

**A**  
**Summer Internship Report**  
**On**  
**" Swasthyam - Dr's Appointment booking app"**

(CE446 – Summer Internship - II)

**Prepared by**

Aliabbas Attarwala (18CE005)  
Navdeep Dadhania (18CE014)  
Nikunj Delavadiya (18CE018)  
Wilson Radadia (18CE094)  
Dharmesh Rathod (18CE099)  
Nihal Shaikh (18CE120)

**Under the Supervision of**

Prof. Trusha Patel  
Prof. Sagar Patel  
Prof. Dhaval Bhoi

**Submitted to**

Charotar University of Science & Technology (CHARUSAT)  
for the Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Technology (B.Tech.)  
for Semester 7  
**Submitted at**



**U & P U. PATEL DEPARTMENT OF COMPUTER ENGINEERING**  
**Chandubhai S. Patel Institute of Technology (CSPIT)**  
**Faculty of Technology & Engineering (FTE), CHARUSAT**  
**At: Changa, Dist: Anand, Pin: 388421.**  
**July 2021**

## DECLARATION BY THE CANDIDATES

We hereby declare that the project report entitled “Swasthyam - Dr's Appointment booking app” submitted by us to Chandubhai S. Patel Institute of Technology, Changa in partial fulfilment of the requirement for the award of the degree of **B.Tech** in Computer Engineering, from U & P U. Patel Department of Computer Engineering, CSPIT/FTE, is a record of bonafide CE446 – Summer Internship - II carried out by us under the guidance of **Prof. Trusha Patel**. We further declare that the work carried out and documented in this project report has not been submitted anywhere else either in part or in full and it is the original work, for the award of any other degree or diploma in this institute or any other institute or university.

Aliabbas Attarwala (18CE005)



Navdeep Dadhania (18CE014)



Nikunj Delavadiya (18CE018)



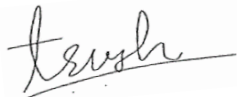
Wilson Radadia (18CE094)



Dharmesh Rathod (18CE099)



Nihal Shaikh (18CE120)



Prof. Trusha Patel

Assistant Professor

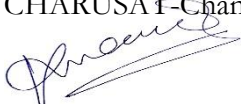
U & P U. Patel Department of Computer Engineering, CSPIT/FTE,  
CHARUSAT-Changa.



Prof. Sagar Patel

Assistant Professor

U & P U. Patel Department of Computer Engineering, CSPIT/FTE,  
CHARUSAT-Changa.



Prof. Dhaval Bhoi

Assistant Professor

U & P U. Patel Department of Computer Engineering, CSPIT/FTE,  
CHARUSAT-Changa.



**Accredited with Grade A by NAAC**  
**Accredited with Grade A by KCG**

## CERTIFICATE

This is to certify that the report entitled “**Swasthyam - Dr's Appointment booking app**” is a bonafied work carried out by **Aliabbas Attarwala (18CE005)** under the guidance and supervision of **Prof. Trusha Patel / Mr. Ashok Sindhav** for the subject **Summer Internship – II (CE446)** of 7<sup>th</sup> Semester of Bachelor of Technology in **Computer Engineering** at Chandubhai S. Patel Institute of Technology (CSPIT), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

To the best of my knowledge and belief, this work embodies the work of candidate himself, has duly been completed, and fulfills the requirement of the ordinance relating to the B.Tech. Degree of the University and is up to the standard in respect of content, presentation and language for being referred by the examiner(s).

Under the supervision of,

Prof. Trusha Patel  
Assistant Professor  
U & P U. Patel Dept. of Computer Engineering  
CSPIT, FTE, CHARUSAT, Changa, Gujarat

Mr. Ashok Sindhav  
CEO  
WebEarl Technologies Pvt Ltd.

Dr. Ritesh Patel  
Head - U & P U. Patel Department of Computer Engineering,  
CSPIT, FTE, CHARUSAT, Changa, Gujarat.

---

---

**Chandubhai S. Patel Institute of Technology (CSPIT)**  
**Faculty of Technology & Engineering (FTE), CHARUSAT**

At: Changa, Ta. Petlad, Dist. Anand, Pin: 388421. Gujarat.



Date: 22nd July 2021

## SUMMER INTERNSHIP COMPLETION CERTIFICATE

This is to certify that **Attarwala Aliabbas Soeb**, B.Tech (CE) students of Chandubhai S. Patel Institute of Technology, CHARUSAT, Changa has done a summer internship on “**Swathyam Web App in React JS Technology as Front End and Node JS Technology with GraphQL Method as Back End**” at WebEarl Technologies Pvt Ltd from 05 / 06 / 2021 to 20 / 07 / 2021. We wish him/her all the best for his/her bright career.

Thanking you.

For **WebEarl Technologies Pvt Ltd**

A handwritten signature in blue ink, appearing to read 'Ashok Sindhav', with a horizontal line extending to the right.

Ashok Sindhav  
Director

## **Acknowledgement**

We are privileged to have this opportunity to express my gratitude and acknowledge everyone's never ending support and valuable contributions for our project.

