



Quick Doc

## Doctor Appointment App

### Project Report

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Section : 01

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## **Chapter 1. Introduction**

Our developed mobile app named **QuickDOC** as an easy and quick way to schedule appointments with doctors. Its primary purpose is to solve the time consumption issue for doctors as well as their patients through elimination of wait time or phone calls.

Using QuickDOC, the patients can open an account, search for any specialist doctors, and see their available dates and schedules. Without any hassle in only a few mouse clicks, they can fix an appointment as per their schedule. The patients can also see all their upcoming appointments in one place.

Conversely, physicians are capable of quickly going through their appointment schedule as well as their availability. This helps to make them more efficient when responding to their patients on schedule.

The other great benefit that QuickDOC has is the one-click emergency call function. If the patient has an emergency, then they can immediately reach out to the physician without having to use the booking procedure.

To sum up, QuickDOC is created to offer easy, quick, and convenient service to both doctors and patients in order to increase accessibility to healthcare.

### **1.1 Motivation**

In today's fast-paced world, accessing quality healthcare conveniently is more important than ever. Traditional appointment systems often involve long wait times, lack of coordination, and difficulty in managing patient records.

Our motivation behind developing the Quick Doc is to bridge the gap between patients and healthcare providers by offering a smart, accessible, and user-friendly platform. The app aims to simplify the appointment booking process, improve patient engagement, and enhance the overall efficiency of healthcare services.

## 1.2 Challenges Faced on Development

Throughout the development process of QuickDOC, we faced some issues that taught us and enhanced the app:

**Database Connection:** One of the main issues was to integrate the app with the database to store as well as show user information in real-time. We had to make sure that patient information, doctor information, and appointments reflected instantly and got updated correctly.

**Dynamic Slot Allocation:** The second challenge was to make sure that if a patient booked a time slot from any doctor, that same slot didn't become free to others. Creating this functionality required very precise coding to make sure that more than one patient can't book the same slot.

**Notifications System:** Besides that, we also encountered challenges in implementing notifications. We wanted to provide automatic reminders to the patients when their appointments were approaching. This part wasn't easy.

## **Chapter 2. Benefits & Usages**

### **2.1 For Patients:**

1. Instant Appointment Booking: Easily find and book appointments with available doctors based on specialty, location, and time preference.
2. 24/7 Access: Book, cancel, or reschedule appointments anytime, anywhere.
3. Health Records: Store and access medical history, prescriptions, and reports digitally.
4. Emergency Support: Instantly connect with doctors in urgent situations through one-click emergency call feature.
5. Convenience & Comfort: No more waiting in long lines or making multiple calls, everything is done within seconds.

### **2.2 For Doctors:**

1. Efficient Scheduling: Manage appointments, view patient history, and reduce no-shows.
2. Digital Health Records: Quickly access patient data for better diagnosis and treatment.
3. Patient Communication: Send updates, follow-ups, and prescriptions through the app.
4. Analytics: View appointment trends, patient statistics, and clinic performance.
5. Reputation & Reach: Attract more patients by being visible on the app and offering online booking.
6. Time Management: Spend less time on admin work and more on patient care.

### **2.3 Overall Benefits:**

1. Time-saving: Eliminates long queues and manual registration processes.
2. Error Reduction: Minimizes administrative errors in scheduling and data entry.
3. Secure & Scalable: Ensures secure handling of personal health data and scalability for future growth.
4. Improved Patient Satisfaction: Provides a smooth, quick, and reliable healthcare experience.

## **Chapter 3. Implementation Details**

### **3.1 Exceptional Feature**

One of the most unique and significant functionalities we created in QuickDOC is Dynamic Slot Management. This functionality makes sure that as soon as a patient books their appointment with a doctor, the time slot that is chosen is immediately marked as unavailable for other patients.

This eliminates double bookings and always maintains the accuracy of the doctor's schedule. It also helps to instill confidence in patients that their appointment is finalized and booked exclusively for them.

It is extremely helpful to doctors since the appointment won't overlap, saving time. To patients, this ensures that booking will proceed very smoothly and will not confuse them in any way.

Briefly, Dynamic Slot Management is perhaps the best QuickDOC has to offer when compared to traditional schedule systems.

