

Class Project Phase I Team 54

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Project Overview

Log in/ Registering page:

Stakeholders' requirements: The Login/Register Page should have the following: While on the registering page, The registering page would have the following.

- Logo with our name
- Full name
- Email (To verify their email address before creating an account)
- Username (This would be used for login)
- Creating a password
- Sign up button (To create a new account)

While creating the login page, we would have the following

- Logo with our name
- Username
- Password (Authentication)
- Sign in button (To get access to your account dashboard)
- Sign up button

While on this page, the stakeholders would have much to choose from. They would first land on the login page, where they would be prompted to input their username as well as password; if the stakeholder did not have an account with us, they would click on the sign-up button, which would prompt them to a different page, where they would be able to create an account with us. If authentication fails while logging in, it will prompt an "Incorrect username or password" text, and the user will need to try again.

Depending on the username, the application would prompt them to their respective views, i.e., patient, nurse, and doctor views.

Nurse View:

Stakeholders' Requirements: The Nurse's view should have the following:

When the user logs in as a nurse, the nurse should be able to-

- Search or register patients by name or ID
- Record patient vitals including height, weight, blood pressure, temperature
- Ask questions about medications, allergies, medical history
- Add additional notes for the doctor

The nurse's interface allows them to search for patients to pull up their file. The nurse can then input the latest vitals and basic health details into standardized fields. For example, they can record values for height, weight, blood pressure, and temperature. There are also fields to document known allergies, current medications the patient is taking, and any general health concerns the patient mentions. After

entering all the information, the nurse will click a "Continue" button to save everything to the patient's record. This data will then become available for the doctor to see when they meet with that patient. Allowing nurses to collect basic information in advance facilitates more efficient doctor consultations. It also ensures patient data remains organized in one central system.

Doctor's view

Stakeholders' Requirements: The Doctor's view should have the following:

When the doctors log in, they should be able to-

- Search for patients, appointments, specialists
- View patient names, summary and profile
- Access the utilities such as patient's portal, vitals and prescriptions
- Have a view of the booked appointment schedule

The doctor's user view enables searching for patients by name to open their medical profile. Several shortcut buttons give quick access to key patient information, including:

- <u>Patients and Portal Button</u>: Lets doctors review patient summaries, medical history, and nurse's preparatory notes.
- <u>Vitals Button</u>: Opens latest vitals entered by the nurse including weight, height, blood pressure, etc.
- <u>Prescriptions Button</u>: Shows patient's medication history and previously prescribed treatments.

Additionally, the doctor's view shows a list of upcoming appointments with patient names and times. During patient examinations, the doctor can add notes on physical exam findings and diagnosed conditions. If medications are needed, the doctor can enter an electronic prescription linked to the pharmacy on file for that patient.

The messaging system can also be accessed through the doctor's dashboard by clicking on the sidebar shortcut. This allows them to send direct messages to patients or specialists within the system.

The specialized user interface and shortcuts allow doctors fast access to patient information to aid efficient diagnosis and care during appointments. Centralizing all records and communication in one system facilitates continuity of care across patient visits.

Patient View

Stakeholders' Requirements: When a patient logs in, the patient should be able to:

- View profile and appointments
- Access insurance information

- View health history and doctor assignments
- Receive notifications and send messages
- Edit profile details

The Patient View gives access to a personal profile with health and appointment details. Patients can view a history of all notifications, messages, booked appointments, and previous visit reports. The profile shows doctors assigned for future and past appointments to maintain continuity of care. Insurance information is visible here as well.

A key part of the Patient View is the ability to receive notifications and reminders. These may relate to upcoming appointments, prescription refills due, or reply messages from their doctor. Notifications keep patients engaged in managing their health. Additionally, patients can edit contact information, insurance details, pharmacy selection and other aspects of their profile. An activity history allows patients to audit changes to their file. The messaging system can also be accessed to send queries to doctors and nurses. Received responses would show up as notifications. This facilitates transparent communication.

In summary, the Patient View and notifications system allows people to actively participate in their own care - booking appointments, messaging providers, updating personal information, reviewing visit history and treatment plans. Notifications and reminders aid patient compliance. The overview gives them greater autonomy over their health management.

Messaging System

Stakeholders' Requirements: The messaging system is the communication platform between the doctors, nurses, patients and other medical specialists. The messaging system should have the following features-

- Direct messaging between patients and doctors
- Group messaging with internal specialists
- Message history and notifications

The messaging system enables seamless communication between patients and health providers within the system. There are two main sections - Direct Messages and Group Messages.

Direct Messages This allows one-on-one conversations between the patient and their doctor. The doctor can reply to patient queries directly. The chat history is archived for both parties to view. If an unread message is sent, it will trigger a notification for the recipient to log in and respond. This facilitates timely responses and continuity in conversations.