Prima facie, we would like to express my sincere gratitude to our Lab in charge Prof. Trusha Patel, for the continuous support of our project study and related research, for him patience, motivation, and immense knowledge.

Our sincere thanks also goes to Principal Sir Dr. A.D Patel, Dean Sir Dr. Amit Ganatra, HOD Sir Dr. Ritesh Patel who provided us an opportunity to work on a summer internship project and to be able to present the same.

Last but not the least, we would like to thank my friends and family for supporting me spiritually throughout this project and for always being a constant source of inspiration. We also place on record, our sense of gratitude to one and all, who directly or indirectly, have lent their hand in this venture.

## **Abstract**

The proposed project is a smart appointment booking system that provides patients or any user an easy way of booking a doctor's appointment online. This is a web based and android based application that overcomes the issue of managing and booking appointments according to user's choice or demands. The task sometimes becomes very tedious for the compounder or doctor himself in manually allotting appointments for the users as per their availability. Hence this project offers an effective solution where users can view various booking slots available and select the preferred date and time. This system also allows users to cancel their booking anytime.

# Table of Contents

Acknowledgement .....	i
Abstract .....	ii
<b>CHAPTER-1 INTRODUCTION .....</b>	<b>1</b>
1.1 PURPOSE OF INTERNSHIP .....	1
1.2 OVERVIEW OF PROJECT .....	1
1.3 OBJECTIVE .....	2
1.4 SCOPE .....	2
1.5 ROLES AND RESPONSIBILITIES .....	2
<b>CHAPTER-2 SYSTEM ANALYSIS .....</b>	<b>3</b>
2.1 REQUIREMENTS OF NEW SYSTEM.....	3
2.1.1 FUNCTIONAL REQUIREMENTS .....	3
2.1.2 NON-FUNCTIONAL REQUIREMENTS .....	7
2.2 HARDWARE REQUIREMENTS.....	8
2.3 SOFTWARE REQUIREMENTS .....	8
<b>CHAPTER-3 SYSTEM DESIGN .....</b>	<b>9</b>
3.1 DATA DICTIONARY.....	9
3.2 ER DIAGRAM .....	14
<b>CHAPTER-4 IMPLEMENTATION SCREENSHOTS .....</b>	<b>15</b>
4.1 WEB APPLICATION - DOCTOR SIDE.....	15
4.2 MOBILE APPLICATION - DOCTOR SIDE.....	24
4.3 MOBILE APPLICATION – USER SIDE .....	29
<b>CHAPTER-5 TEST CASES.....</b>	<b>33</b>
5.1 TESTING STRATEGY .....	33
<b>CHAPTER-6 LIMITATIONS AND FUTURE ENHANCEMENTS.....</b>	<b>37</b>
6.1 LIMITATIONS.....	37
6.2 FUTURE ENHANCEMENTS .....	37
<b>CHAPTER-7 CONCLUSION .....</b>	<b>38</b>
Bibliography.....	vi

## List of Figures

Fig 3.1.1 Data Dictionary(1) .....	9
Fig 3.1.2 Data Dictionary(2) .....	10
Fig 3.1.3 Data Dictionary(3) .....	11
Fig 3.1.4 Data Dictionary(4) .....	12
Fig 3.1.5 Data Dictionary(5) .....	13
Fig 3.2.1 ER Diagram .....	14
Fig 4.1.1 Home Screen .....	15
Fig 4.1.2 Login Screen .....	15
Fig 4.1.3 Sign UP Screen .....	16
Fig 4.1.4 Forget password Screen .....	16
Fig 4.1.5 Dashboard Screen .....	17
Fig 4.1.6 Doctor Profile Screen(1) .....	17
Fig 4.1.7 Doctor Profile Screen(2) .....	18
Fig 4.1.8 Hospital Information Screen(1) .....	18
Fig 4.1.9 Hospital Information Screen(2) .....	19
Fig 4.1.10 Covid care Information Screen .....	19
Fig 4.1.11 Staff Member Screen .....	20
Fig 4.1.12 Appointments Screen .....	20
Fig 4.1.13 Covid Appointments Screen .....	21
Fig 4.1.14 History of Appointments Screen .....	21
Fig 4.1.15 Reviews of Appointments Screen .....	22
Fig 4.1.16 Feedback/Suggestions Screen .....	22
Fig 4.1.17 FAQ Screen .....	23
Fig 4.1.18 Advertisement Screen(1) .....	23
Fig 4.1.19 Advertisement Screen(2) .....	23
Fig 4.2.1 Login Screen .....	24
Fig 4.2.2 Sign UP Screen .....	24
Fig 4.2.3 Forget Password Screen .....	24
Fig 4.2.4 Sidebar Screen .....	24
Fig 4.2.5 Covid Care Screen .....	25
Fig 4.2.6 Hospital information Screen .....	25
Fig 4.2.7 Staff Member Screen .....	25
Fig 4.2.8 Advertisement Screen .....	25
Fig 4.2.9 Doctor Profile Screen .....	26
Fig 4.2.10 Edit Profile Screen .....	26
Fig 4.2.11 Time Slot Selection Screen .....	26
Fig 4.2.12 Reset Password Screen .....	26
Fig 4.2.13 Appointment Screen .....	27
Fig 4.2.14 Covid Appointment Screen .....	27
Fig 4.2.15 Covid Appointment Detail Screen .....	27
Fig 4.2.16 Appointment History Screen .....	27
Fig 4.2.17 Advertisement Screen .....	28
Fig 4.2.18 Advertisement Payment Screen .....	28



