

**Quick Doc**

# **Doctor Appointment App**

## **Project Report**

Course Title : Mobile Programming

Course Code : CSE489

Section : 01

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Date Of Submission : 1<sup>st</sup> September, 2025

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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

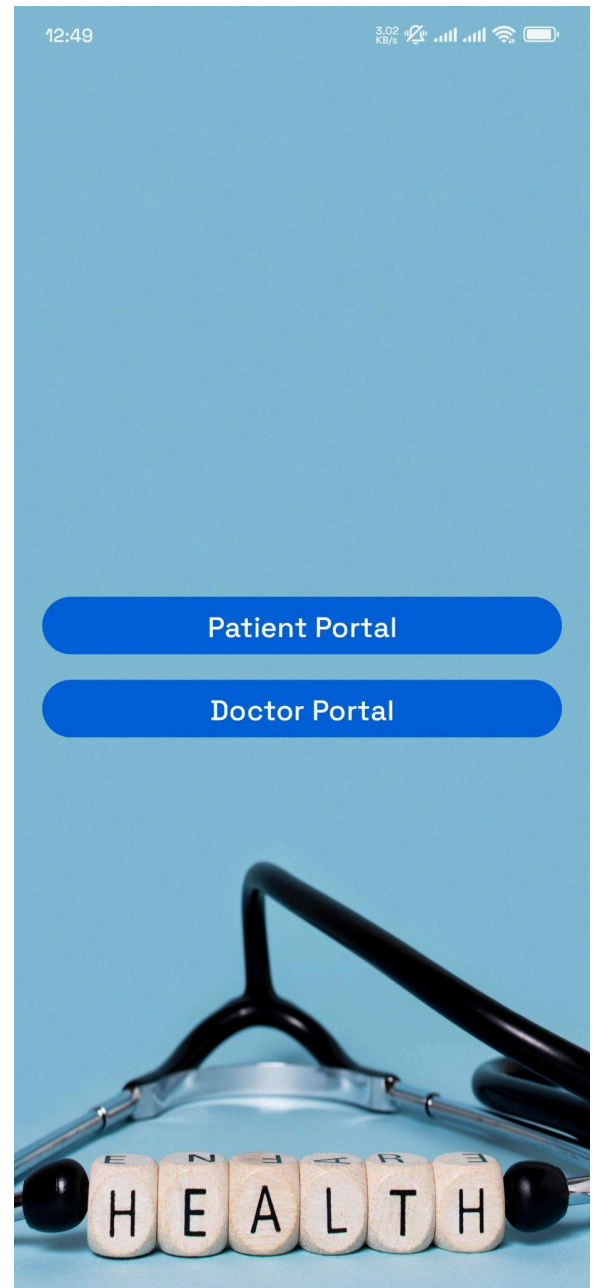


Figure 2 : Login Option



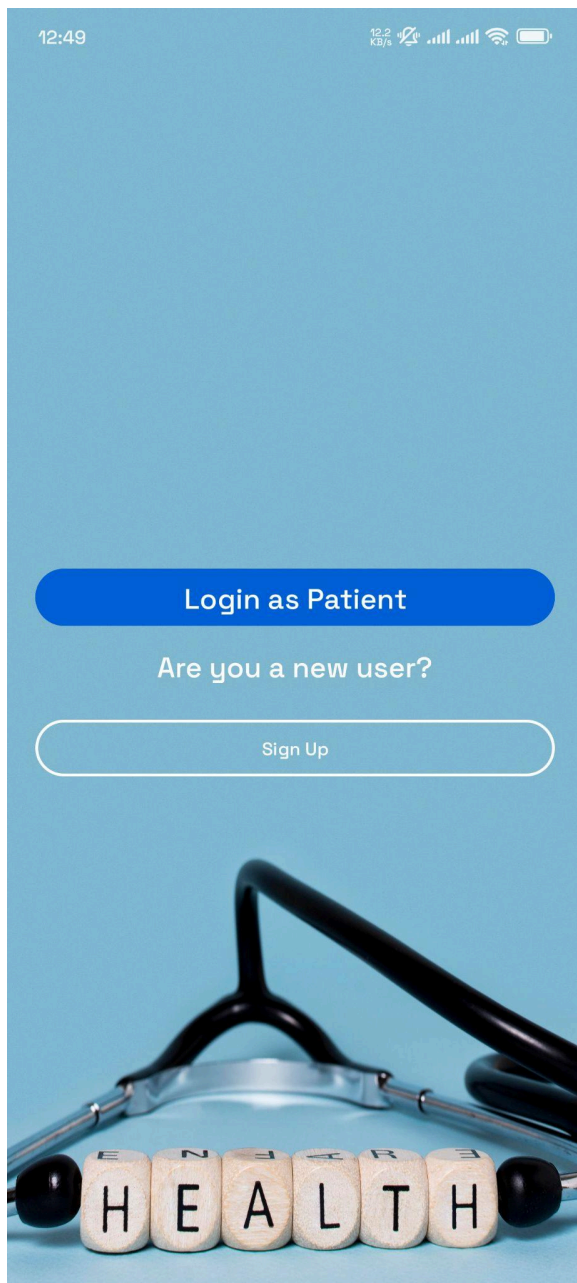


Figure 3 : Login/Signup as Patient

 A mobile app interface for creating a patient account. The background is a light blue color. At the top, the status bar shows the time as 1:18 and various connectivity icons. Below the status bar, the title "Create Patient Account" is displayed in blue. Underneath the title is a black icon of a person with a plus sign, representing a medical or health-related profile. The form consists of several input fields with labels to their left: "Name", "Username", "Email", "Password", "Re-enter Password", "Address", and "Phone Number". Each label is followed by a horizontal line representing the input field. At the bottom of the form, there are two buttons: a blue rounded button on the left with the text "Back" in white, and a blue rounded button on the right with the text "Register" in white.