Group Messages This section allows doctors to engage in group message threads with other specialists/departments involved in a case. For example, querying a physical therapist regarding suitable exercises for a patient. The groups allow collaborative care across multiple disciplines. Message histories remain visible so providers can catch up on care decisions.

In summary, the messaging system conveniently enables transparent and timely communication between patients and their multidisciplinary care team. Core features like notifications and searchable histories make conversations productive and organized. This ultimately enables patient-centered and coordinated care.

Book Appointment

The "Book Appointment" page stands out as a thoughtfully designed component of a healthcare appointment scheduling system, emphasizing user-friendliness and practical utility. The page structure is carefully created so that patients may easily schedule appointments with their healthcare professionals.

Key elements of the "Book Appointment" page include:

- An input section where patients can submit their names to ensure a personalized experience and precise record-keeping for each scheduled session.
- A user-friendly scheduling system that allows patients to easily select both the date and time of their appointments. This interface usually includes a calendar view for date selection and a list of available time slots.
- Action buttons are prominently displayed, making it easier to complete the booking procedure. These include a button to confirm the appointment, rescheduling options, and a function that allows healthcare professionals to rapidly add new available appointment slots.

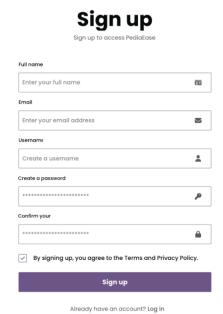
The page's design promotes clarity and usability, with a clean appearance and simple directions that take consumers from beginning to end of the procedure. The chosen color palette and font combine to produce a relaxing and professional ambiance, contributing to an overall favorable user experience.

To summarize, the "Book Appointment" page streamlines the appointment scheduling procedure, exemplifying a modern approach to healthcare service accessibility and patient happiness.

User Guide and Walkthrough

Login/Register Page:





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Log in

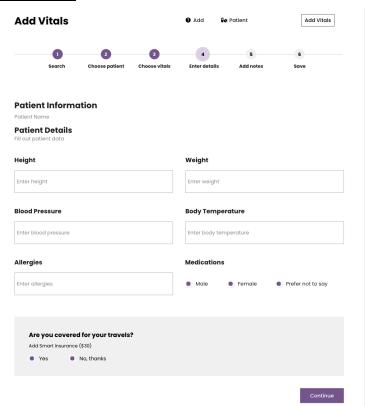
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Don't have an account? Sign up

When stakeholders arrive on the login page, they are welcomed with a logo and the application name. They enter their username and password and click the "Sign In" button to begin the authentication process. For newcomers without an account, the "Sign Up" button takes them to a registration page where they can create an account and define their role as patients, nurses, or doctors. If authentication fails, an explicit "Incorrect username or password" notification urges users to examine and try again. Successful authentication brings stakeholders to bespoke dashboards based on their roles, providing a more intuitive and individualized experience. The page prioritizes security by including features such as safe password entering and responsive design, resulting in a smooth and secure user journey with feedback and guidance throughout. Once logged in, users can easily select a logout option for greater security.

Nurse View:



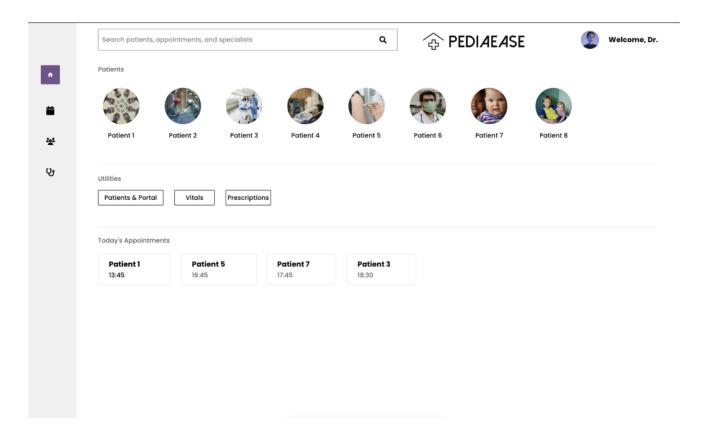
If a nurse logged into the system, she would able to view a screen where first they would be able to search for the patients with their name or ID, which would take her to the next screen where she would be able to select the specific patient and then move onto inputting their vitals into the system, After inputting the vitals, they would then be able to move to the next page, which asks general questions about the patient, such as,

- Height
- Weight

- Blood pressure
- Body temperature
- Known Allergies
- Medications
- Gender
- It would also show a prompt where the patient could opt into our competent insurance.

After clicking continue on this page, it asks the nurse for notes, where the nurse could note down any vital information she would want the doctor to know about the patient, after which she could save it.

Doctor View:



When opening the application in the doctor's view, they would be greeted on the home page. It would first have a search box where the doctor could search for the patients, appointments, and specialists. Under that, They would have a summary of the name of the patient they would be seeing that day, followed by shortcuts for the following.