Fig 4.2.19 Feedback Screen .....	28
Fig 4.2.20 Help and Support Screen .....	28
Fig 4.3.1 Splash Screen .....	29
Fig 4.3.2 Introduction Screen(1) .....	29
Fig 4.3.2 Introduction Screen(2) .....	29
Fig 4.3.4 Introduction Screen(3) .....	29
Fig 4.3.5 Login Screen .....	30
Fig 4.3.6 Forget Password .....	30
Fig 4.3.7 Registration Screen .....	30
Fig 4.3.8 OTP Screen .....	30
Fig 4.3.9 Dashboard Full Screen .....	31
Fig 4.3.10 Hospital Full Screen .....	31
Fig 4.3.11 Doctor details Screen .....	32
Fig 4.3.12 Set Appointment Screen .....	32
Fig 4.3.13 Appointment Form Screen .....	32
Fig 4.3.14 Appointment Summary Screen .....	32

## List of Tables

Table 1.1 Roles and Responsibilities .....	2
Table 5.1 Registration of Doctor test case .....	33
Table 5.2 Login of Doctor test case .....	34
Table 5.3 Profile, Hospital, Covid Care test case .....	35
Table 5.4 Advertisement of Hospital test case .....	36

## CHAPTER-1 INTRODUCTION

### 1.1 PURPOSE OF INTERNSHIP

The main purpose of this internship is to enhance professional and personal skill development which enables us to gain a planned and directed learning experience. It also enable us to integrate knowledge gained through their industry learning with the competencies made available through actual experience in a professional setting. The goals of this internship are:

- Learn and develop practical skills
- Gain first hand understanding of the inner workings of an organization
- Make a positive contribution to an organization
- Solve problems by taking initiative and using creativity
- Clarify career goals
- Observe and Learn ethics at work
- Observe and work with professionals in the field

### 1.2 OVERVIEW OF PROJECT

The Doctor-Patient system would be mainly used by hospitals and clinics of any size. This application would mainly help the doctors to track their patient's application status and the patient can comfortably schedule his/her appointment. This system would consist of three modules :

#### 1. Doctor side application

- Firstly, doctor has to register himself/herself as an authorized doctor through this application.
- After the registration, the doctor will be able to access his/her profile to add more information like uploading degree document, license document, etc.
- The doctor can also add/update his/her hospital details and can also add/update the covid-care centre(if available) information.
- The doctor can also track the appointment status, appointment history and the covid care appointments.
- The doctor can also add/update the staff information.
- The doctor or authorized staff member can set the advertisement by uploading photos of hospital and those uploaded photos will be displayed on the patient's application.

#### 2. Patient side application

- Firstly, the patient has to register himself/herself by filling the necessary details to access the application.
- After the successful registration the patient can schedule his/her appointment according to his preferable time slot.

- The patient can also see the appointment status, appointment history and the reviews given.
- The list of covid care centres available in hospital would be displayed to the patient.

### 3. Admin Portal

- After the successful registration of doctor, the admin can approve/decline the authorization of doctor. The patient can only set the appointment for the authorized doctor.
- The admin is also able to see the information of the doctor, patient and can update their information.

## 1.3 OBJECTIVE

To automate the process of scheduling appointments for the patient according to their preferred time slot and to help the doctor maintain all the information of the appointments in one dashboard

## 1.4 SCOPE

The scope of this system is for any size of hospital or clinic that requires such type of application.

## 1.5 ROLES AND RESPONSIBILITIES

Aliabbas (18CE005)	Web Developer and Doctor side application
Navdeep (18CE014)	Backend Developer
Nikunj (18CE018)	Web Developer and Doctor side application
Wilson (18CE094)	Mobile App Developer and Doctor & Patient side application
Dharmesh (18CE099)	Mobile App Developer and Doctor & Patient side application
Nihal (18CE120)	Mobile App Developer and Doctor & Patient side application