Figure 4: Signing up/ Creating patient account

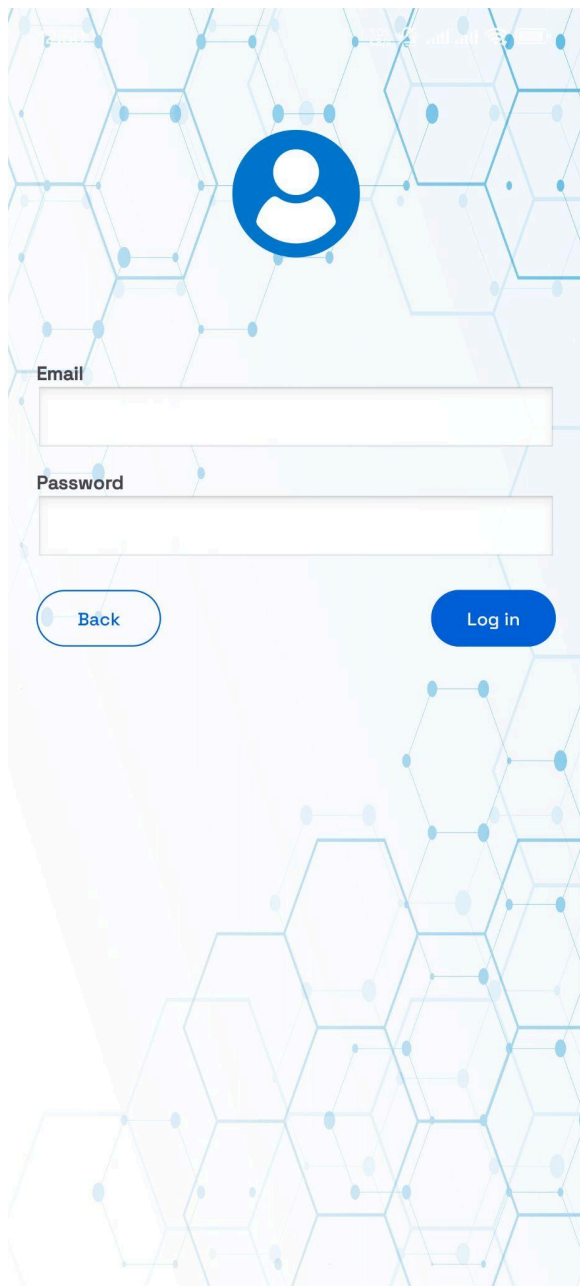


Figure 5: Patient Login

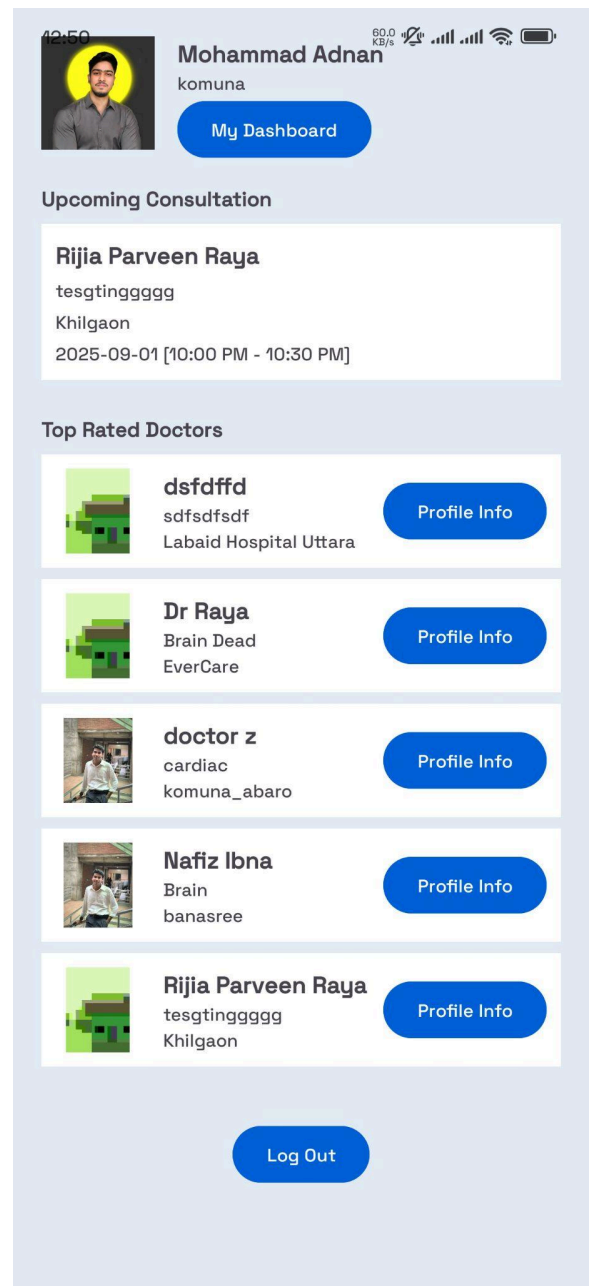


Figure 6 : Patient Homepage



Figure 7 : Patient Dashboard

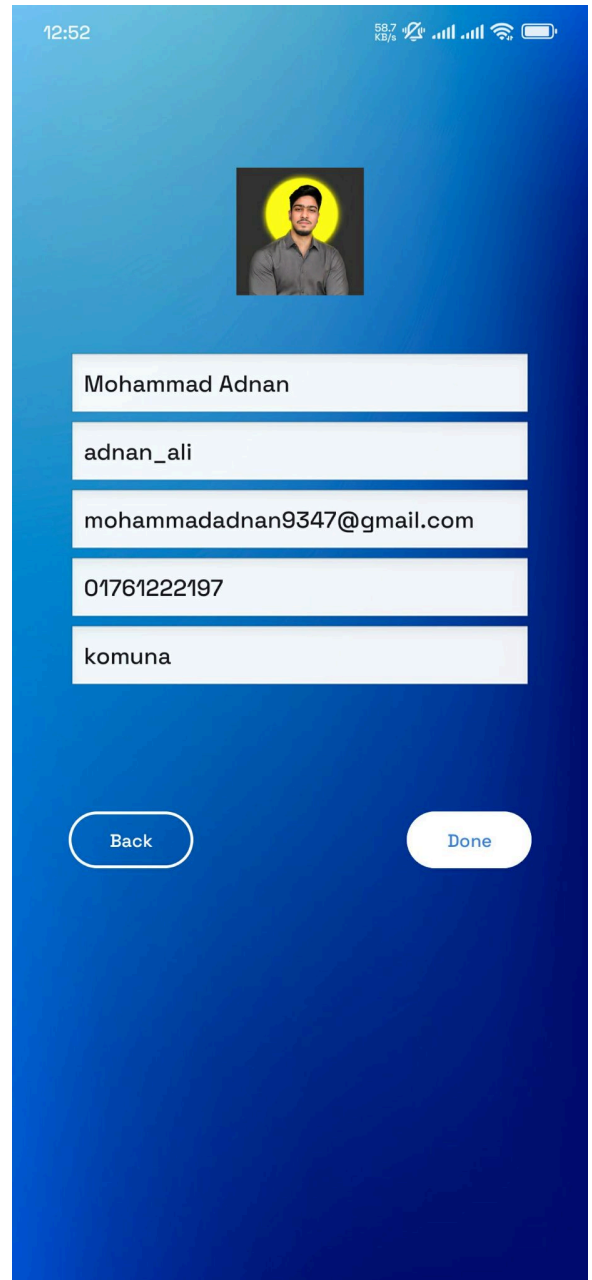


Figure 8 : Edit Patient Profile

## Book Appointment

Select a Doctor

doctor z (cardiac)

Choose a date to book appointment.

September 2025

M

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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

Figure 9 : Book New Appointment

## Book Appointment

Select a Doctor

doctor z (cardiac)

Choose a date to book appointment.

September 2025

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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

Appointment booked successfully!