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### 3.2 Wireframes

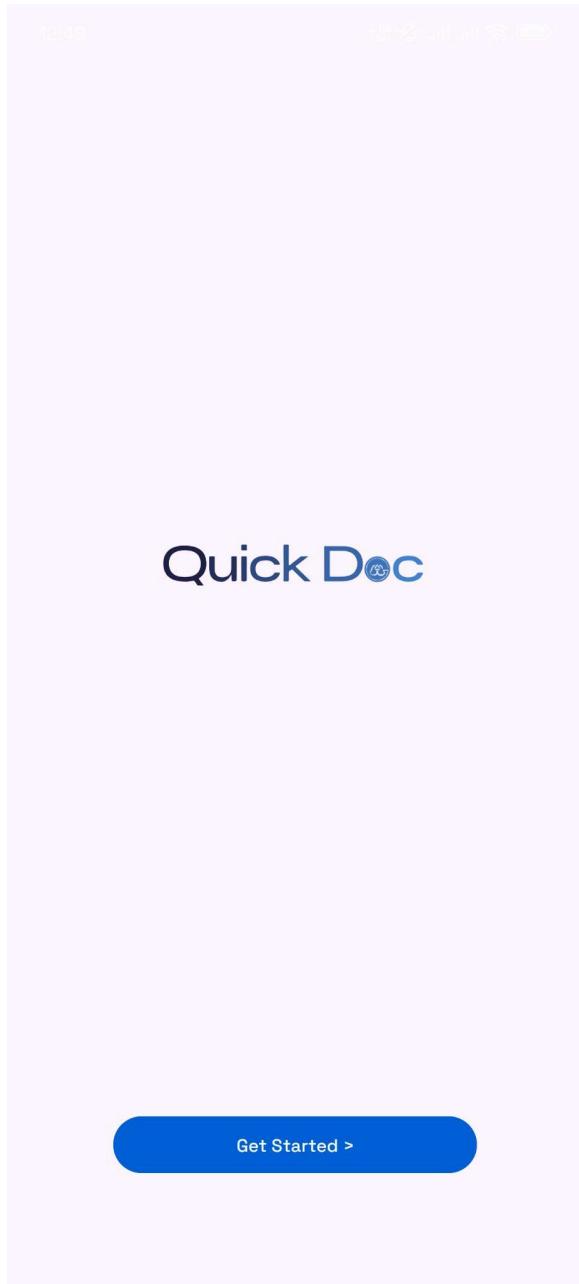


Figure 1 : Welcome Page

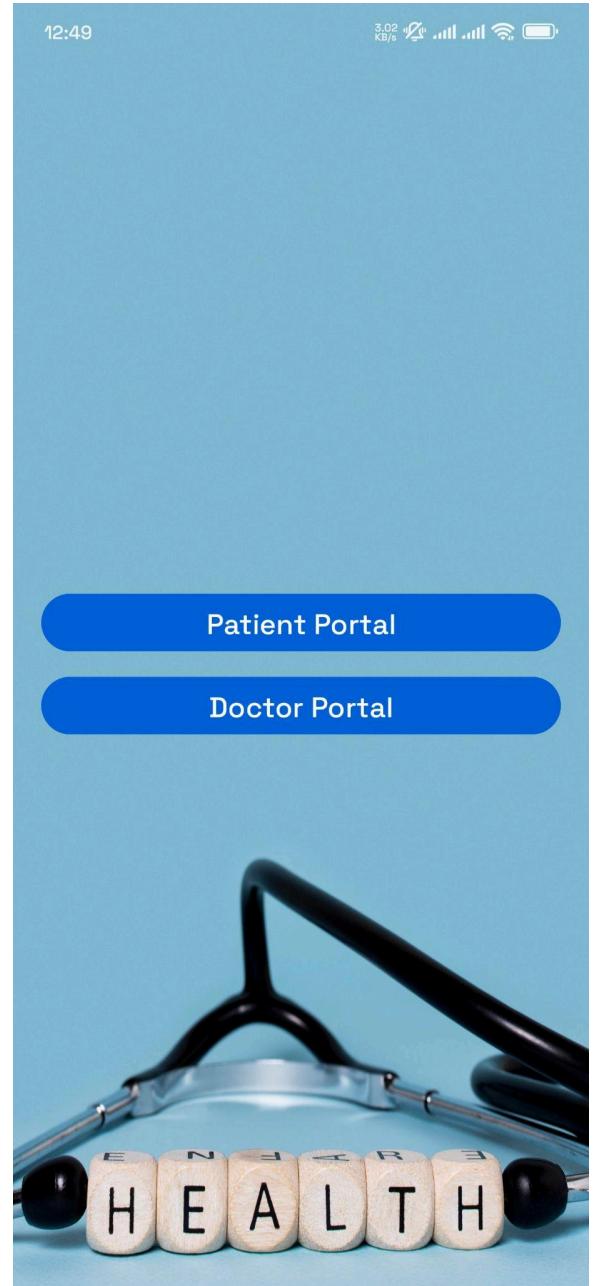


Figure 2 : Login Option

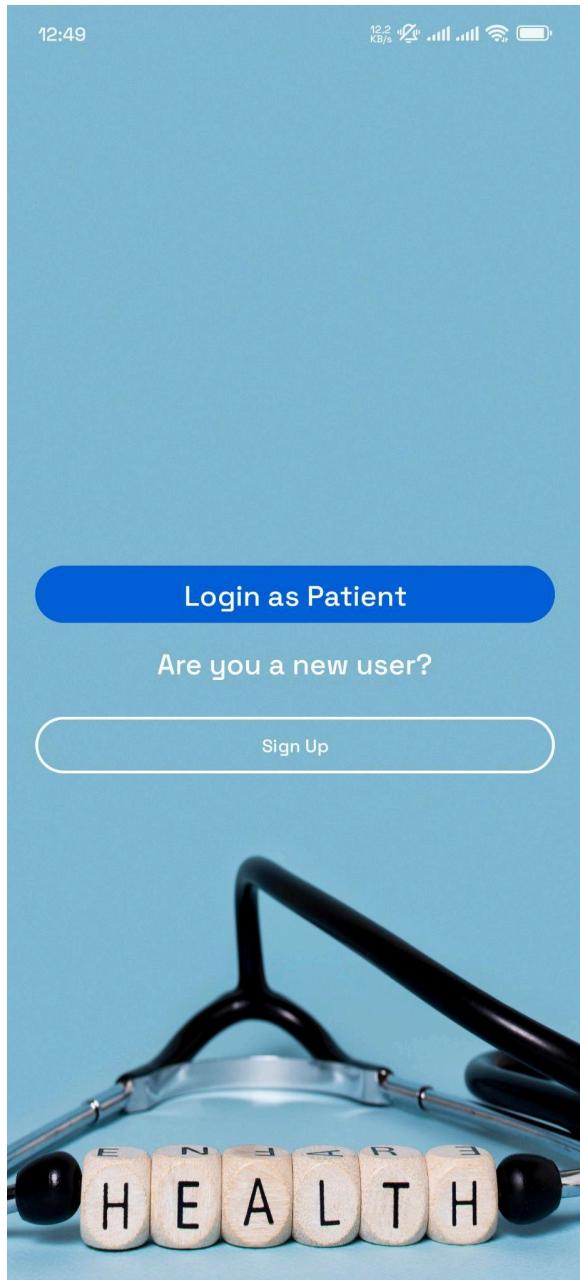


Figure 3 : Login/Signup as Patient

The screenshot shows a mobile application interface titled "Create Patient Account" at the top. Below the title is a black icon featuring a white stethoscope and a plus sign. The form consists of several input fields: "Name" (with a blank line), "Username" (with a blank line), "Email" (with a blank line), "Password" (with a blank line), "Re-enter Password" (with a blank line), "Address" (preceded by a small dark circular icon and followed by a blank line), and "Phone Number" (with a blank line). At the bottom left is a "Back" button, and at the bottom right is a prominent blue "Register" button.

