# Minor Project Report

# on

# DocEase

**In partial fulfillment for the award of the degree**

**Of**

**BACHELOR OF COMPUTER APPLICATION**

**[B.C.A]**

**Year 2023-2024**


**SUBMITTED BY:**

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**BCA-5th SEMESTER**

**Submitted to:**

## SHRI SHAMBHUBHAI V. PATEL COLLEGE OF COMPUTER SCIENCE & BUSINESS MANAGEMENT

Affiliated to

## Veer Narmad South Gujarat University

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# 1. Introduction

- Welcome to a smarter, more convenient way to manage your healthcare needs. Our DocEase App is designed to simplify the process of booking and managing your medical appointments, ensuring you receive the care you deserve, when you need it.
- Say goodbye to the hassle of long waiting times on the phone or tedious paperwork. With our user-friendly app, you can effortlessly book, reschedule, or cancel appointments with just a few taps. Our goal is to put the power of healthcare back in your hands, allowing you to take control of your well-being and connect with the right medical professionals when you need them most.

- Key Features:

  - ✓ **Effortlessly Schedule Appointments:**

    Say goodbye to long hold times and tedious paperwork. Book appointments with your preferred healthcare providers at your fingertips, 24/7.

  - ✓ **Find the Right Specialist:**

    Easily search for and connect with specialists who can address your unique healthcare needs.

  - ✓ **Appointment History:**

    Keep a comprehensive record of all your past and upcoming appointments, making it easy to track your healthcare journey.

- Your health is invaluable, and our Doctor Appointment App is committed to making it as accessible and stress-free as possible. Experience the future of healthcare management in the palm of your hand.

## 1.1 Project Description

- DocEase Application is a system designed primarily for use easy online doctor appointment management application.
- This system is fully responsive or mobile friendly and have a good-looking user interface.
- DocEase Application have contained two panels:
  - ✓ Doctor Panel
  - ✓ Patient Panel

### ❖ Doctor Panel:

- ✓ Doctor can register itself with an appropriate field.
- ✓ Doctor can login with valid credentials.
- ✓ Doctor can update his / her profile.
- ✓ Doctor can view his / her appointments with his / her patients.
- ✓ Doctor can confirm the appointments.

### ❖ Patient Panel:

- ✓ Patient can register itself with an appropriate field.
- ✓ Doctor can login with valid credentials.
- ✓ Patient can update his / her profile.
- ✓ Patient can view all doctors which are register at doctor panel.
- ✓ Patient can appoint doctor easily.
- ✓ Patient can view his / her appointments.
- ✓ Patient can delete his / her specific appointment.

## 1.2 Project Profile

| DocEase | |
|---|---|
| Project Title | DocEase |
| Frontend | XML , Java |
| Backend | Firebase |
| Supported OS | Android |
| IDE | Android Studio |
| Browsers | Google Chrome, Brave |
| Documentation tool | MS Word |
| Internal Guide | Prof. Riddhi Joshi (HOD) |
| Submitted to | Prof. Riddhi Joshi (HOD) |

## 1.3 Target Audience

❖ The target audience for a Doctor Appointment app can include a diverse range of individuals and professionals within the healthcare ecosystem.

### ➢ Patients:

- ✓ Individuals seeking medical care for themselves and their family members.
- ✓ Those looking for a convenient way to schedule appointments with healthcare providers.
- ✓ People who want to manage their health records, prescriptions, and appointments digitally.
- ✓ Patients interested in telemedicine options for virtual consultations.

### ➢ Healthcare Providers:

- ✓ Doctors, physicians, specialists, dentists, therapists, and other medical professionals.
- ✓ Healthcare practices, clinics, and hospitals interested in adopting a digital appointment booking system.
- ✓ Professionals looking for tools to manage patient appointments and streamline their practice.

# 2. Objectives

- ✓ **Appointment Scheduling:**

  Enable patients to easily schedule, reschedule, or cancel appointments with healthcare providers at their convenience. This reduces the need for phone calls and streamlines the appointment process.

- ✓ **Improved Access:**

  Ensure patients have easy access to a variety of healthcare providers, including primary care physicians, specialists, and allied health professionals. This can be especially helpful in areas with limited healthcare resources.

- ✓ **Real-time Availability:**

  Display real-time availability of healthcare providers, allowing patients to choose appointments based on their preferred time slots and provider availability.

- ✓ **Reduced Wait Times:**

  Minimize the time patients spend waiting in the clinic by providing estimated wait times and allowing them to check in online or virtually.

- ✓ **Patient Information Management:**

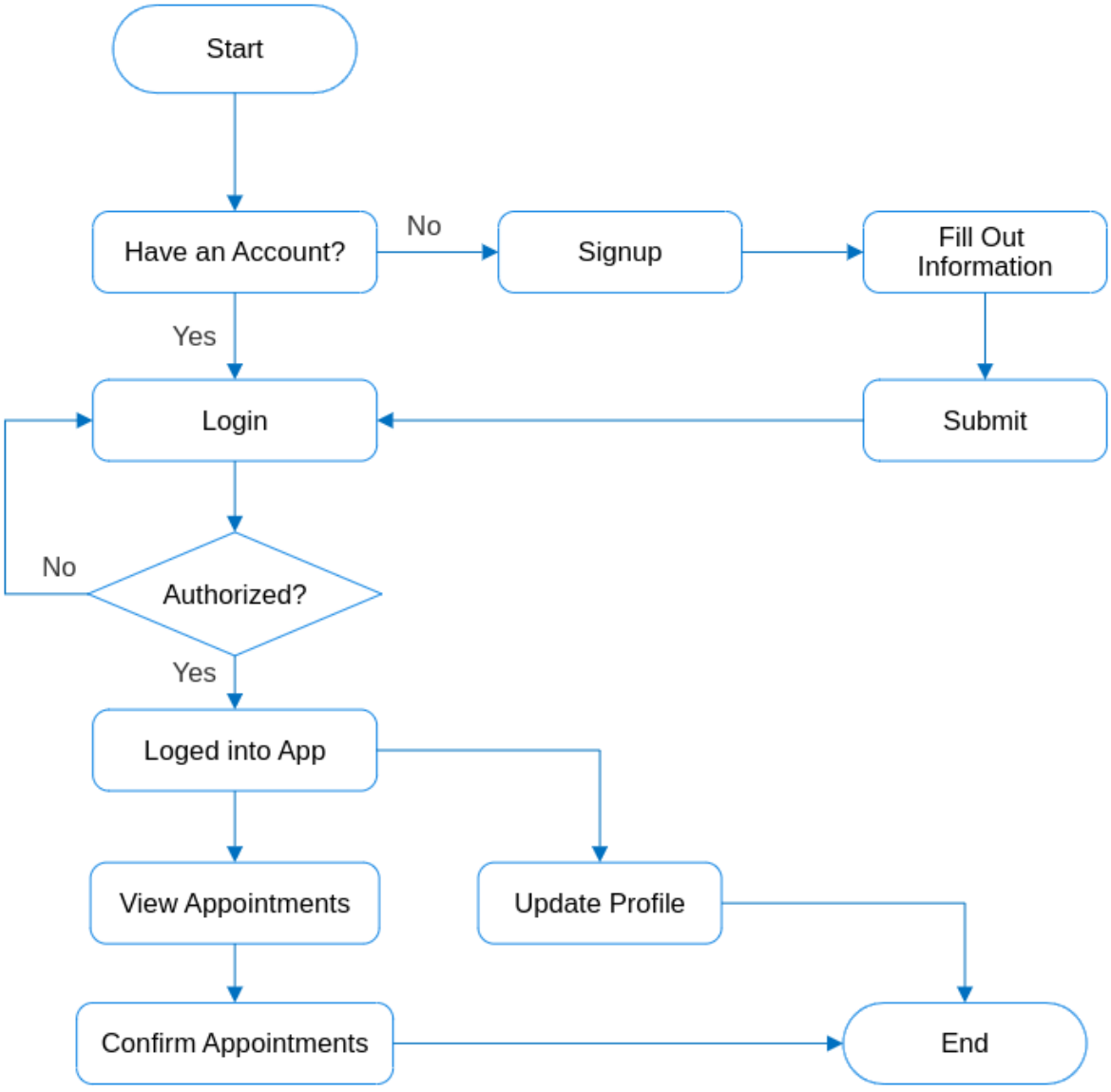
  Allow patients to securely store and manage their medical records, including past appointments, test results, and medications, within the app for easy access by healthcare providers.

## Start to End Process:

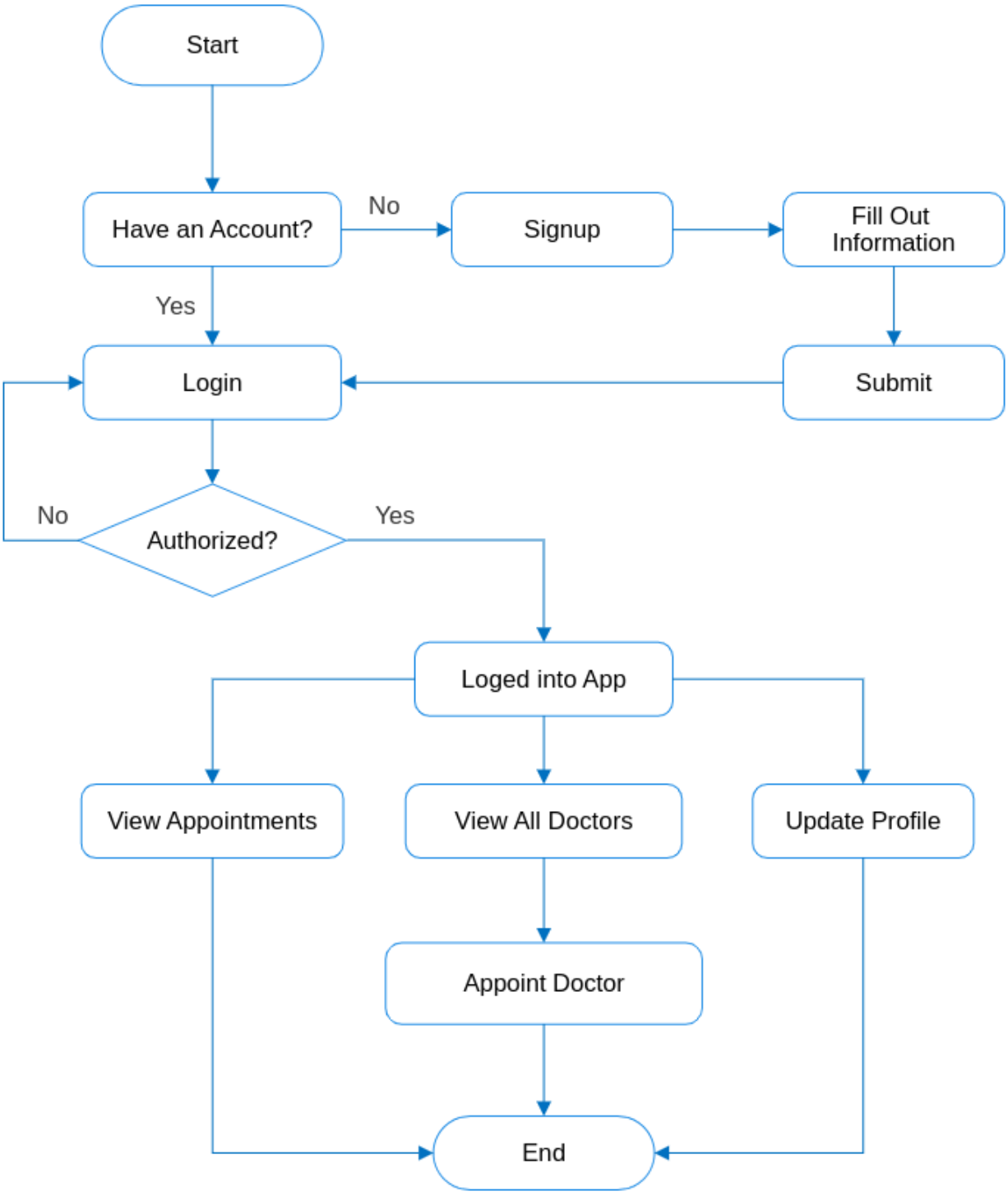
1. Collecting information for system (Requirement Gathering and Analysis).
2. Preparing the design of the system through information.
3. Creating table definition and implementation.
4. Integration of Front-end and Back-end.
5. Custom Functions & Validations.
6. Making responsive design.
7. Testing.
8. Debugging and code optimization.