Done

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

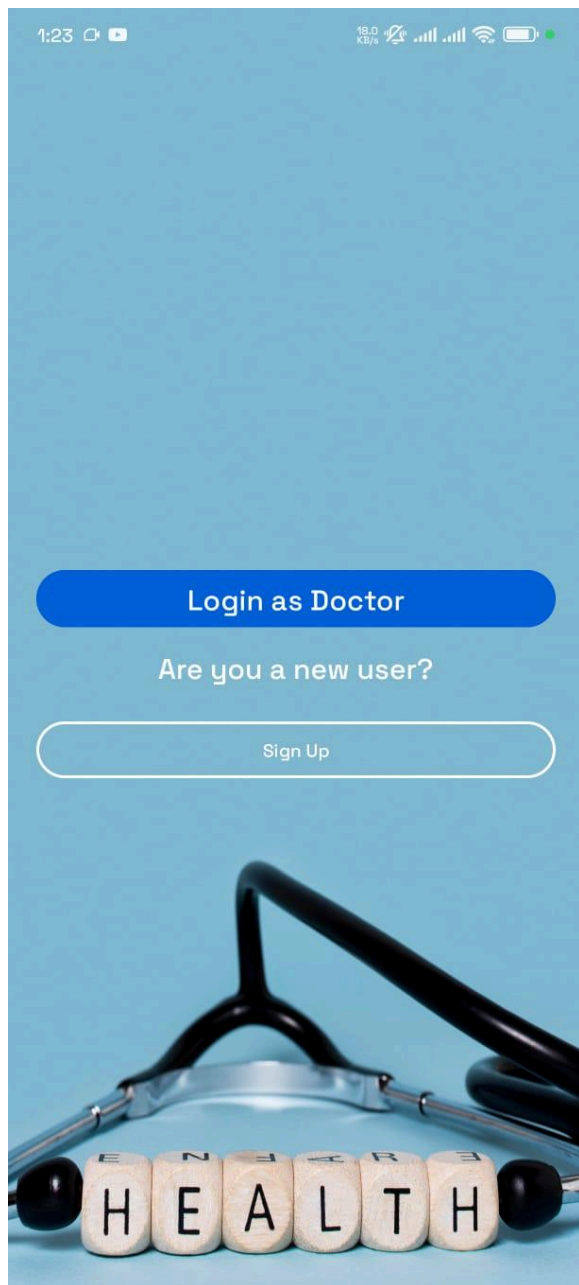
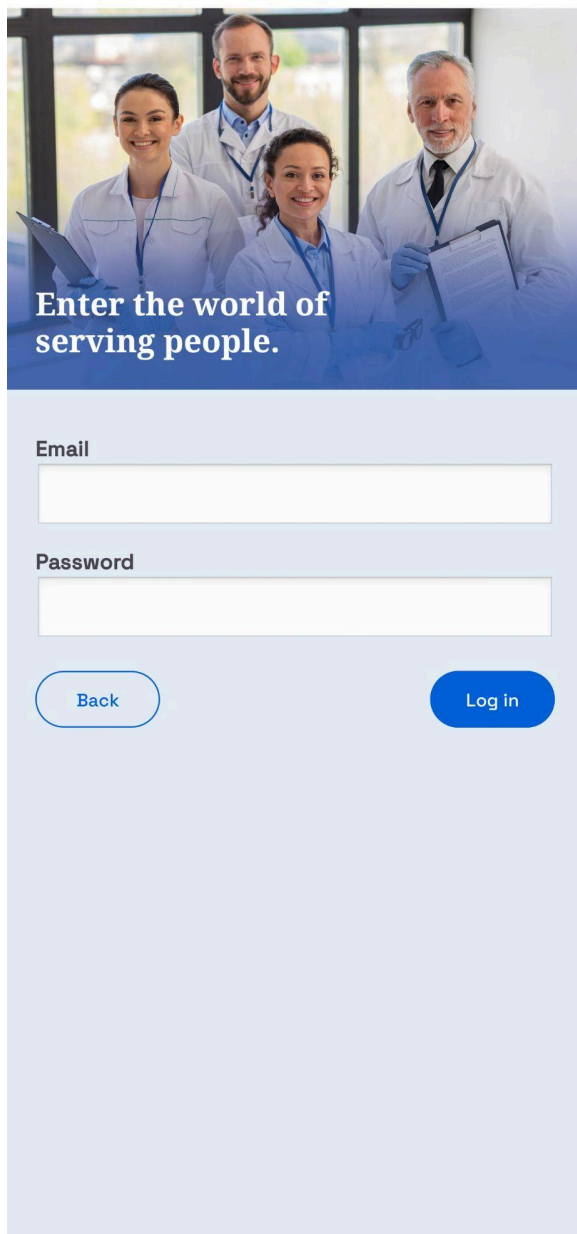


Figure 11 : Login/ Signup as doctor

 A mobile application interface for creating a doctor account. The background is a light blue color. At the top, the title 'Create Doctor Account' is displayed in blue. Below the title is a black icon of a person with a plus sign. The form consists of several input fields with labels: 'Name', 'Username', 'Email', 'Password', 'Re-enter Password', 'Address', 'Phone Number', 'Postal Code', 'Short Bio', 'Specialization', 'Experience', and 'Qualification'. Each field has a horizontal line for text entry. At the bottom, there are two buttons: a blue rounded button labeled 'Back' and a blue rounded button labeled 'Register'. The top of the screen shows a status bar with the time '1:18', signal strength, and battery level.

Figure 12 : Signup as Doctor



The login form features a header image of four medical professionals with the text "Enter the world of serving people." Below this, there are input fields for "Email" and "Password", each with a corresponding label. At the bottom, there are two buttons: "Back" and "Log in".