Table 1.1 Roles and Responsibilities

## CHAPTER-2 SYSTEM ANALYSIS

### 2.1 REQUIREMENTS OF NEW SYSTEM

#### 2.1.1 FUNCTIONAL REQUIREMENTS

##### Doctor App:

- **Login:** Doctor or staff can login to system using credentials.
  - Input: Email id and Password
  - Output: Home screen for particular user
  - Processing: User will be authenticated based on credentials as Doctor or Staff patient in backend.
- **Register:** Doctor can register himself/herself.
  - Input: Name, City, Category, Email, Phone no. Password
  - Output: User will be registered and redirected to login page.
  - Processing: User will be registered if mobile number is authenticated using OTP.
- **Home:** Appointment request from user will be shown.
  - Input: Accept or Reject appointment request.
  - Output: Appointment request will be accepted or rejected.
  - Processing: If appointment is accepted will be added to My Appointment or if appointment is rejected then it will be added to appointment History.
- **My Appointment:** Accepted appointment will be shown.
  - Input: Set appointment status as cancel, visited or not visited.
  - Output: Appointment status will be set as cancelled, visited or not visited.
  - Processing: Appointment will be added into appointment history.
- **Appointment History:** History of appointment will be shown
  - Output: History of all the appointment and its detail will be shown.
- **Profile:** Doctor Profile will be shown and can be edited.
  - Input: Name, City, Category, Email, Phone number, Password, profile photo, Experience, Education, Degree Document, License

Document.

- Output: Edited Profile will be shown.
  - Processing: Profile will be shown and updated if edited.
- **Reset Password:** Password can be reset.
    - Input: Old password, new password.
    - Output: Password reset confirmation.
    - Processing: if old password is true then password will be changed to new password.
  - **Time slots:** Set time slots for appointment.
    - Input: Select time slot for appointment day wise.
    - Output: Selected slots will be visible.
    - Processing: Time slots for selected days will be added to database.
  - **Reviews:** Reviews by patient for appointment will be shown.
    - Output: Reviews and Ratings per each appointment will be shown in detail.
  - **Add Staff:** Doctor can add Staff member.
    - Input: Name, Designation, Mobile no, Email.
    - Output: Staff member's email id and auto generated password.
    - Processing: Staff member will be added under particular doctor and password for that staff member will be generated.
  - **Edit Staff:** Staff member detail can be edited.
    - Input: Name, Designation, Mobile no, Email.
    - Output: Detail edited confirmation alert.
    - Processing: Staff detail will be updated.
  - **View Staff:** Staff list will be shown.
    - Output: Staff list and its detail will be shown.
  - **My Hospital:** Hospital Details will be shown and can be edited.
    - Input: Hospital Name, Hospital Address, Google address Link, Email, Phone no, Hospital Photos.
    - Output:: Edited Hospital address will be shown..
    - Processing: Hospital Detail will be shown and updated if edited.

- **Doctor In/Out:** Doctor's availability will be shown.
  - Input: Set doctor's status in hospital as In/Out.
  - Output: Log of doctor's In/Out for the day will be shown.
  - Processing: Doctor's status as in/out will be set in database.
- **Covid Care:** Covid facility information for hospital.
  - Input: Covid facility availability status, No. of beds, No. of vacant beds, No. of ventilators, No. of beds in ICU, No. of available oxygen cylinders.
  - Output: Covid facility availability status, No. of beds, No. of vacant beds, No. of ventilators, No. of beds in ICU, No. of available oxygen cylinders.
  - Processing: Details will be edited on database.
- **Advertisement:** Advertisement for hospital.
  - Input: Hospital photos, Date range.
  - Output: Hospital's advertisement will be shown on patient app and advertisement history on doctor app.
  - Processing: Request will be sent to admin for the advertisement and if accepted then advertisement will be shown.
- **Feedback & Suggestion:** Feedback for App.
  - Input: Rating and Feedback
  - Output: Confirmation message.
  - Processing: Feedback will be saved in database.
- **Help and Support:** FAQs.
  - Output: FAQs for application use will be shown.
- **Notification:** Notifications will be shown.
  - Output: Notification of appointments, advertisement admin approval and other events.

**Patient App:**

- **Login:** Doctor or staff can login to system using credentials.
  - Input: Email id and Password or Google account
  - Output: Home screen
  - Processing: User will be authenticated based on credentials.
- **Register:** Doctor can register himself/herself.

- Input: Name, City, Email, Phone no. Password or Google account
- Output: User will be registered and redirected to login page.
- Processing: User will be registered if mobile number is authenticated using OTP or by Google.
- **Profile:** Patient Profile will be shown and can be edited.
  - Input: Name, City, Email, Phone no.
  - Output: Edited Profile will be shown.
  - Processing: Profile will be shown and updated if edited.
- **My Appointment:** All appointment will be shown.
  - Input: Set appointment status as cancel.
  - Output: All the appointments will be shown and if cancelled Appointment status will be set as cancelled.
  - Processing: Appointment will be added into appointment history if cancelled or completed.
- **Appointment History:** History of appointment will be shown
  - Output: History of all the appointment and its detail will be shown.
- **Doctors:** Doctor List from different hospitals will be shown.
  - Output: Doctor List from different hospitals will be shown and detail of that doctor.
- **Hospitals:** Hospital List will be shown.
  - Output: Doctor List of that hospitals will be shown and detail of that hospital.
- **Set Appointment:** Appointment request can be sent to doctor.
  - Input: Date, Slot, Name, Age, Gender, Phone, Symptoms, Description, Address.
  - Output: Review of all the details filled and appoint request sent confirmation.
  - Processing: Appointment request will be sent to particular doctor.
- **Feedback & Suggestion:** Feedback for App.
  - Input: Rating and Feedback
  - Output: Confirmation message.
  - Processing: Feedback will be saved in database.