# 3. System Flow Diagram

## ❖ Doctor Process Flow Diagram:

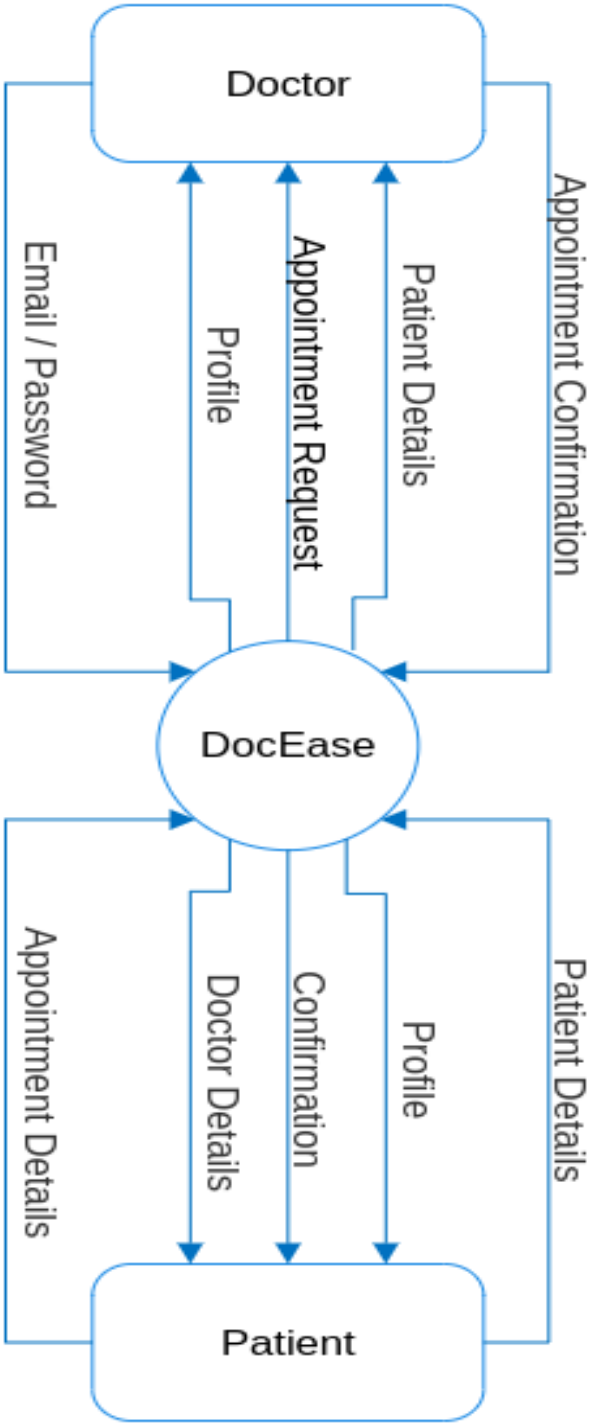


## ❖ Patient Process Flow Diagram:

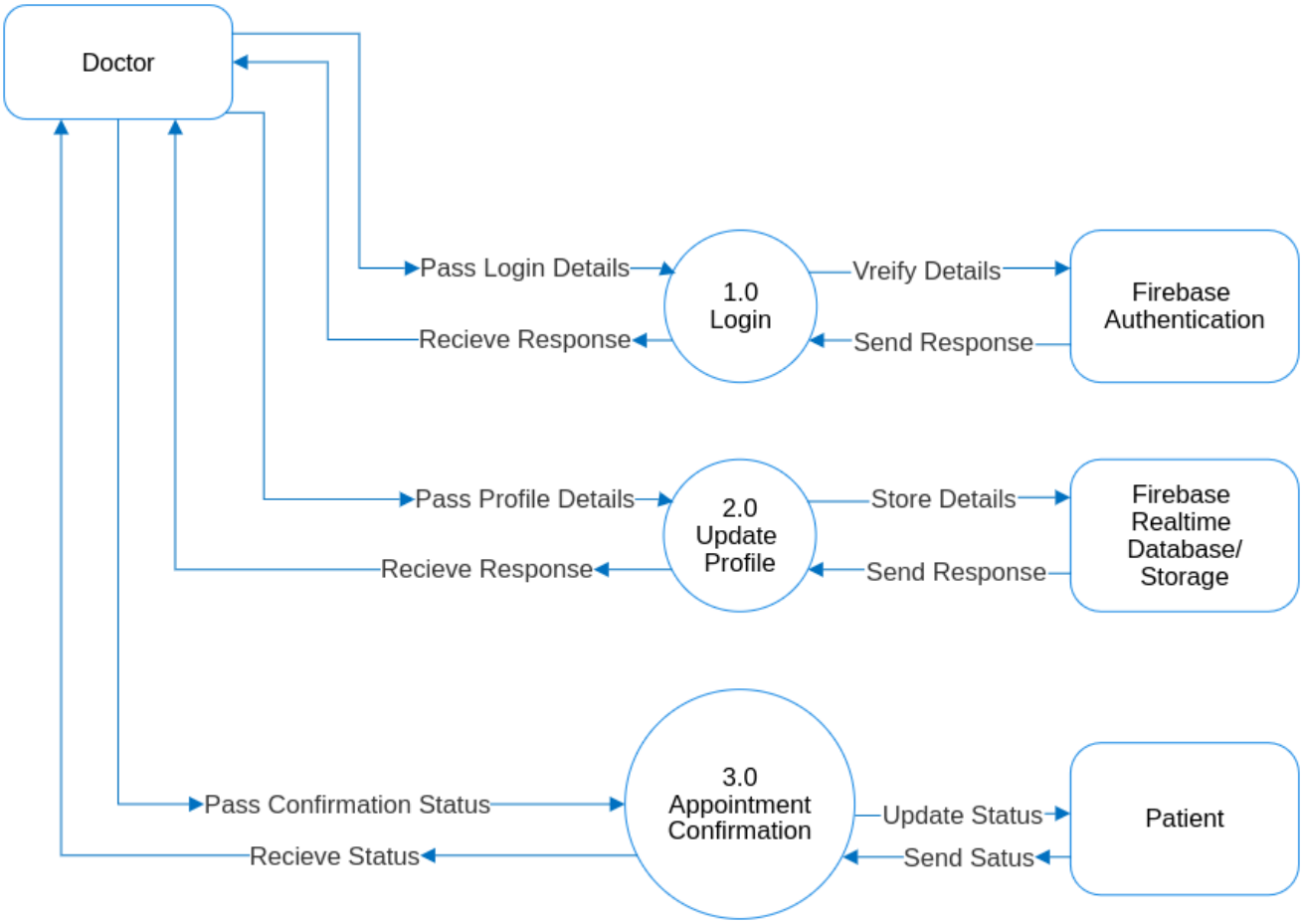


# 4. DFD / UML Diagram

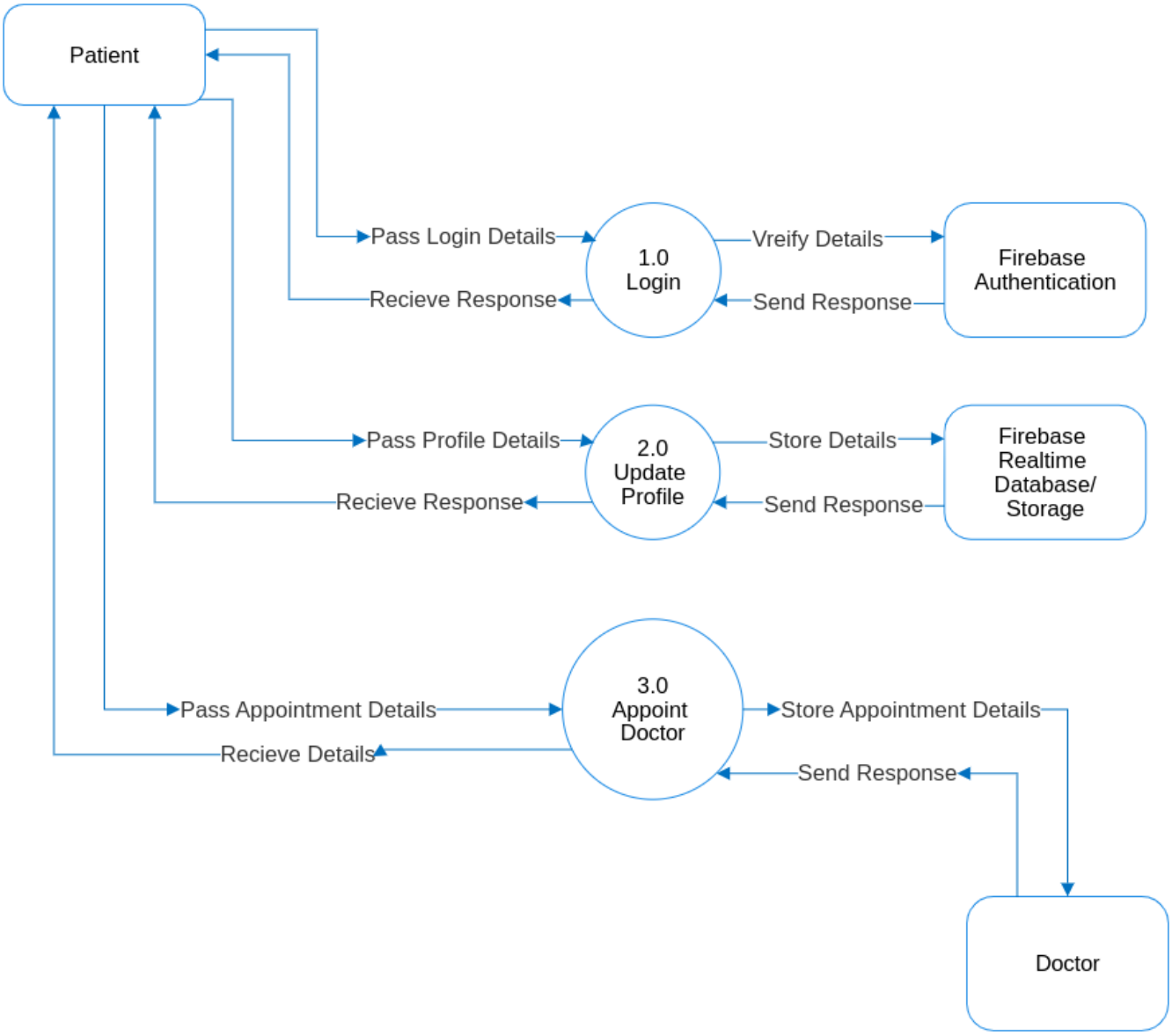
## ❖ 0 Level Diagram (Context Diagram):