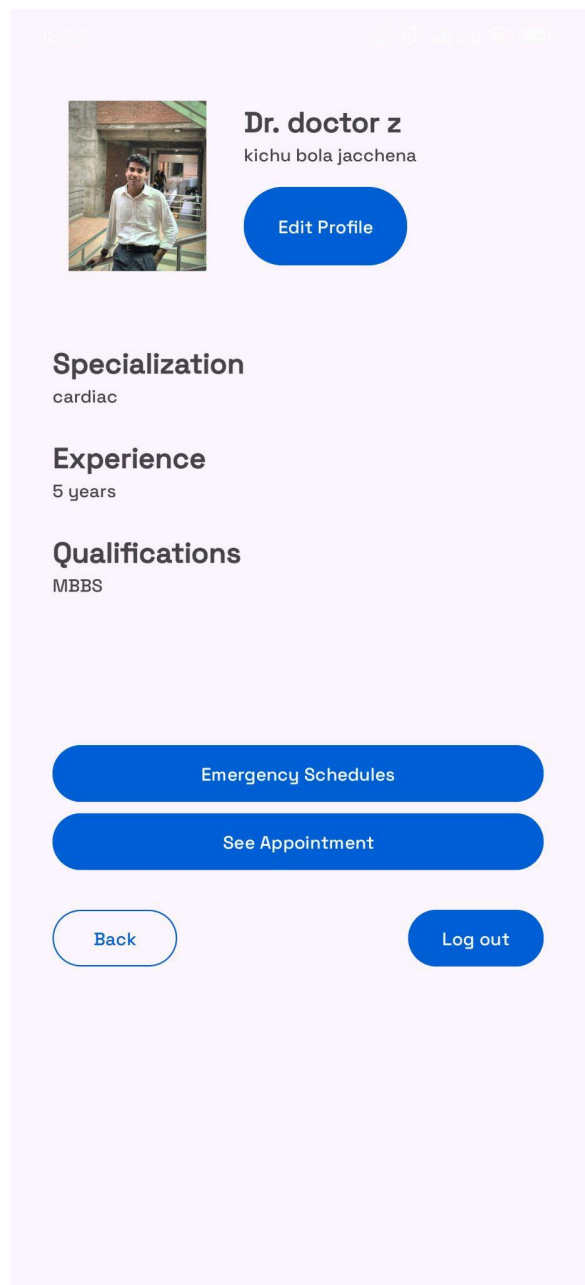
Enter the world of serving people.

Email

Password

Back Log in

Figure 13 : Doctor Login



The dashboard includes a top navigation bar with a "Home" link and a "Logout" button. The main content area displays the doctor's profile, including a photo, name "Dr. doctor z", and a bio "kichu bola jacchena". There is an "Edit Profile" button. Below the profile, there are sections for "Specialization" (cardiac), "Experience" (5 years), and "Qualifications" (MBBS). At the bottom, there are three buttons: "Emergency Schedules", "See Appointment", and "Log out".