- **Help and Support:** FAQs.
  - Output: FAQs for application use will be shown.
- **Notification:** Notifications will be shown.
  - Output: Notification of appointments, advertisement admin approval and other events.

### 2.1.2 NON-FUNCTIONAL REQUIREMENTS

- **Usability:**
  - Usability defines how difficult it will be for a user to learn and operate the system.
- **Efficiency of use:**
  - User can easily interact with system. Most of tasks a user can complete without any help. It has not complex design so any user can easily interact
- **Reliability:**
  - Reliability defines how likely it is for the software to work without failure for a given period of time. Reliability decreases because of bugs in the code, hardware failures, or problems with other system components.
  - The Database update process must roll back all related updates when any update fails.
- **Performance:**
  - Performance is a quality attribute that describes the responsiveness of the system to various user interactions with it.
  - The front-page load time must no more than 5 seconds.
- **Security:**
  - Security requirements ensure that the software is protected from unauthorized access to the system and its stored data. It considers different levels of authorization and authentication across different *users*’ roles. For instance, data privacy is a security characteristic that describes who can create, see, copy, change, or delete information.
  - Unauthorized user cannot login to system



## 2.2 HARDWARE REQUIREMENTS

- **Processor:** Intel dual core or above your head
- **Processor Speed:** 1.0GHZ or above
- **RAM:** 4 GB RAM or above
- **Hard Disk:** 20 GB hard disk or above

## 2.3 SOFTWARE REQUIREMENTS

- **Tools:** VS Code, GitHub, MongoDB Atlas, Adobe XD, Figma
- **Technology:** Node JS, Express JS, React JS, React-native , Expo
- **Database:** MongoDB

## CHAPTER-3 SYSTEM DESIGN

### 3.1 DATA DICTIONARY

Table Name	Filed Name	Data Type
<b>admin</b>	a_id	PK
	a_username	String
	a_password	String
<b>category</b>	category_id	PK
	category_name	String
<b>doctor</b>	doctor_id	PK
	doctor_name	String
	category_id	FK
	doctor_city_name	String
	doctor_email	String
	doctor_phoneno	String
	doctor_document	String
	doctor_licence	String
	doctor_photo	String
	doctor_date_time	Date
	doctor_education	String
	doctor_total_experien	Integer
	doctor_password	String
<b>hospital</b>	status	String
	inout_Status	String
	hospital_id	PK
	doctor_id	FK
	hospital_name	String
	hospital_city_name	String
	hospital_email	String

Fig 3.1.1 Data Dictionary(1)

	hospital_number_one	String
	hospital_location_link	String
	hospital_address	String
	covidCenter	String
<b>hospital_photo</b>		
	hp_id	PK
	hp_name	String
	hospital_id	FK
<b>hospital_facilities</b>		
	hf_id	PK
	hospital_id	FK
	facilities_name	String
<b>staff</b>		
	staff_id	PK
	staff_name	String
	staff_phone	String
	doctor_id	FK
	staff_designation	String
	staff_email	String
	staff_password	String
	staff_status	String
	staff_date_time	Date
<b>doctor_attendence</b>		
	attendance_id	PK
	doctor_id	FK
	staff_id	FK
	status	String
<b>doctor_avability</b>		
	da_id	PK
	doctor_id	FK
	slot	Array
	day	String

Fig 3.1.2 Data Dictionary(2)

**user**

user_id	PK
user_name	String
user_phoneno	String
user_city	String
user_password	String
user_email	String
user_age	Integer
user_gender	String
user_date_time	Date
user_address	String

**appointment**

appointment_id	PK
doctor_id	FK
user_id	FK
staff_id	FK
name	String
gender	String
age	Integer
address	String
phone	String
token	Integer
caseType	String
date	Date
slot	String
problem	String
bp	Integer
allergy	String
suger	Integer
history	String
acceptedBy	String
appointmentStatus	String

Fig 3.1.3 Data Dictionary(3)

<b>review</b>	status	String
	userStatus	String
	createdAt	Date
	updatedAt	Date
<b>review</b>	review_id	PK
	doctor_id	FK
	user_id	FK
	appointment_id	FK
	appointment_type	String
	date_time	Date
	review_text	String
	review_rating	Integer
<b>covid_center</b>	center_id	PK
	hospital_id	FK
	total_bad	Integer
	oxygen	Integer
	ventilator	Integer
	vacantbad	Integer
	icubad	Integer
<b>covid_booking</b>	covidappointment_id	PK
	doctor_id	FK
	user_id	FK
	staff_id	FK
	center_id	FK
	name	String
	gender	String
	age	Integer
	address	String
	phone	String