Figure 4: Signing up/ Creating patient account

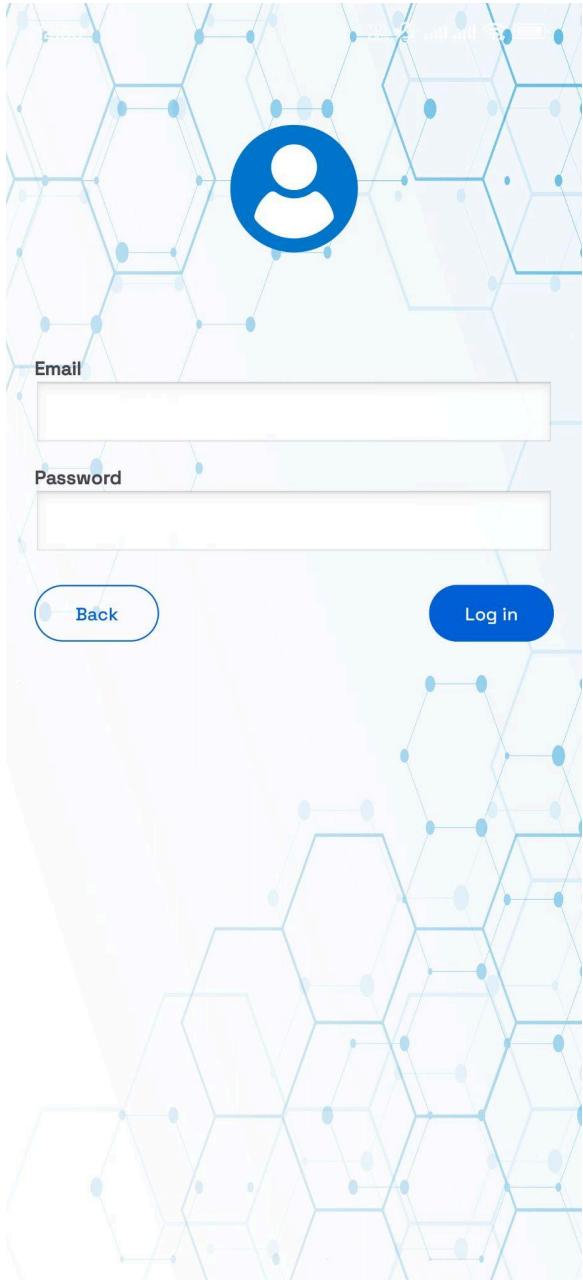


Figure 5: Patient Login

The Patient Homepage screen displays a user profile at the top. The profile picture shows a man, the name is 'Mohammad Adnan', and the location is 'komuna'. A blue button labeled 'My Dashboard' is next to the profile. Below the profile is a section titled 'Upcoming Consultation' showing an appointment with 'Rijia Parveen Raya' on '2025-09-01 [10:00 PM - 10:30 PM]'. A section titled 'Top Rated Doctors' lists five doctors with their names, profiles, and hospital information. At the bottom is a blue 'Log Out' button.

12:50 60.0 KB/s

Mohammad Adnan  
komuna

My Dashboard

Upcoming Consultation

Rijia Parveen Raya  
tesgtinggggg  
Khilgaon  
2025-09-01 [10:00 PM - 10:30 PM]

Top Rated Doctors

dsfdfd  
sdfsd  
Labaid Hospital Uttara  
[Profile Info](#)

Dr Raya  
Brain Dead  
EverCare  
[Profile Info](#)

doctor z  
cardiac  
komuna\_abaro  
[Profile Info](#)

Nafiz Ibna  
Brain  
banasree  
[Profile Info](#)

Rijia Parveen Raya  
tesgtinggggg  
Khilgaon  
[Profile Info](#)