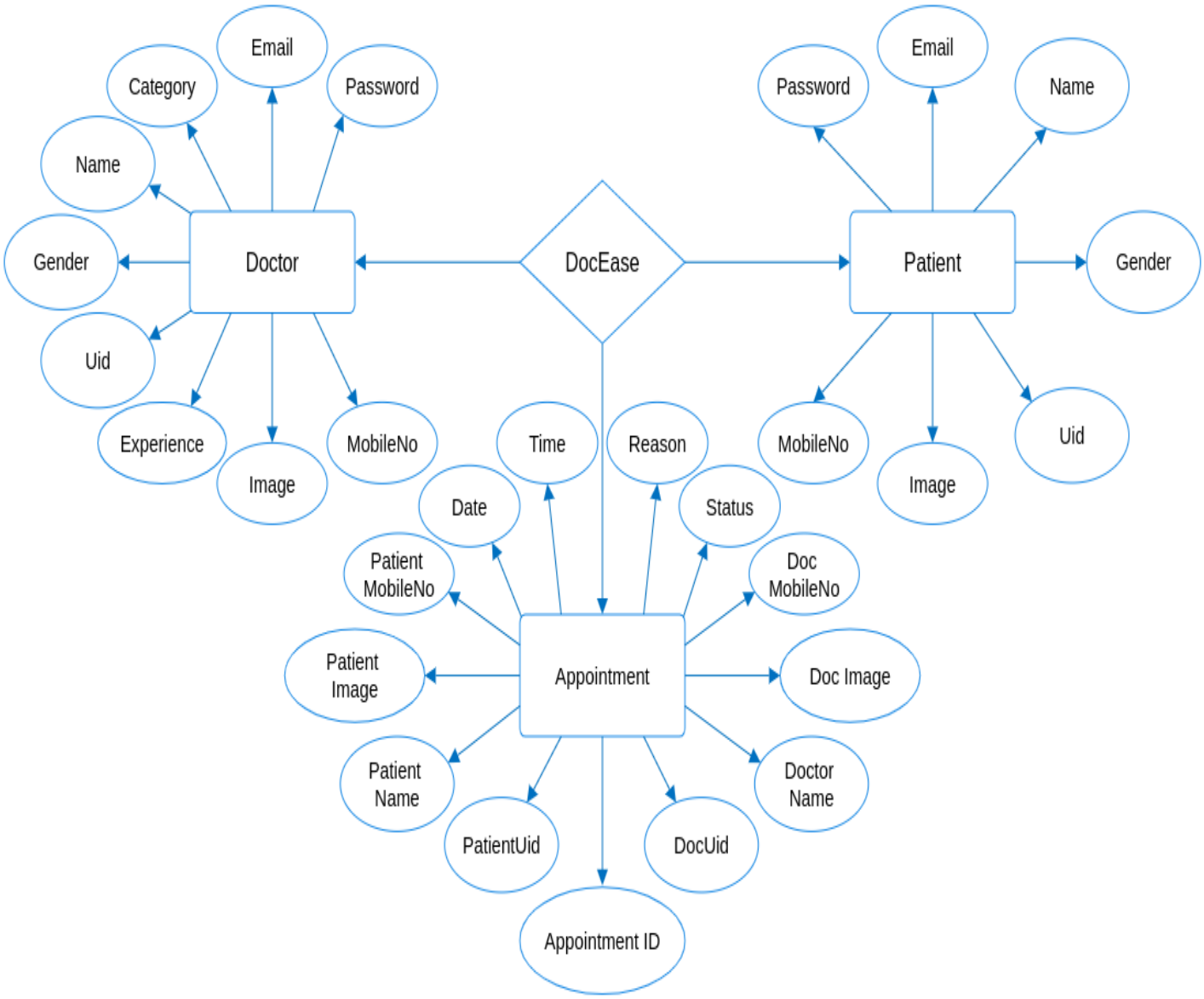
## ❖ 1st Level Doctor Diagram:



## ❖ 1st Level Patient Diagram:



# 5. ER Diagram

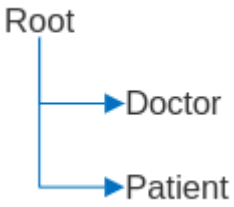

Email
Category
Password
Name
Gender
Doctor
Uid
Experience
Image
MobileNo
DocEase
Email
Password
Name
Patient
Gender
MobileNo
Image
Uid
Time
Reason
Date
Status
Patient MobileNo
Doc MobileNo
Patient Image
Appointment
Doc Image
Patient Name
Doctor Name
PatientUid
DocUid
Appointment ID

# 6. Database Design

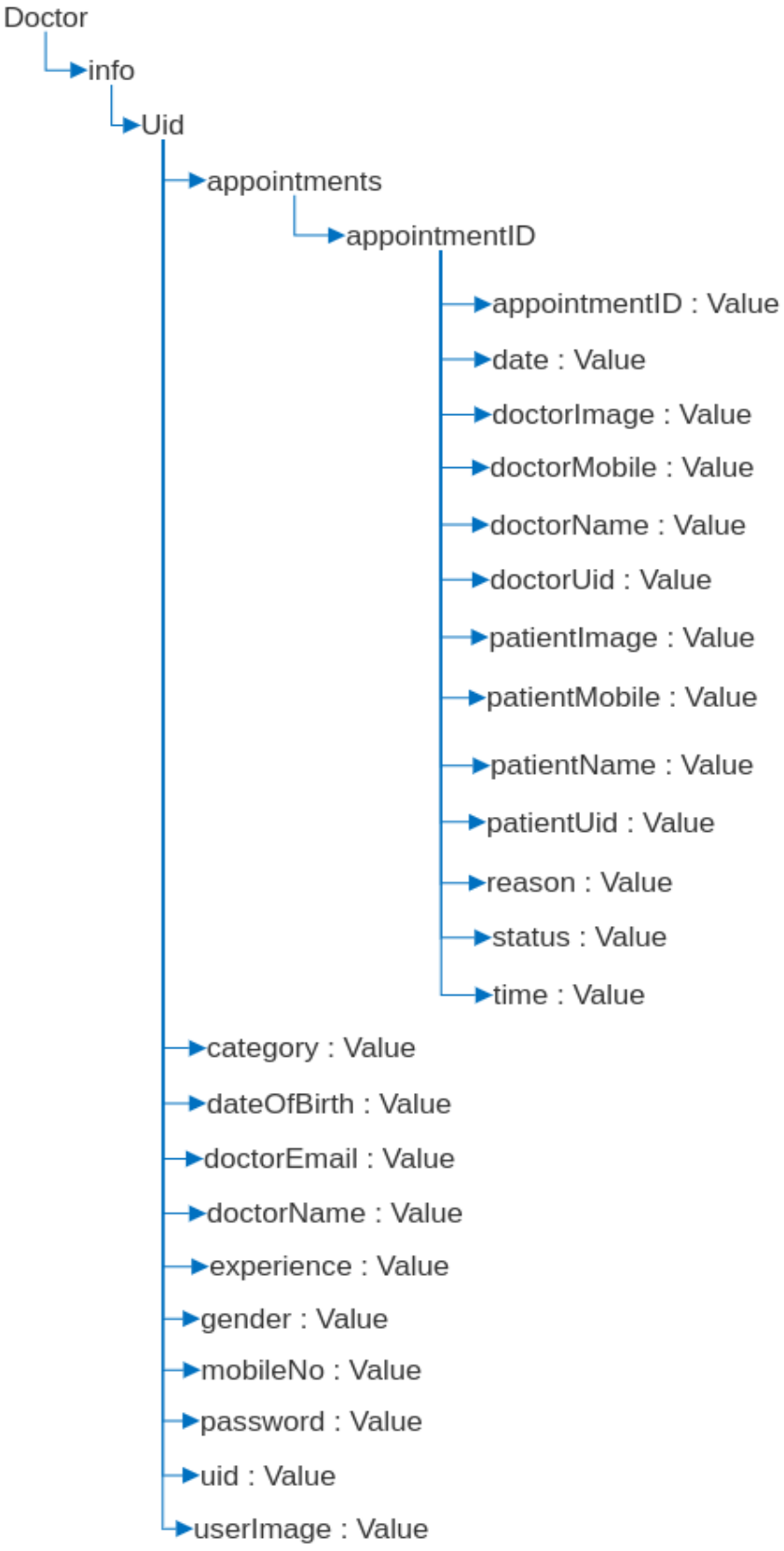
## ❖ Firebase Authentication:

- ✓ Email ID
- ✓ Password
- ✓ Uid

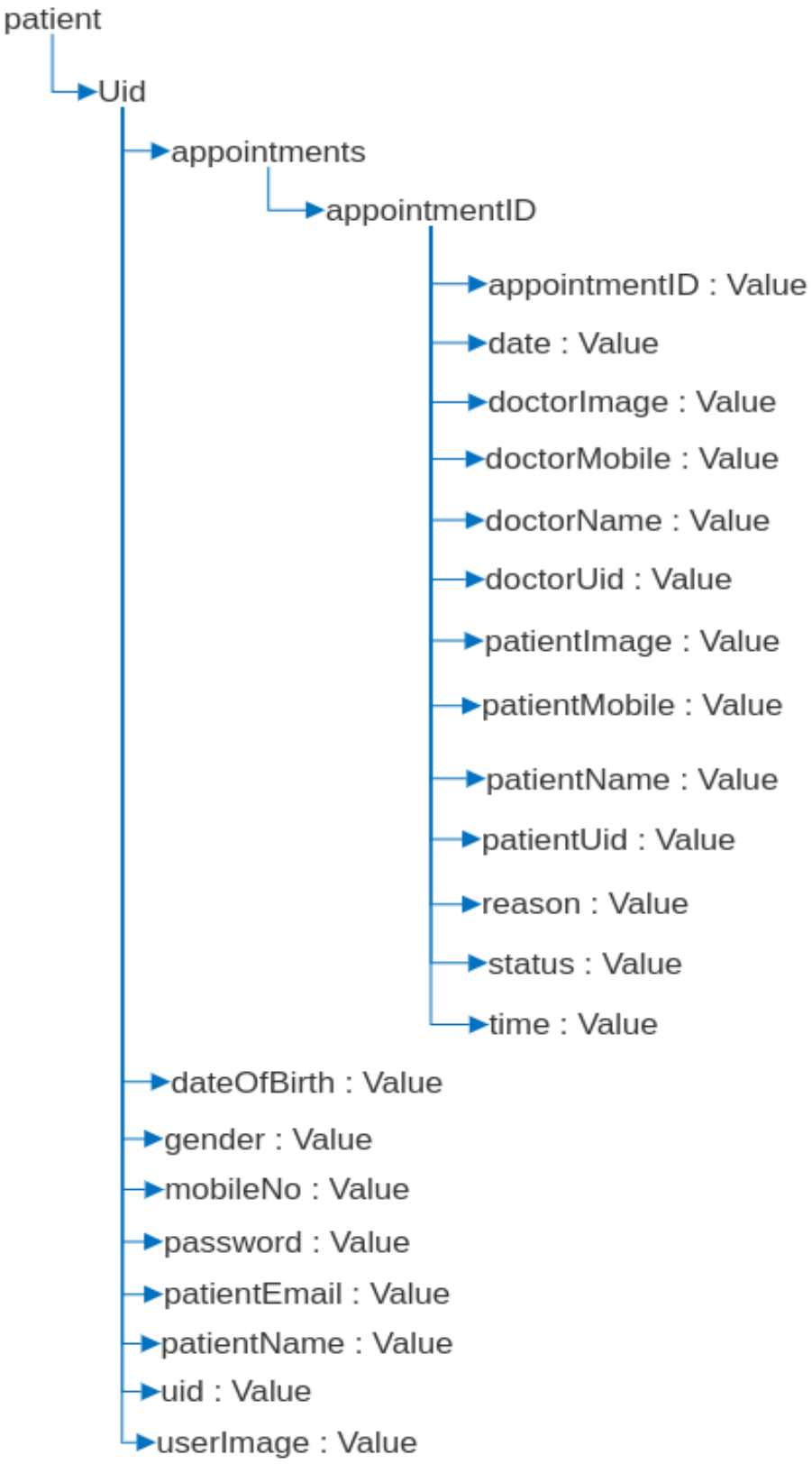
## ❖ Firebase Realtime Database:



❖ **Doctor Side database:**



❖ **Patient Side database:**



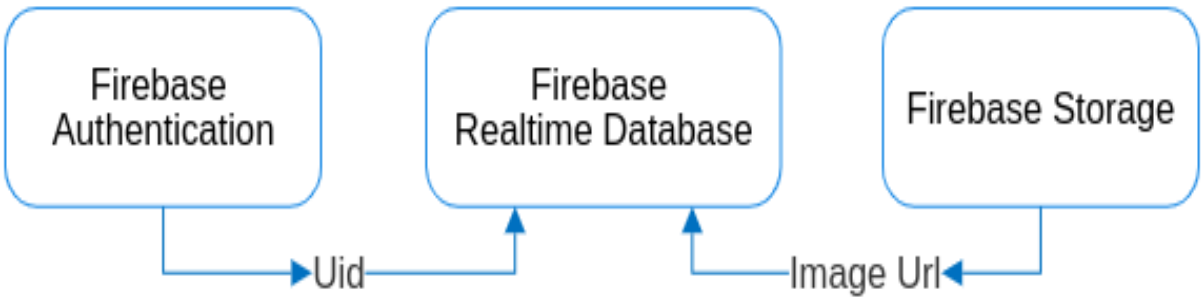
## ❖ Firebase Storage:

- ✓ Doctor/
- ✓ Patient/

→ Doctor Folder contains profile photos of doctors.

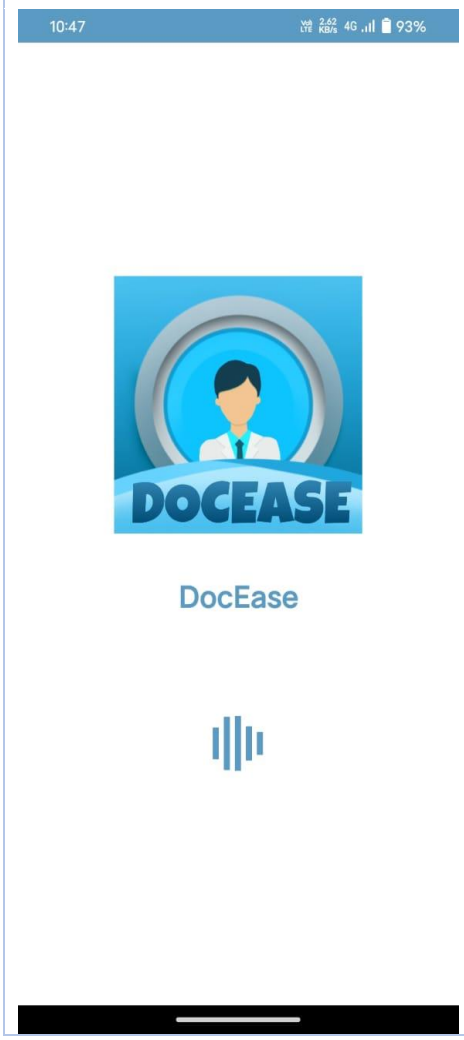
→ Patient Folder contains profile photos of patients.

## ❖ Connection Between Authentication, Database and Storage:

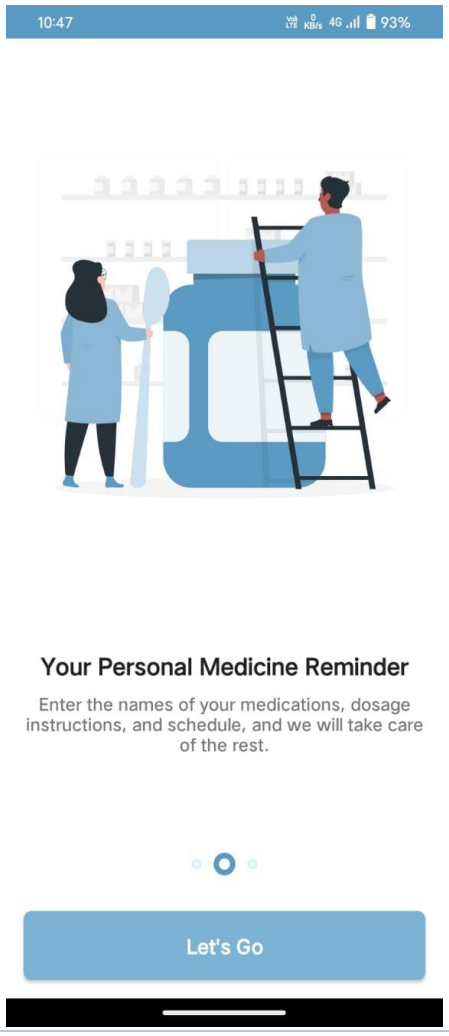


# 7. System Design

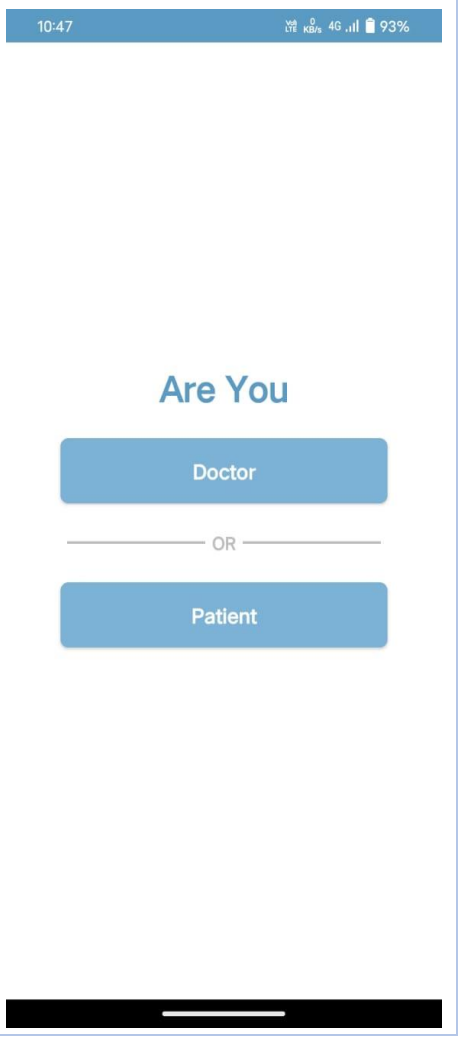
### ❖ Splash Screen:




### ❖ Onboarding Screen:

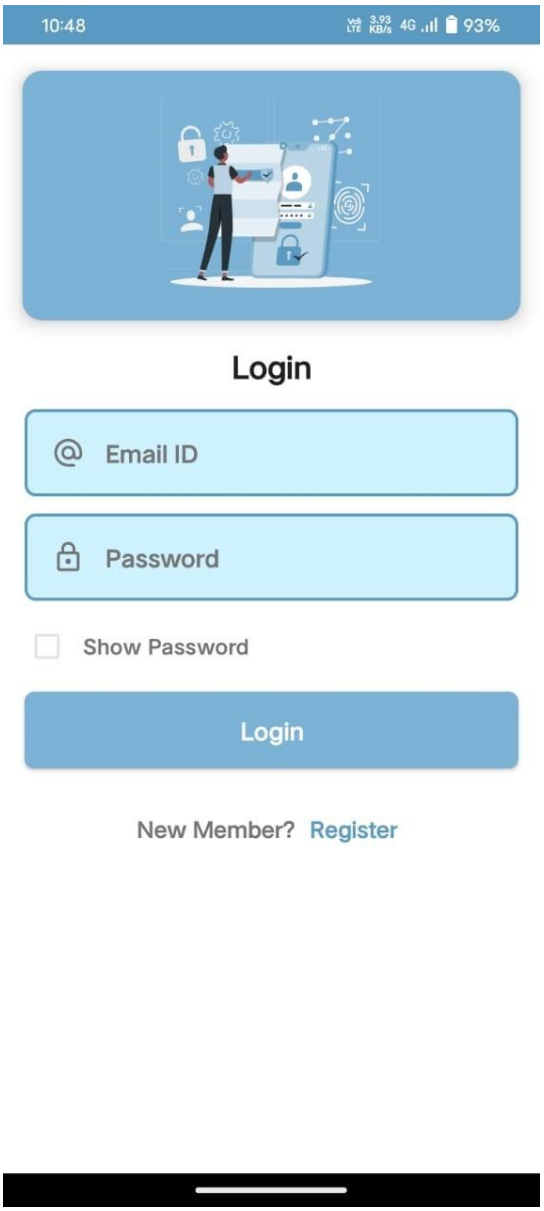



### ❖ Role Screen:

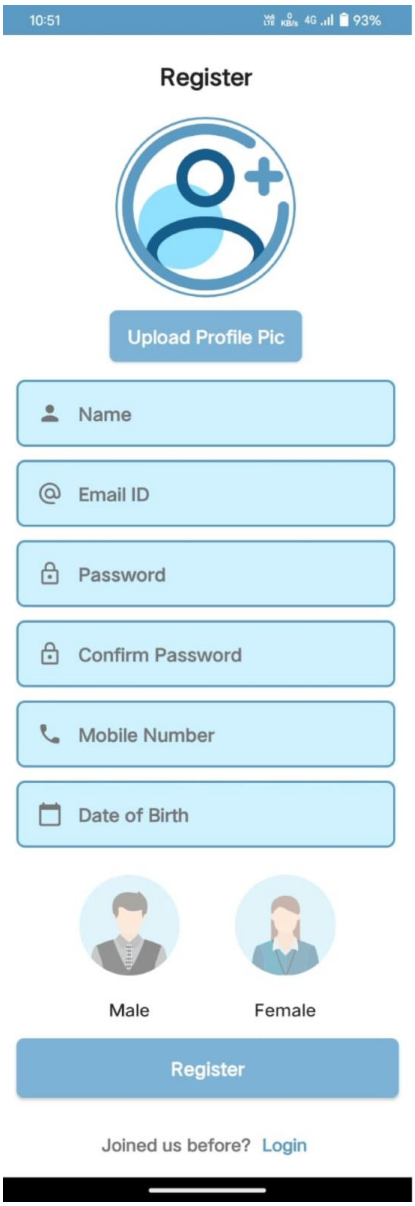


## ❖ Patient Side App:

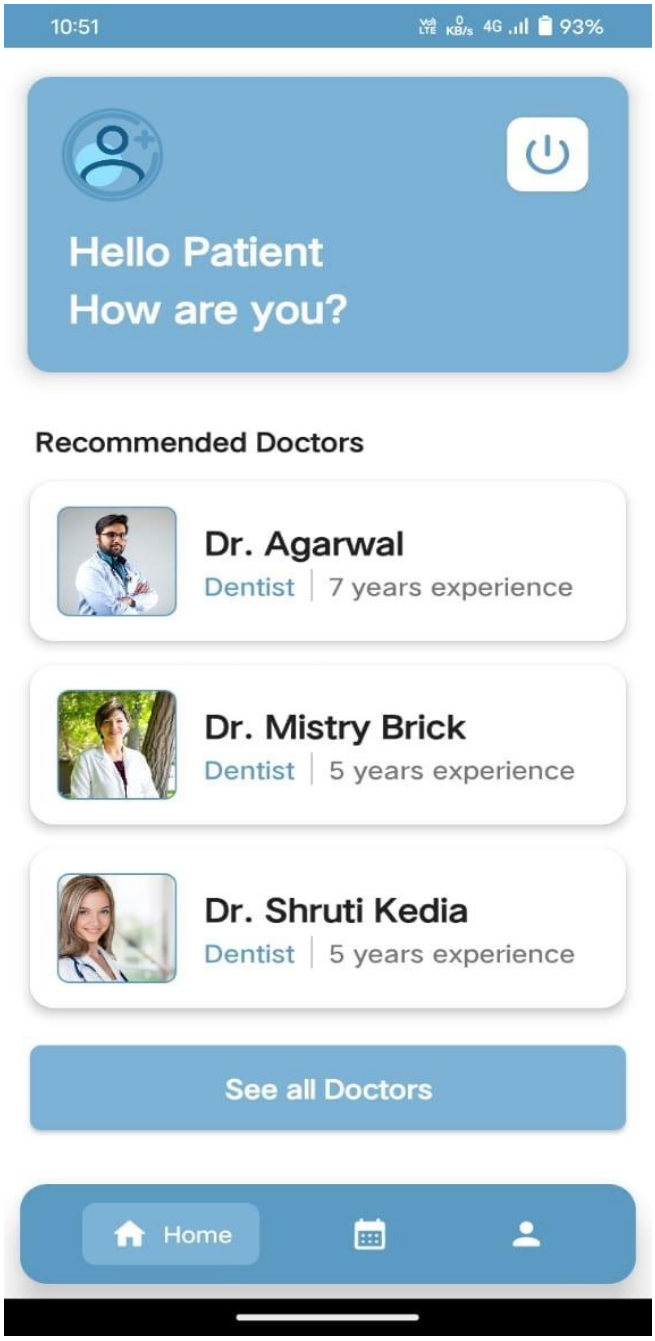
### ❖ Login Screen:



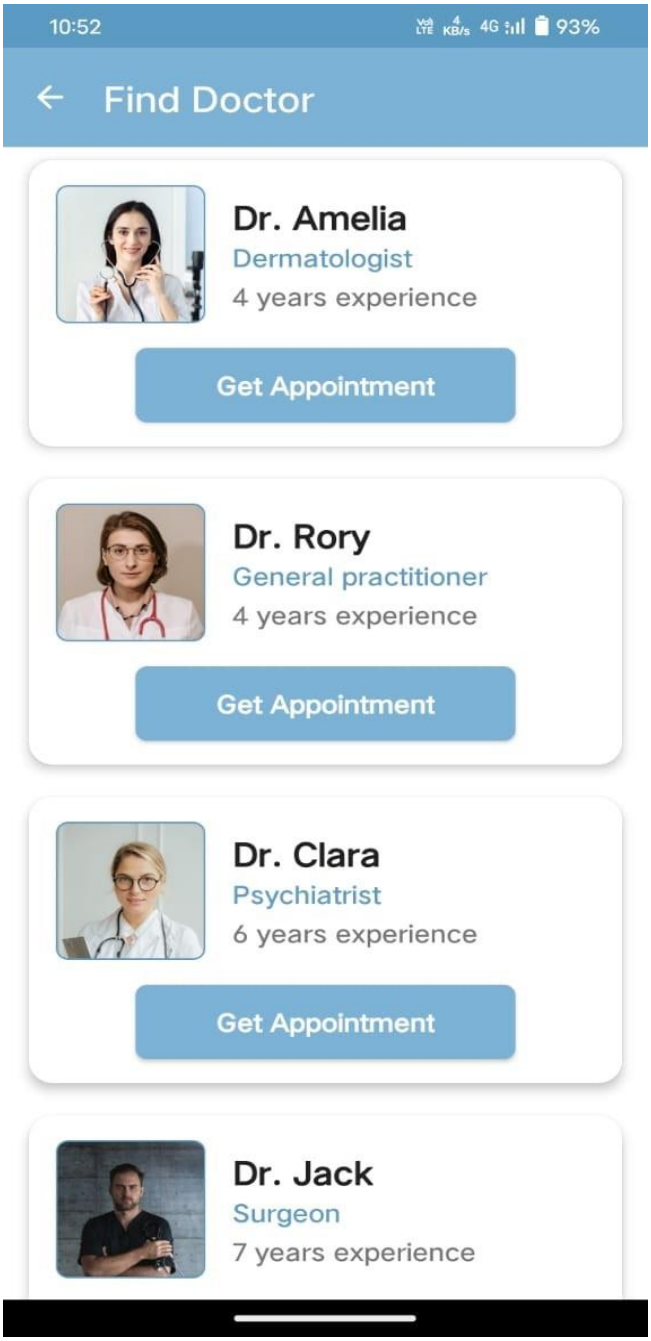

### ❖ Registration Screen:



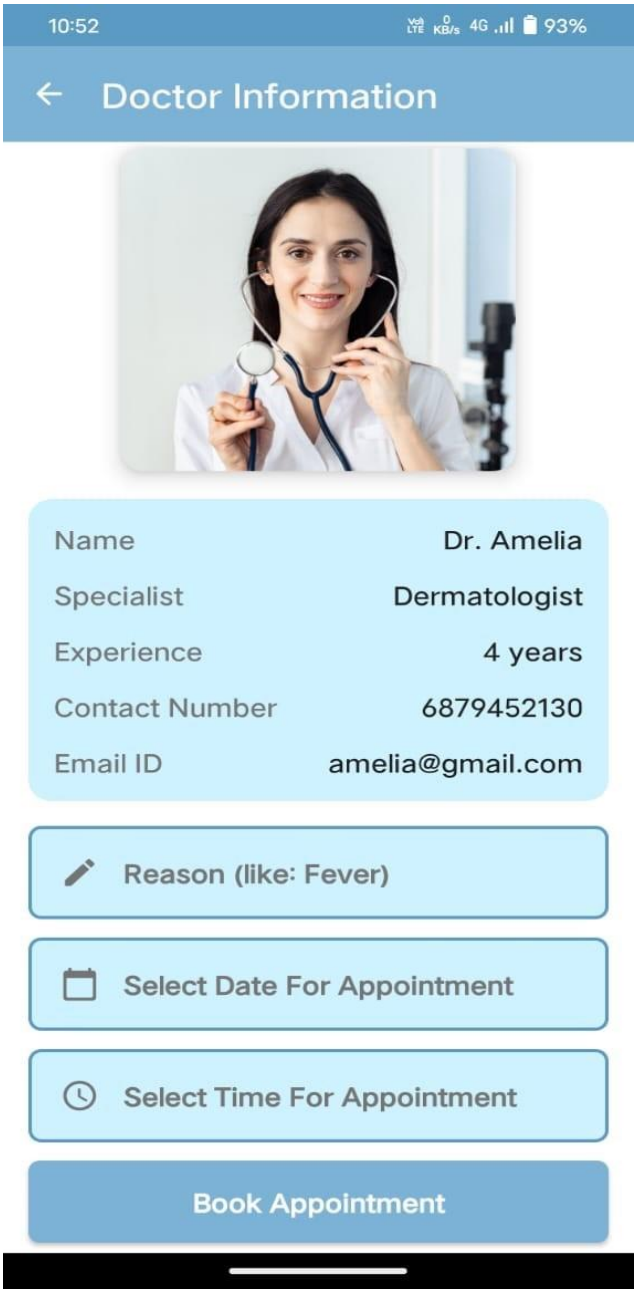
❖ **Home Screen:**



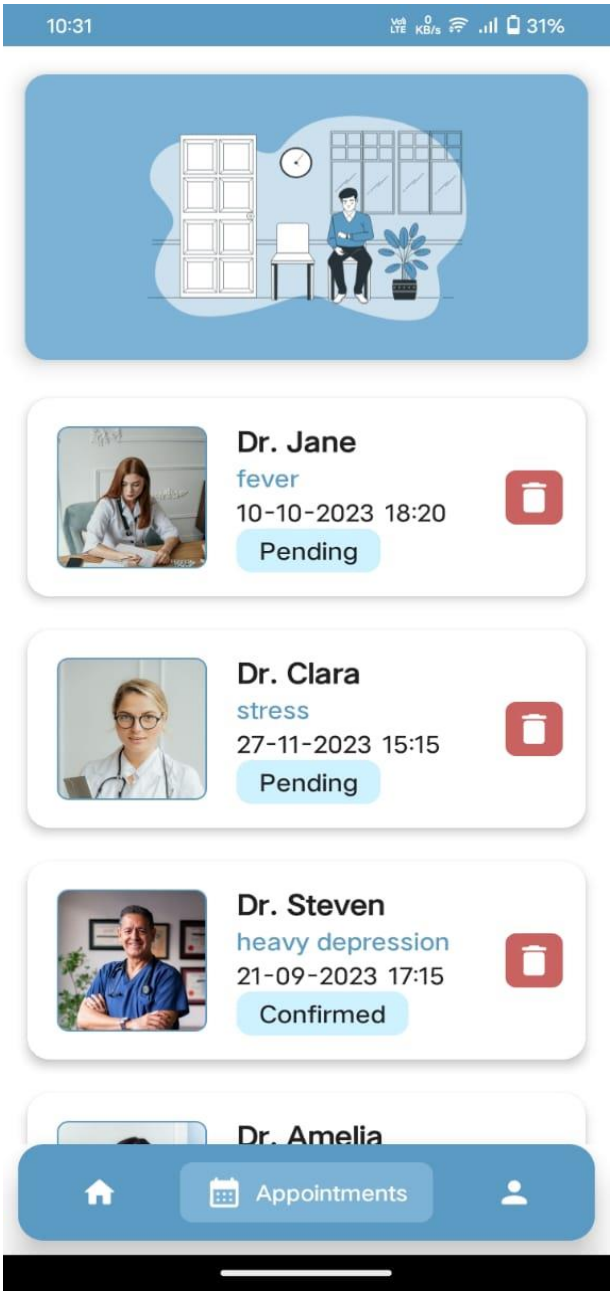

❖ **All Doctor Screen:**



❖ **Book Appointment Screen:**

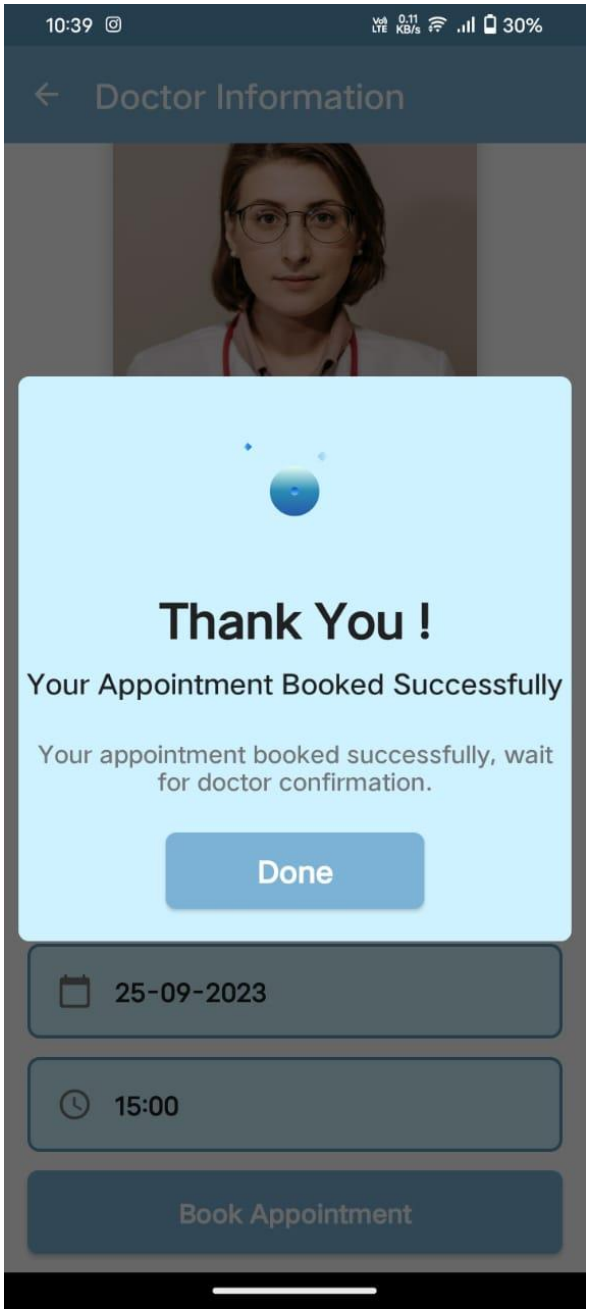


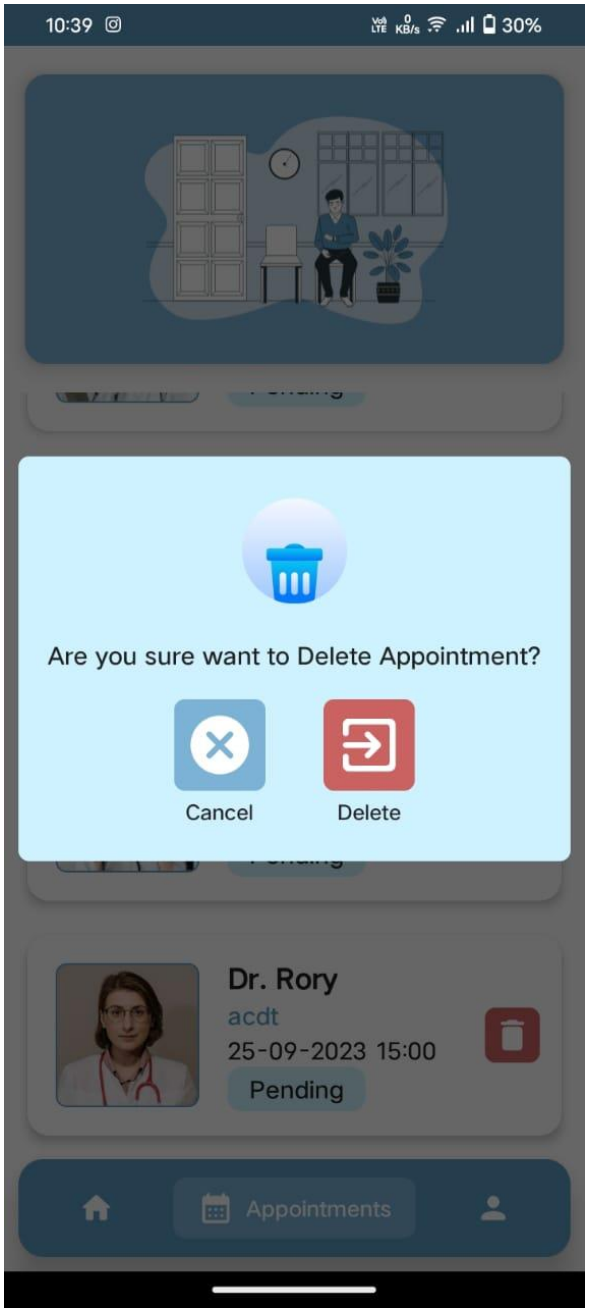

❖ **All Appointments Screen:**



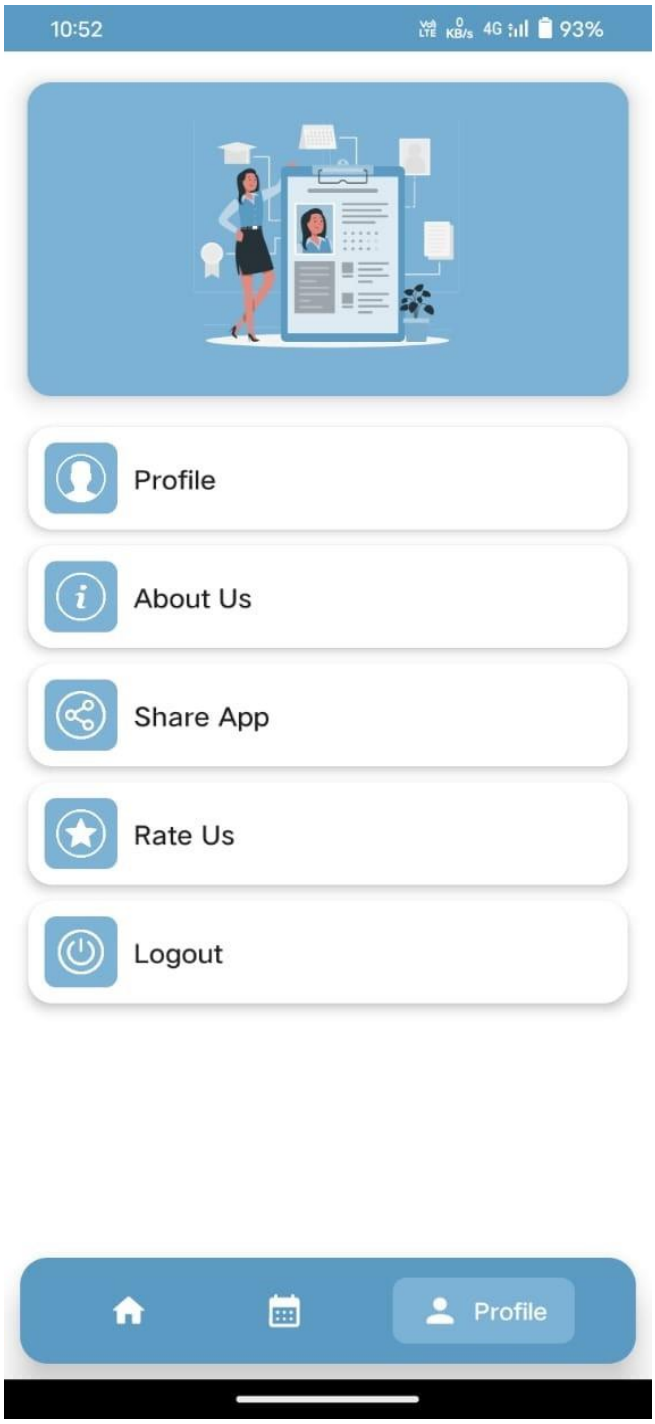

❖ **Book Appointment Dialog:**

❖ **Delete Appointment Dialog:**

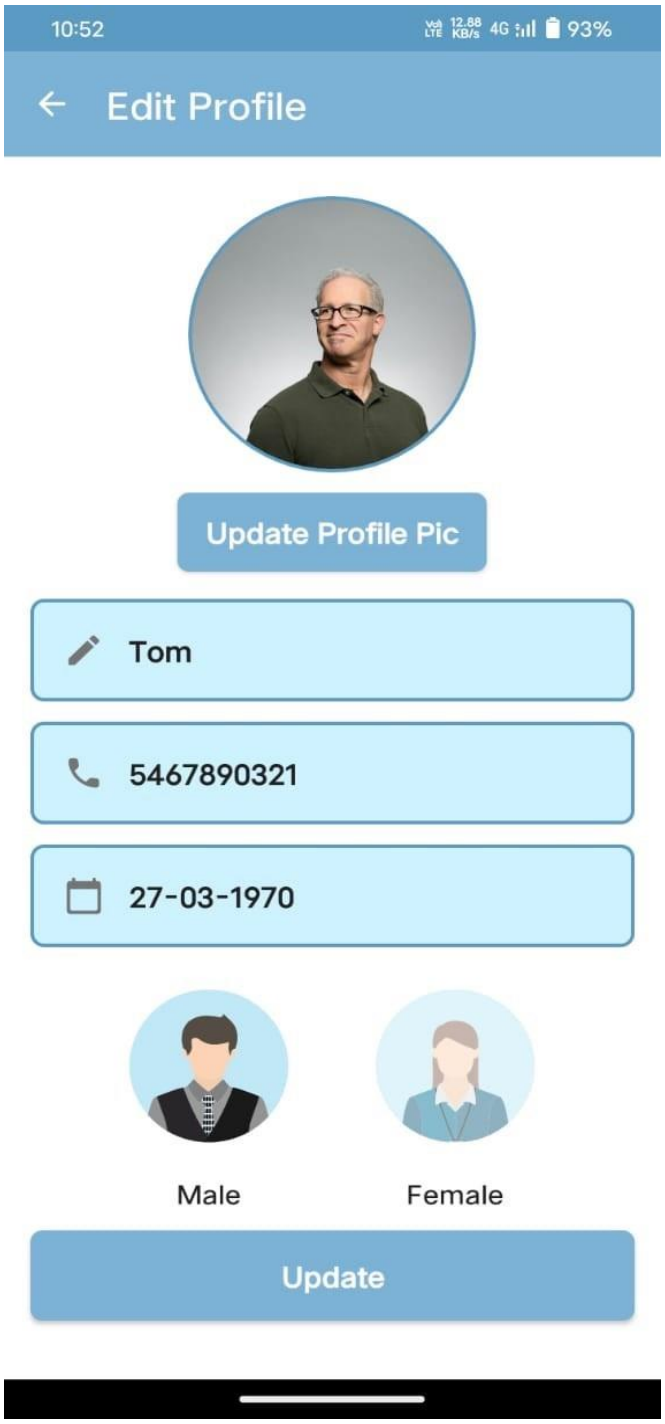

10:39
30%
Doctor Information
Thank You !
Your Appointment Booked Successfully
Your appointment booked successfully, wait for doctor confirmation.
Done
25-09-2023
15:00
Book Appointment


10:39
30%
Are you sure want to Delete Appointment?
Cancel
Delete
Dr. Rory
acdt
25-09-2023 15:00
Pending
Appointments