Fig 3.1.4 Data Dictionary(4)

	token	Integer
	caseType	String
	dateIn	Date
	dateOut	Date
	oxygen	Boolean
	ventilator	Boolean
	acceptedBy	String
	appointmentStatus	String
	status	String
	userStatus	String
	createdAt	Date
	updateAt	Date
<b>advertisment</b>		
	adv_id	PK
	doctor_id	FK
	adv_start_date	Date
	adv_end_date	Date
	adv_title	String
	adv_status	String
	adv_detail	String
<b>advertisment_photo</b>		
	ap_id	PK
	adv_id	FK
	ap_photo	String

Fig 3.1.5 Data Dictionary(5)

## 3.2 ER DIAGRAM

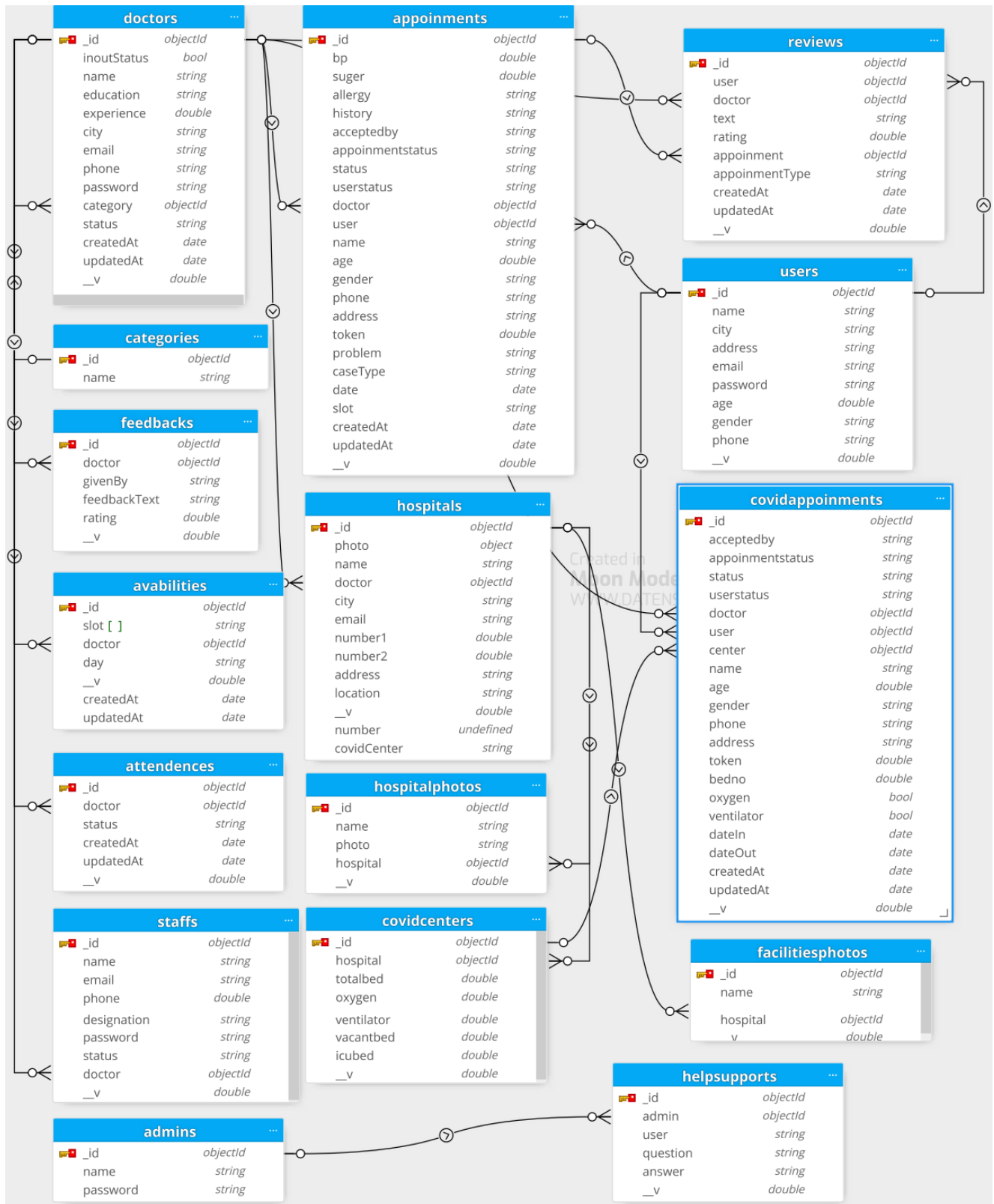


Fig 3.2.1 ER Diagram