Log Out

Figure 6 : Patient Homepage



Figure 7 : Patient Dashboard

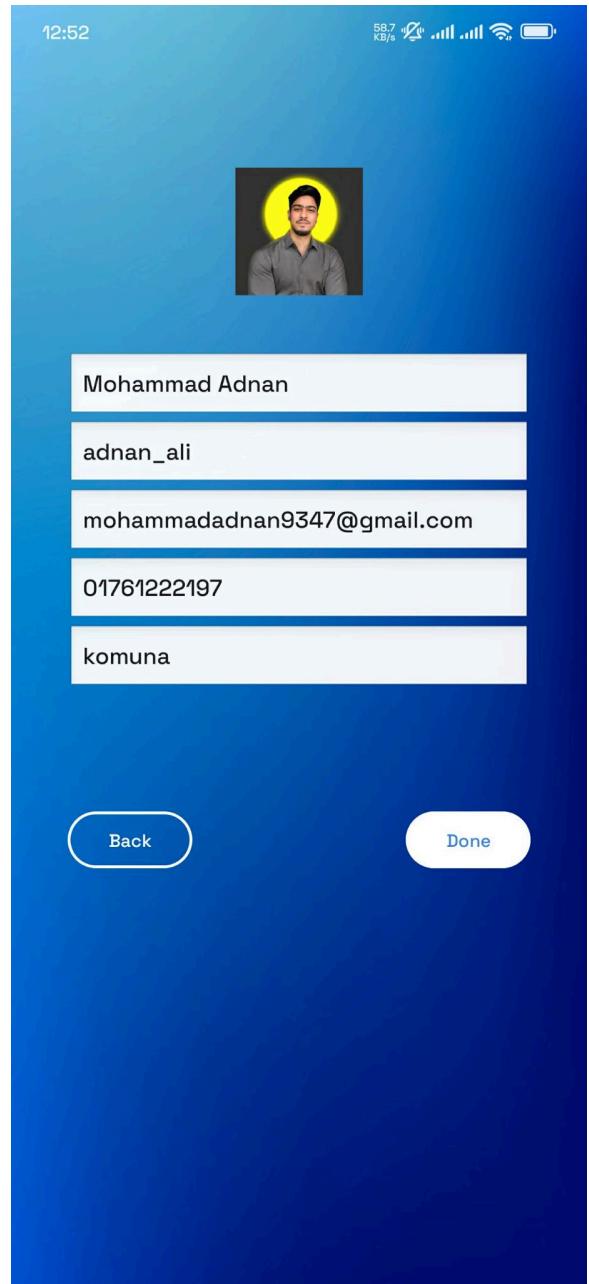


Figure 8 : Edit Patient Profile

## Book Appointment

Select a Doctor

doctor z (cardiac)

Choose a date to book appointment.

September 2025							>
M	T	W	T	F	S	S	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30						

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8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30						

Choose a time slot to book appointment.

09:00 PM - 09:30 PM

10:00 PM - 10:30 PM

11:00 PM - 11:30 PM

Back

Done

Choose a time slot to book appointment.

09:00 PM - 09:30 PM

10:00 PM - 10:30 PM

11:00 PM - 11:30 PM

Booked Appointment booked successfully!

Figure 9 : Book New Appointment

Figure 10 : After booking an appointment that booked slot becomes unaccessible

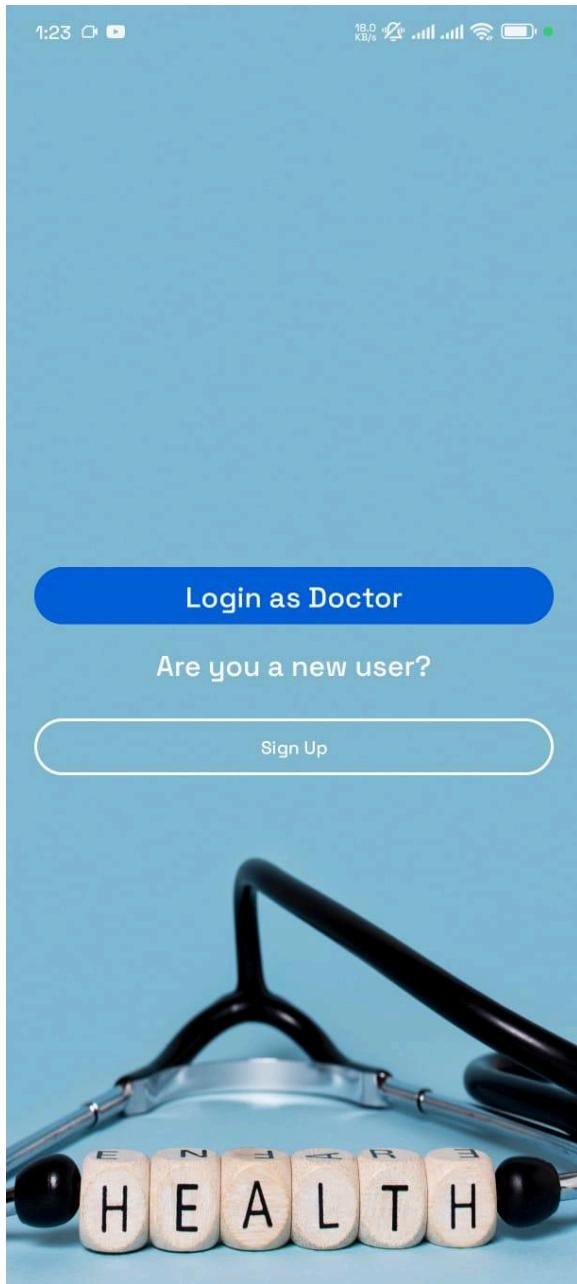


Figure 11 : Login/ Signup as doctor

The screenshot shows a "Create Doctor Account" form. At the top right, there is a camera icon with a plus sign, indicating where to upload a profile picture. Below the camera icon, there are several input fields with labels:

- Name: An empty horizontal text input field.
- Username: An empty horizontal text input field.
- Email: An empty horizontal text input field.
- Password: An empty horizontal text input field.
- Re-enter Password: An empty horizontal text input field.
- Address: An empty horizontal text input field.
- Phone Number: An empty horizontal text input field.
- Postal Code: An empty horizontal text input field.
- Short Bio: An empty horizontal text input field.
- Specialization: An empty horizontal text input field.
- Experience: An empty horizontal text input field.
- Qualification: An empty horizontal text input field.

