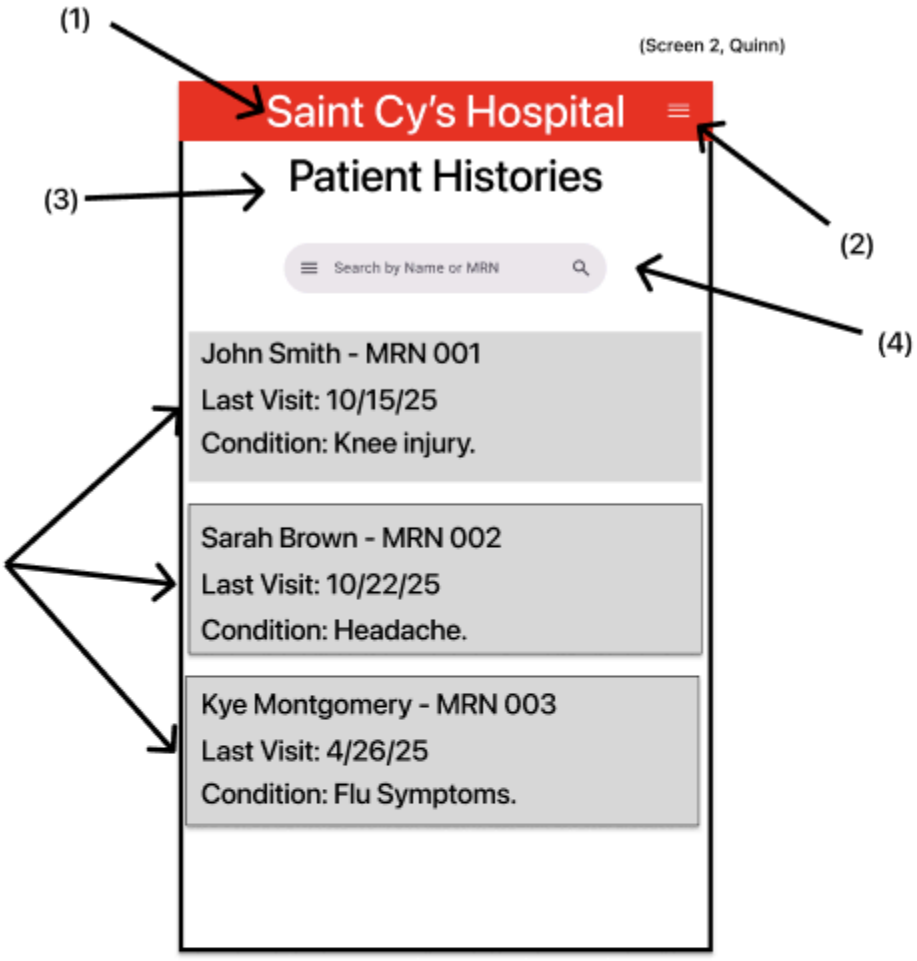
Quinn Beckman



This screen will be used for handling the chats feature. The user will be able to have multiple saved chats with other people, and can click on them to view past messages and respond to them.

(1) The name of the app, part of the basic navbar across the different pages of the app. (2) The important part of the navbar, after being pressed, a list of different pages will appear and the user will be able to navigate the app through those choices. (3) The title of the current page, messages. (4) The user's current chats, can be pressed to open and allow the user to respond and review old messages. There is also a profile icon for profile pictures. The default is the account owner's first initial. (5) The new chat button. If a user needs to message someone they do not already have saved on their screen, they can create a new one here.