❖ **Profile Screen:**

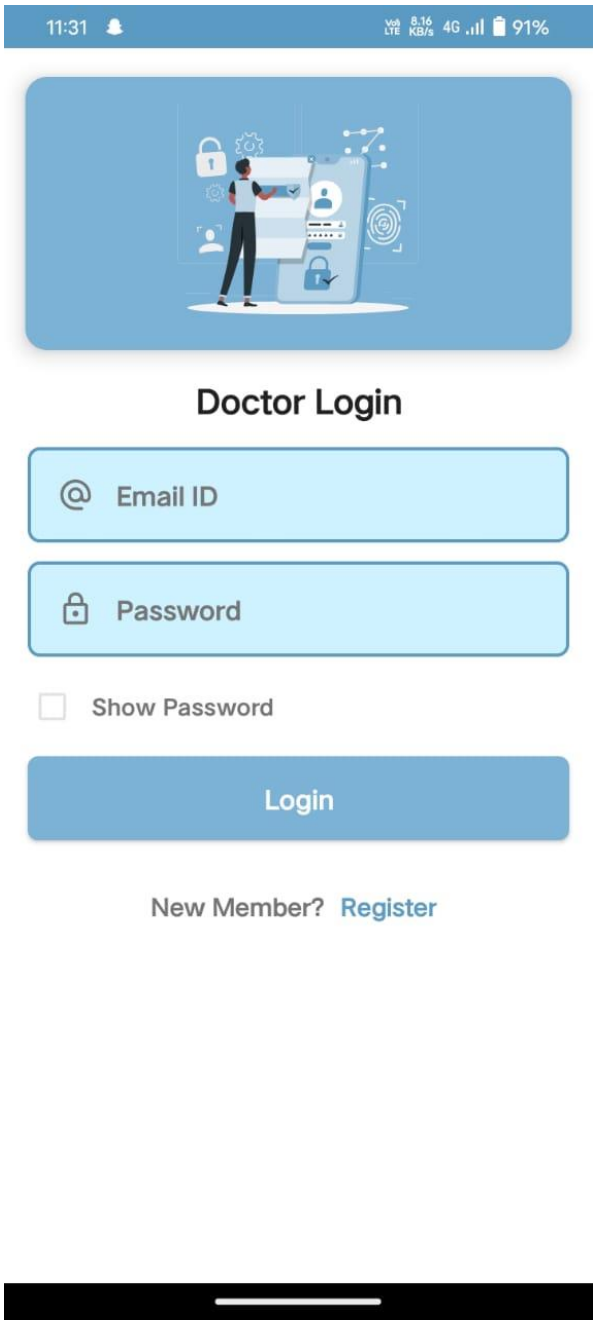



❖ **Update Profile Screen:**

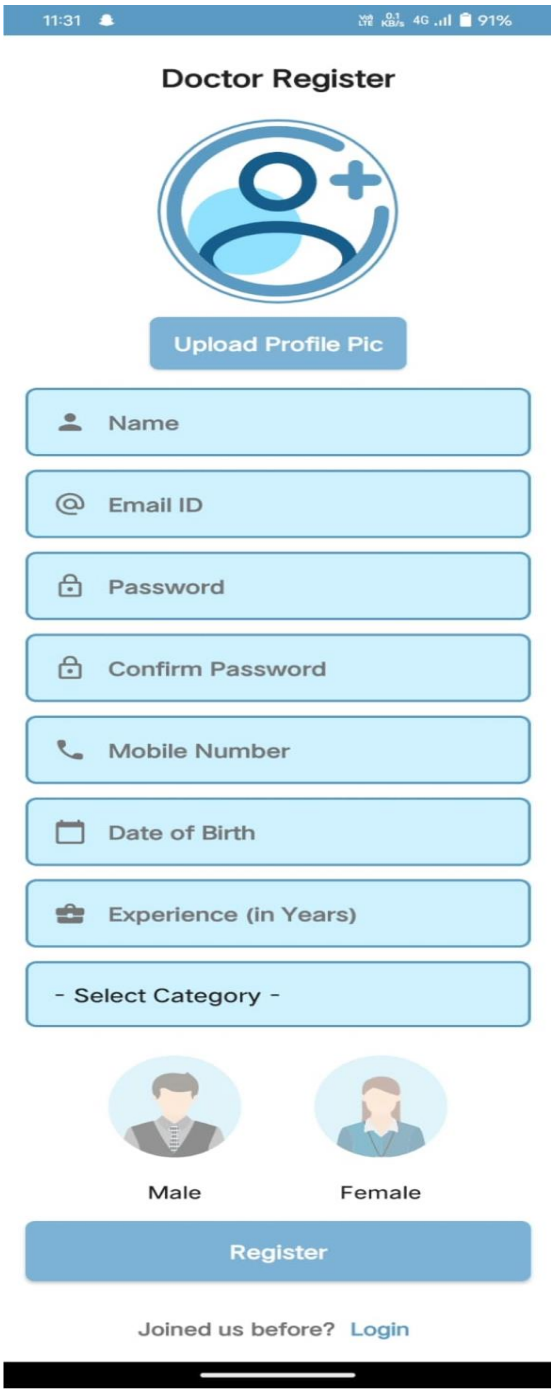


## ❖ Doctor Side App:

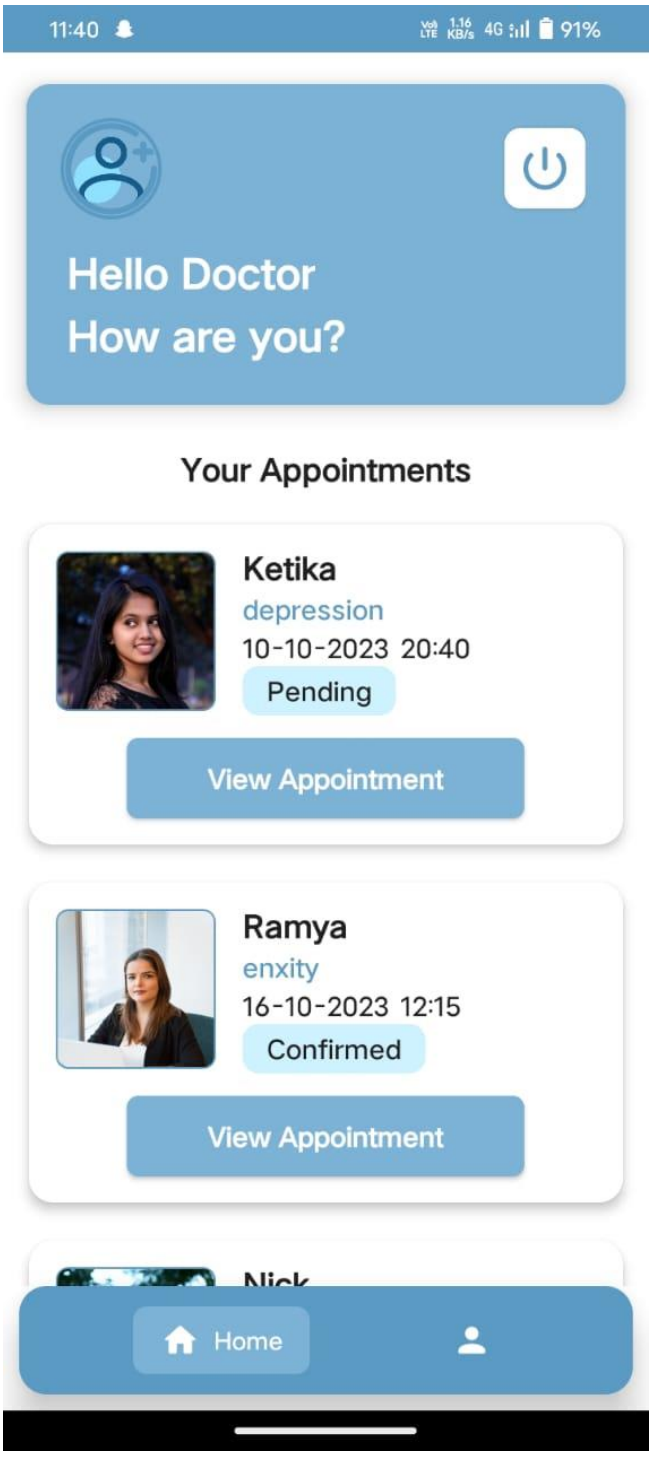
### ❖ Login Screen:



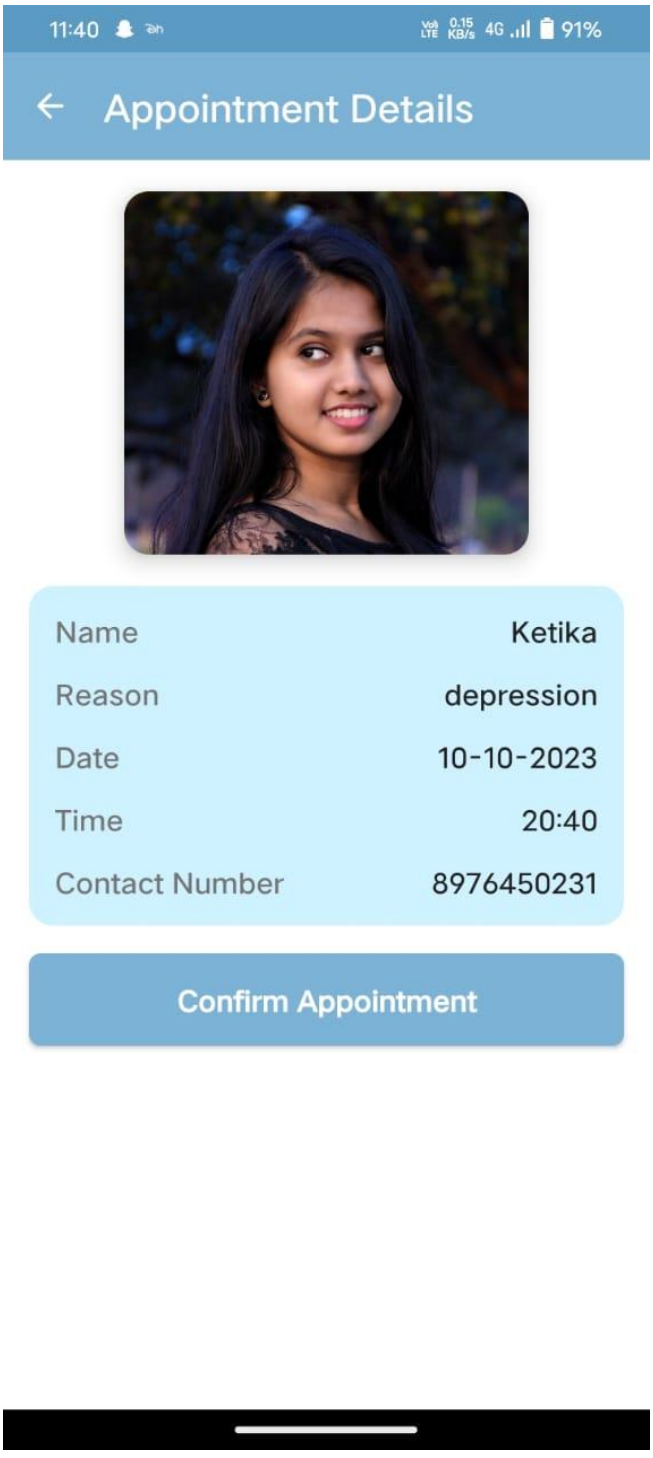

### ❖ Registration Screen:



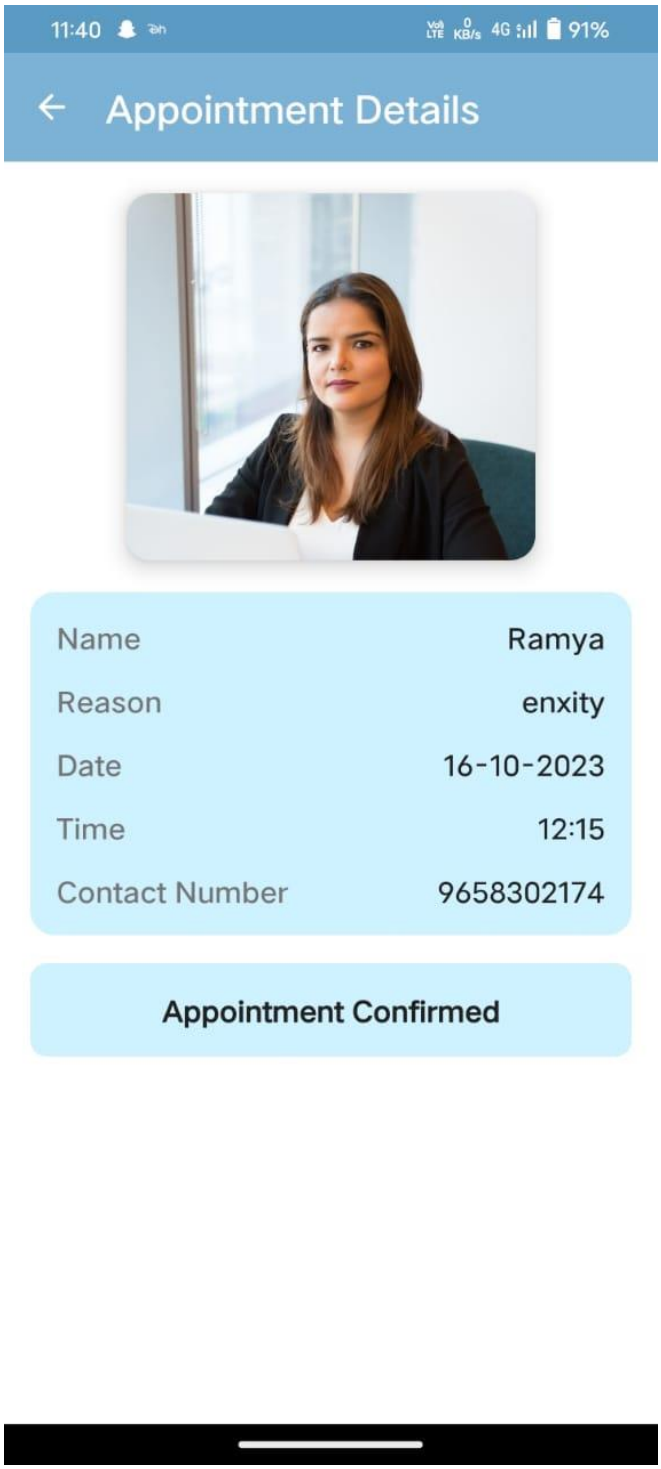
❖ **Home Screen:**



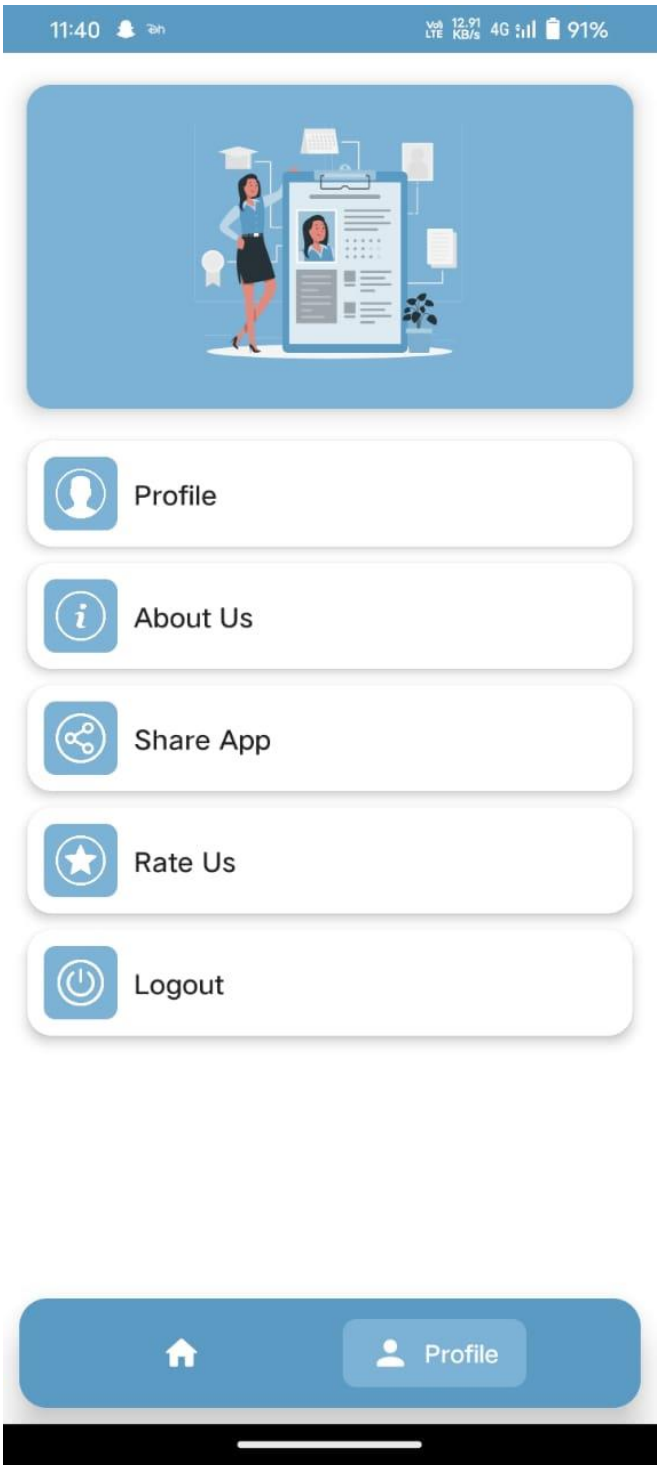

❖ **Pending Appointment Screen:**



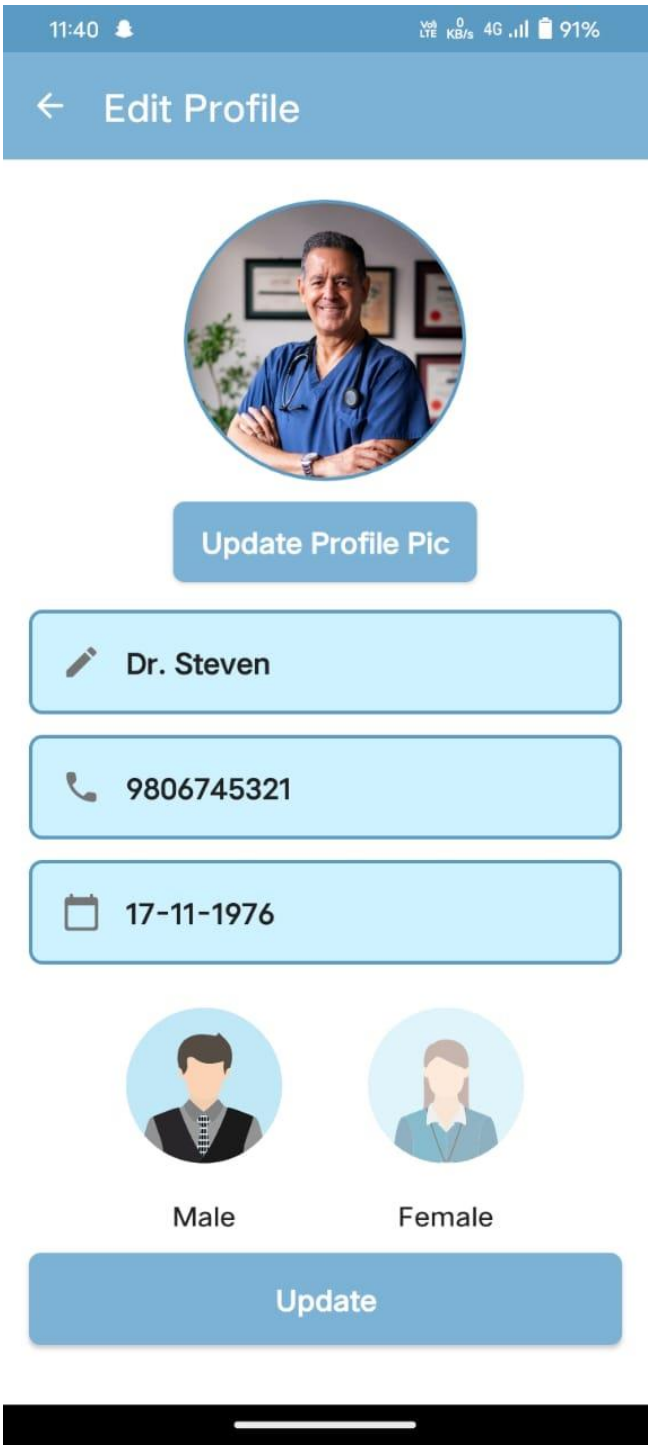
❖ **Confirmed Appointment Screen:**



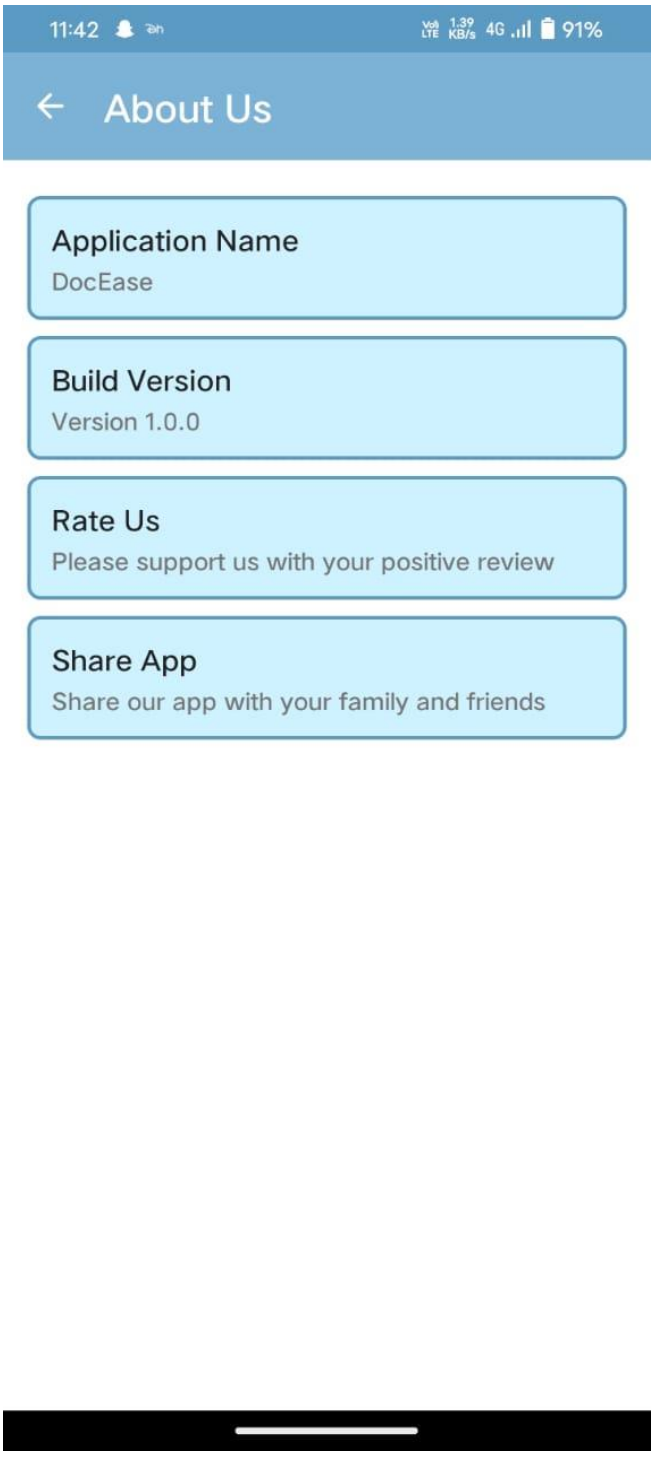

❖ **Profile Screen:**



❖ **Update Profile Screen:**




❖ **About Us Screen:**



# 8. References


- ✓ **https://firebase.google.com/docs**
- ✓ **https://developer.android.com/docs**
- ✓ **https://github.com/**
- ✓ **https://stackoverflow.com/**
- ✓ **https://www.behance.net/**

# 9. Closing Remarks

## ❖ Thank You:

I extend my heartfelt gratitude to you for choosing my DocEase app as your trusted healthcare companion. Your health and well-being are of paramount importance to me, and I am honoured to be a part of your healthcare journey. Thank you for placing your trust in us.

## ❖ Closing Remarks

As we conclude this documentation, we want to reaffirm our commitment to revolutionizing healthcare management. Our vision is to empower you with the tools and resources needed to take control of your health effortlessly. Together, we are reshaping the future of healthcare access and convenience. We look forward to serving you, improving your healthcare experience, and contributing to your overall well-being.

Your health is our top priority, and we are here to support you every step of the way. Welcome to a new era of healthcare management, welcome to the DocEase app.

With warm regards,

Utsav N. Dudhat