At the bottom of the form, there are two buttons: "Back" on the left and "Register" on the right, both in blue rounded rectangles.

Figure 12 : Signup as Doctor

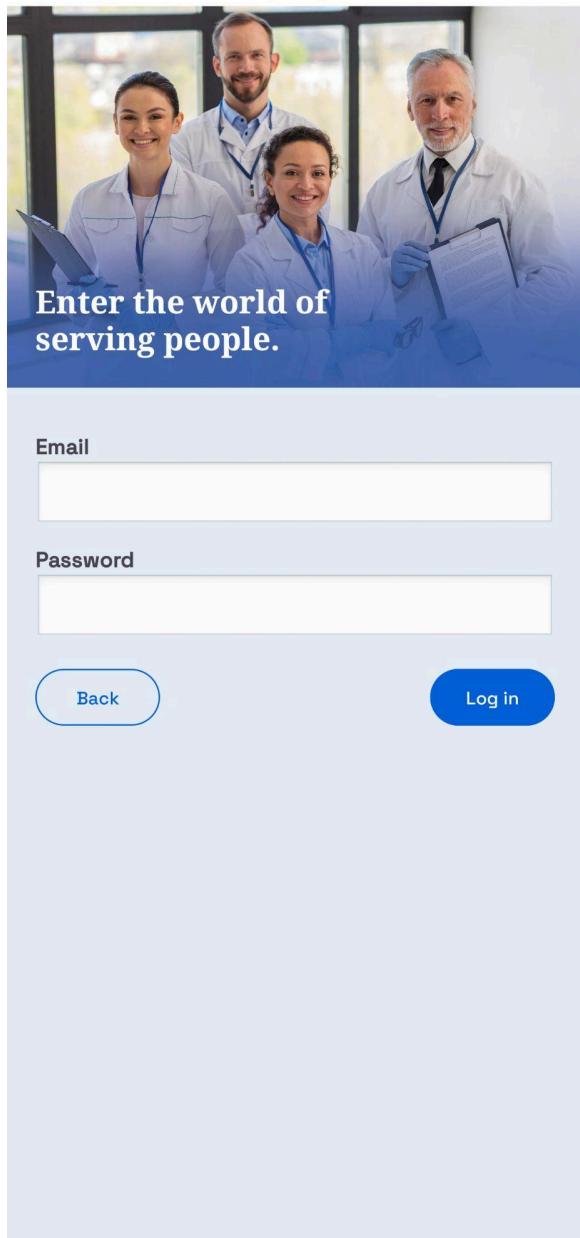


Figure 13 : Doctor Login

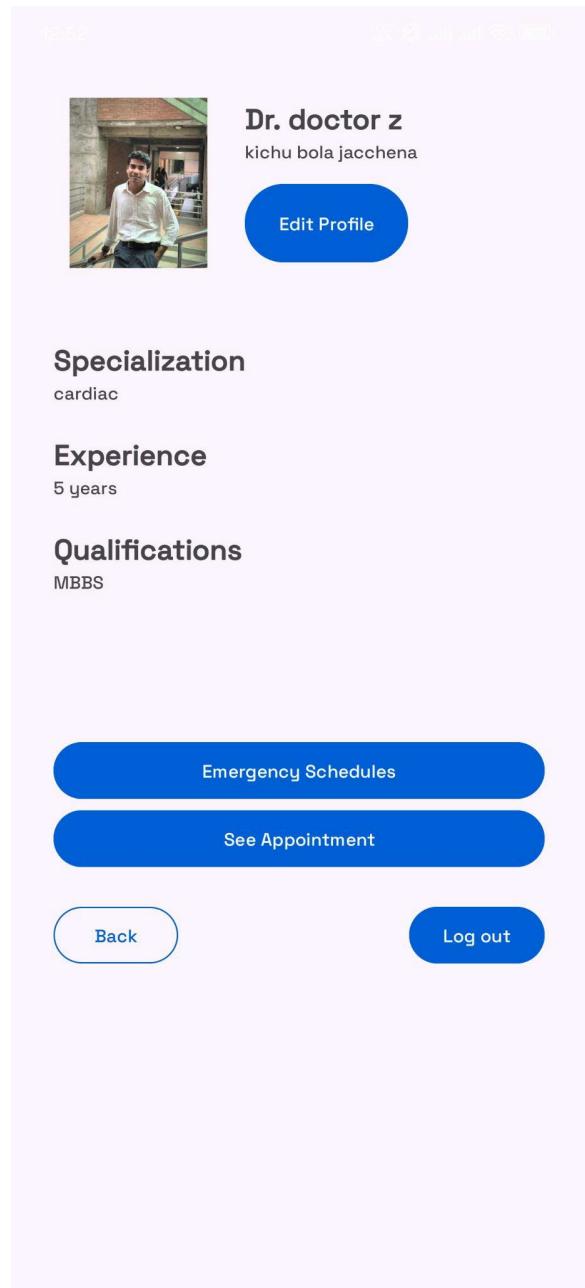


Figure 14 : Doctor's Dashboard

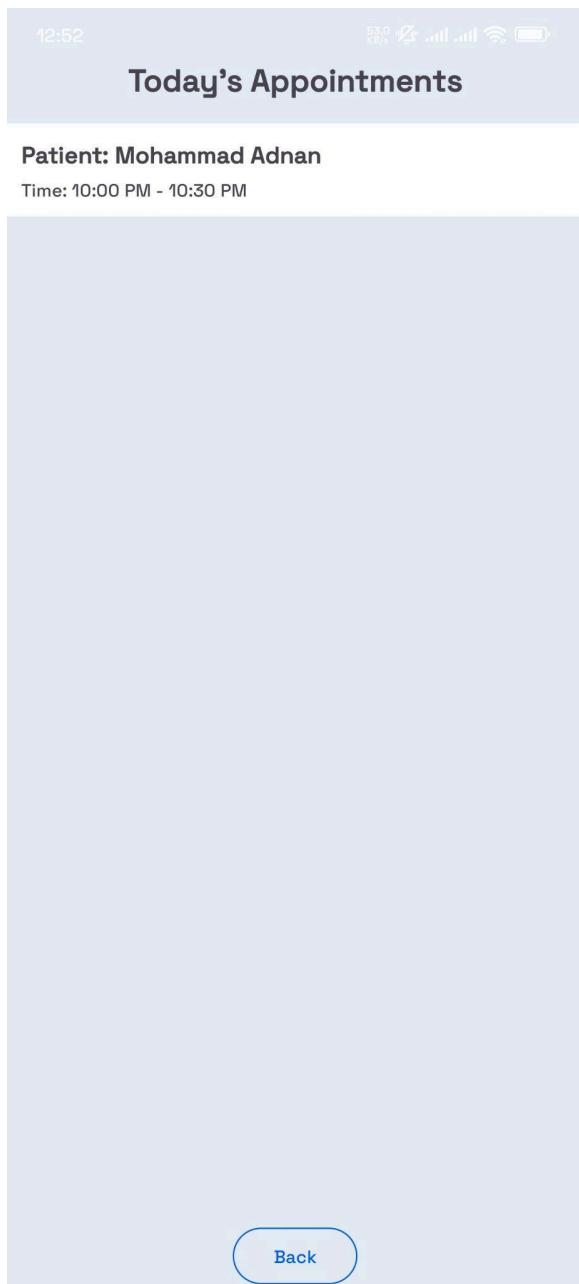


Figure 15 : Emergency/ Today's Appointment



Figure 16 : All Appointments



Figure 17 : Edit Doctor's Profile

## Chapter 4. Business Model

For QuickDOC, we are proposing the **Sponsorship Model** as a future business strategy. Under this model, we plan to collaborate with either one or various potential sponsors such as doctors, hospitals, pharmaceutical & medical companies, fitness & wellness brands, health insurance companies as well as non-profitable health agencies.

These sponsors can provide rewards, discounts, or health benefits to patients who use QuickDOC for activities like booking appointments, attending check-ups, or following health programs. In return, sponsors gain visibility and engagement within the app, while QuickDOC can generate revenue through these partnerships.

This is still in the proposal state. We will approach and partner with potential sponsors in the future when the app is deployed and gradually getting larger with more users.