## CHAPTER-4 IMPLEMENTATION SCREENSHOTS

### 4.1 WEB APPLICATION - DOCTOR SIDE

**Home page:** Whenever doctor or staff open the website, first they will land on this home page.

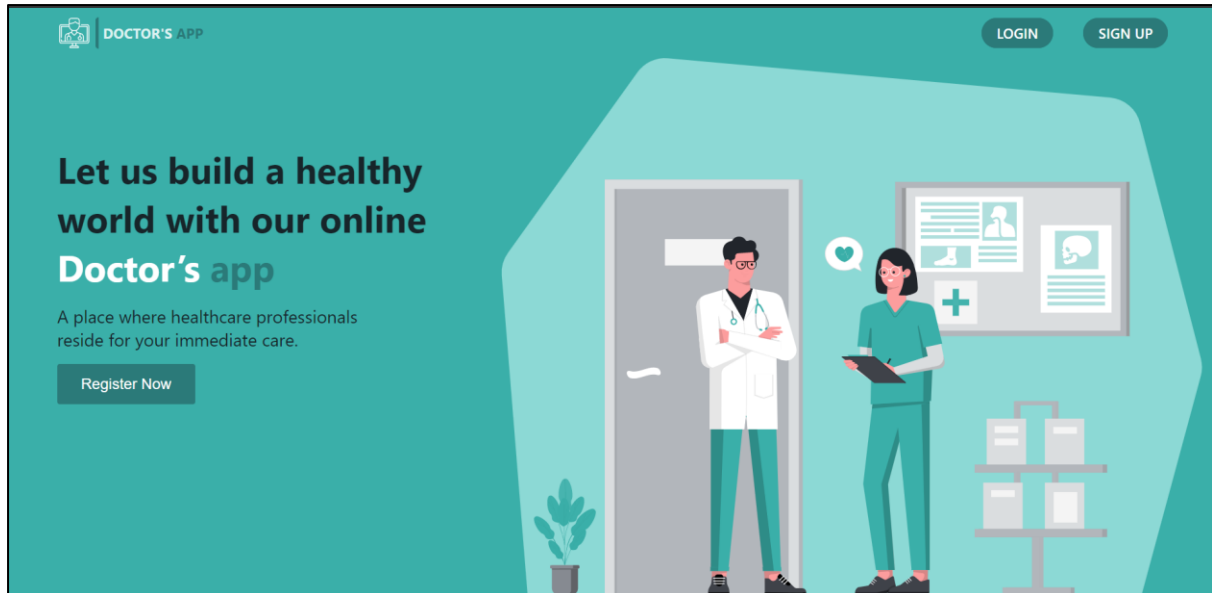


Fig 4.1.1 Home Screen

**Login:** Doctor or staff can login to system using credentials. User will be authenticated based on credentials as Doctor or Staff patient in backend.

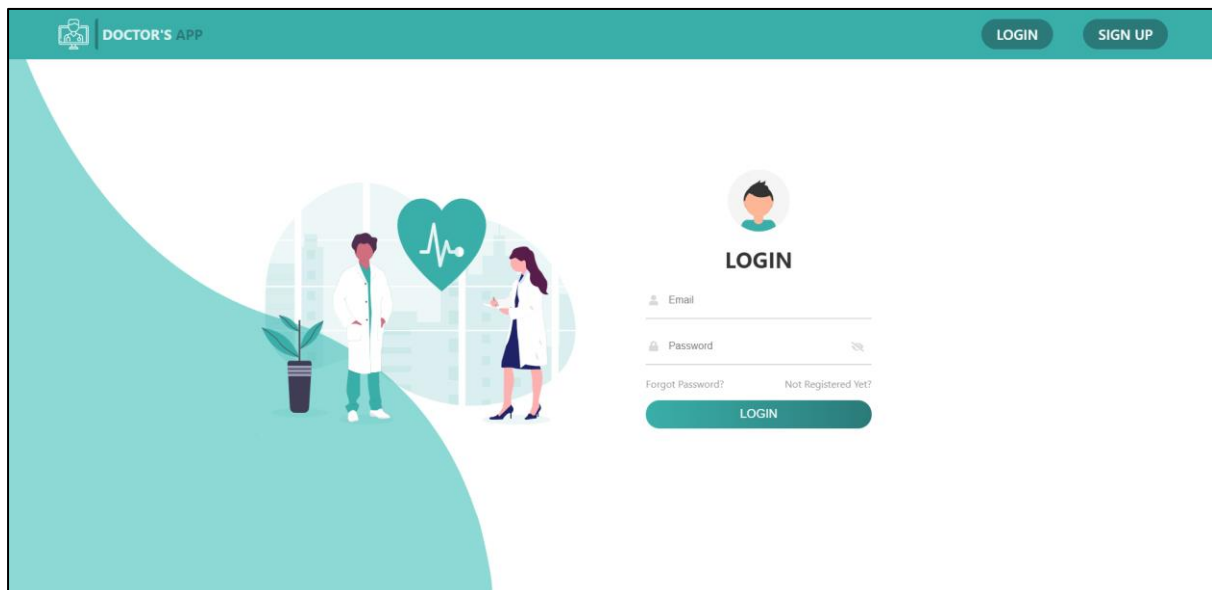


Fig 4.1.2 Login Screen



**Sign UP :** Doctor can register himself/herself. User will be registered and redirected to login page. User will be registered if mobile number is authenticated using OTP.