Quinn Beckman

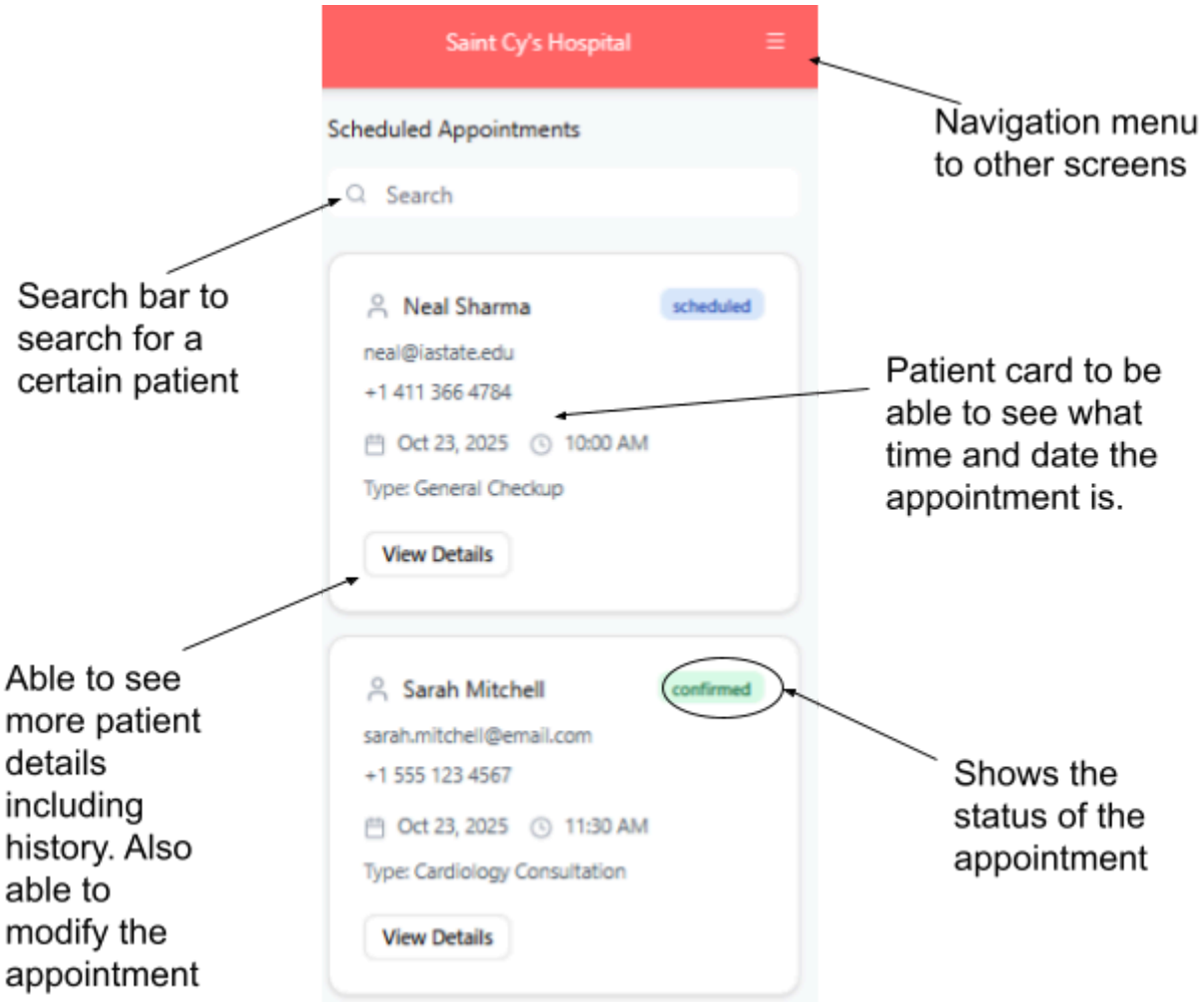


This screen will be used for Patient Histories. The user will be able to view a patients information, and change things like conditions and current medications.

(1) The name of the app, part of the basic navbar across the different pages of the app. (2) The important part of the navbar, after being pressed, a list of different pages will appear and the user will be able to navigate the app through those choices. (3) The title of the current page, Patient Histories. (4) A search bar for navigating through Patient Histories. The user can either search by name or MRN(Medical Record Number). (5) The list of Patient Histories, the user can click on a patient, and it will bring up a page of that patients info. In that page they will be able to edit certain information related to their visit. After these edits are made, a patient can view it in their Reports.

Devank Uppal

Doctors screen to be able to see their scheduled meeting



Devank Uppal

Patient settings page