Home Logout

Dr. doctor z  
kichu bola jacchena

Edit Profile

Specialization  
cardiac

Experience  
5 years

Qualifications  
MBBS

Emergency Schedules

See Appointment

Back Log out

Figure 14 : Doctor's Dashboard

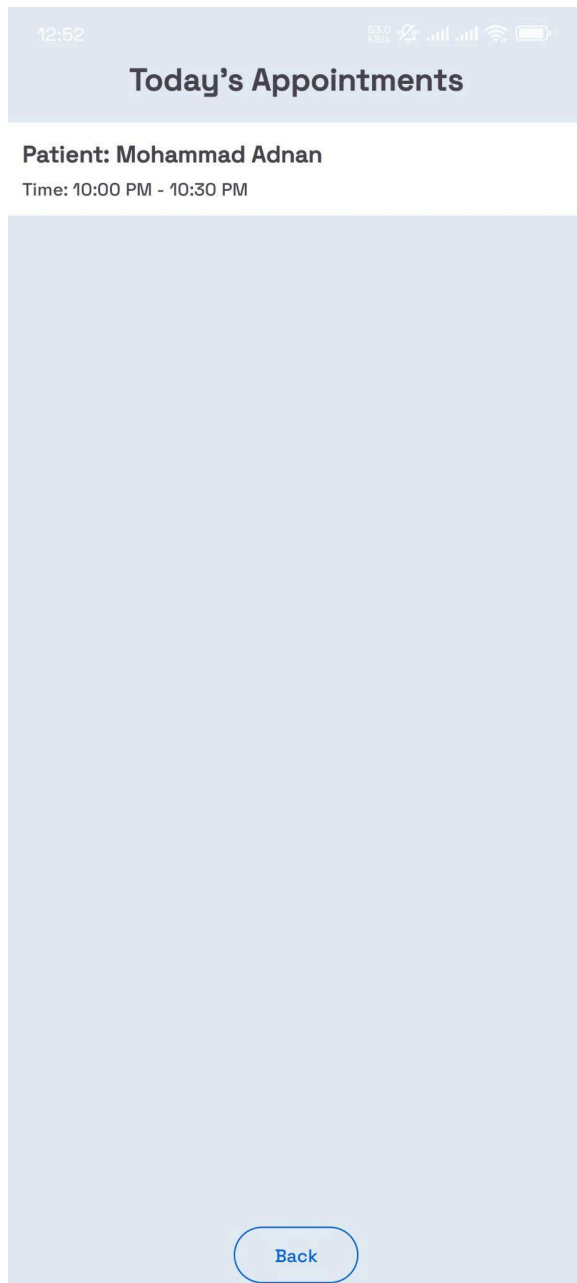


Figure 15 : Emergency/ Today's Appointment

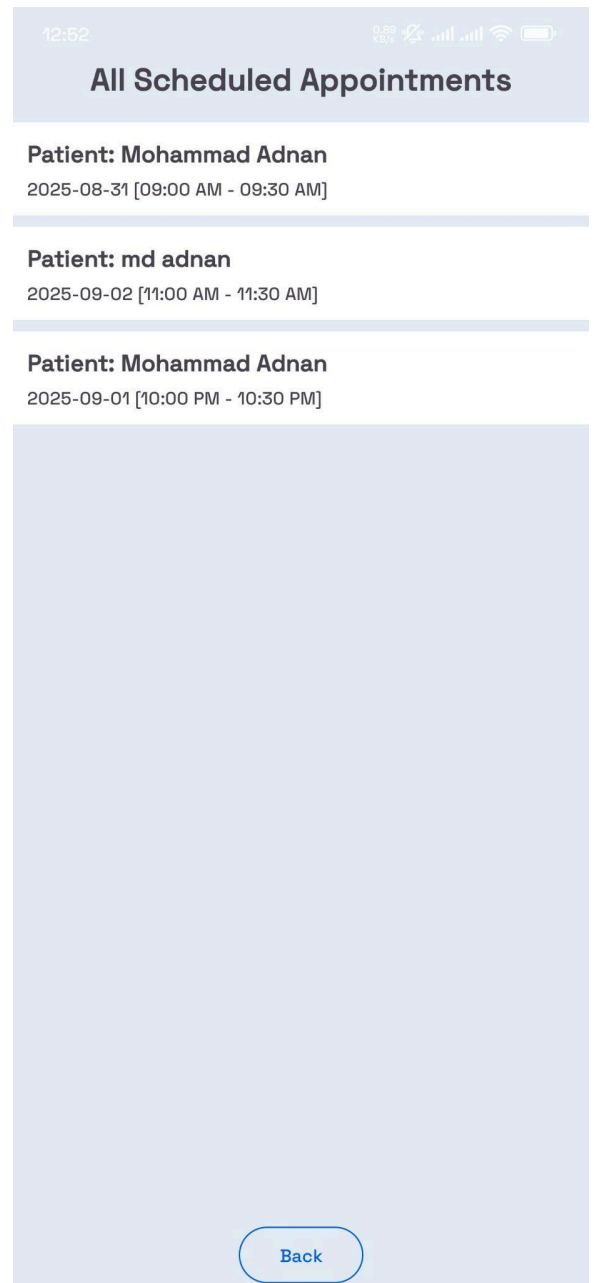


Figure 16 : All Appointments

12:52 9.02 KB/s



doctor z

z\_doctor

mohammadadnanali93@gmail.com

01761222197

komuna\_abaro

1200

kichu bola jacchena

cardiac

5 years

MBBS

Back Done

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.