- Patients and portal
 This would grant them access to patient information and the nurse's notes
- 2) Vitals
 This would show them the vitals of the patient.

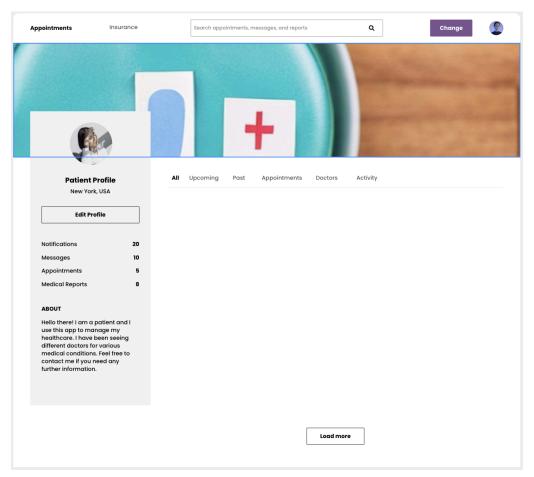
3) Prescriptions

This would show them the patient's history of medications.

Underneath all of this, they would get a window showing them the appointments they have with the patient's name and the time they would be meeting with them.

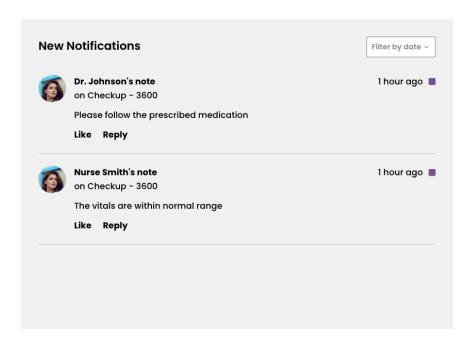
The doctor could see a sidebar on the left-hand side, which would take shortcuts to the above and patient profile.

Patient View:

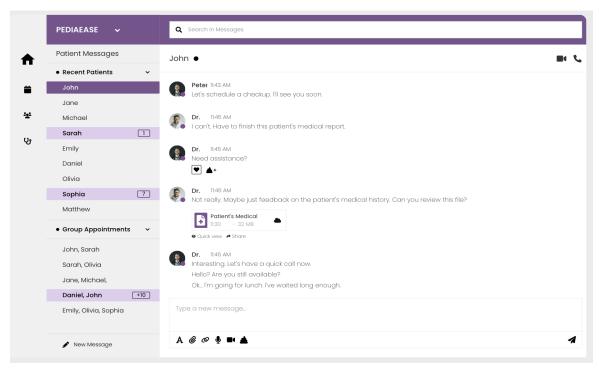


This starts with a patient profile where they can view their appointments and insurance. They can see their profiles with the history of all the notifications, messages, appointments, and reports. They can also see all their activity, the doctor they have worked with, and their upcoming appointments. There is also a section where they would be able to edit their profile. And receive notifications and updates on upcoming activities.

Patient Notifications

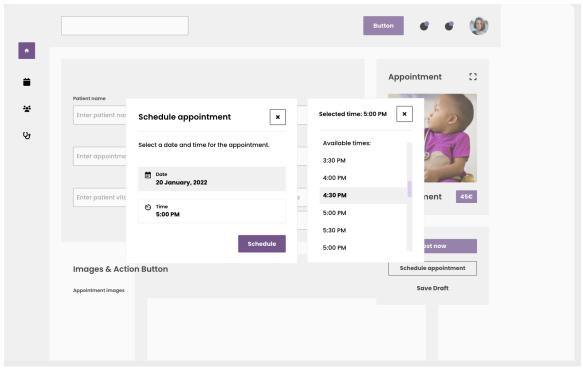


Messaging System:



For the messaging system, the patients could reach the doctor directly, and doctors could message specialists directly. We also made it so that the direct messages would be on the top and the group messages would be at the bottom. This would be a great addition to our projects.

Book Appointment:



When you open the appointment booking system, you are welcomed to the screen with an option to book an appointment with three sections.

- 1) Name of the patient
- 2) Date of the appointment
- 3) Time of the appointment

Here, the patients could book an appointment by choosing the days and the times using a scrolling menu. We also have two additional options at the bottom of the screen, which say reschedule appointments and which can be used to reschedule appointments made by patients and also post now, allowing doctors to post appointments for their patients.

Credit Sheet:

Team Member Name	Overall Contributions
Nikhil Kanodia	Mockup Tool (UI Screenshots) - 100%, Logo - 100%
Sanskar Srivastava	Project Overview - 25%, Overall Formating - 100%
Kushagra Tandon	Project Overview - 50%
Atharva Verma	User Guide and Walkthrough - 50%
Ashmit Pai	User Guide and Walkthrough - 50%, Project Overview - 25%