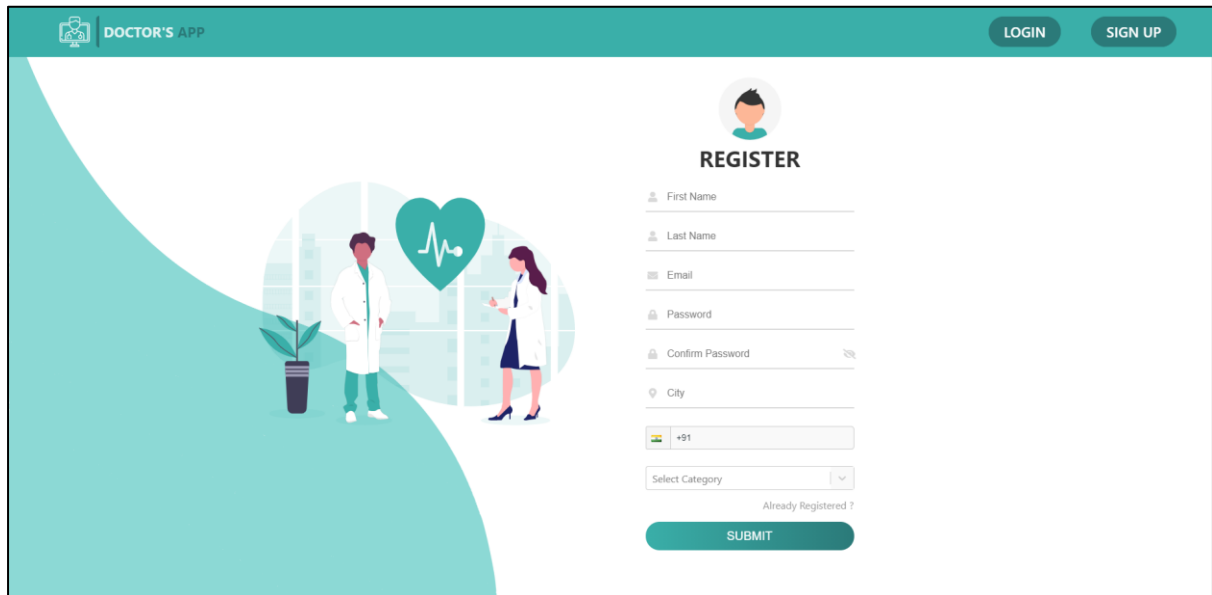


Fig 4.1.3 Sign UP Screen

**Forget password:** Doctor or staff can change their password by using registered phone number. For that, first they have to verify registered phone number by OTP.

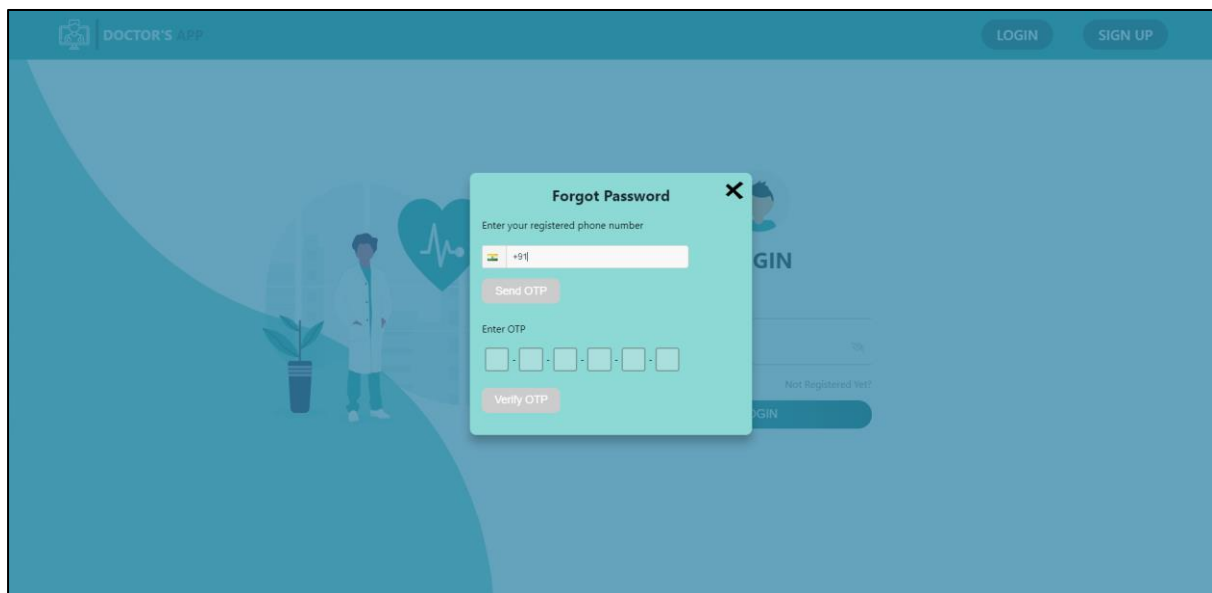


Fig 4.1.4 Forget password Screen

**Dashboard :** Appointment request from user will be shown in My appointment section. If appointment is accepted then it will be added to My Appointment or if appointment is rejected then it will be added to appointment History.

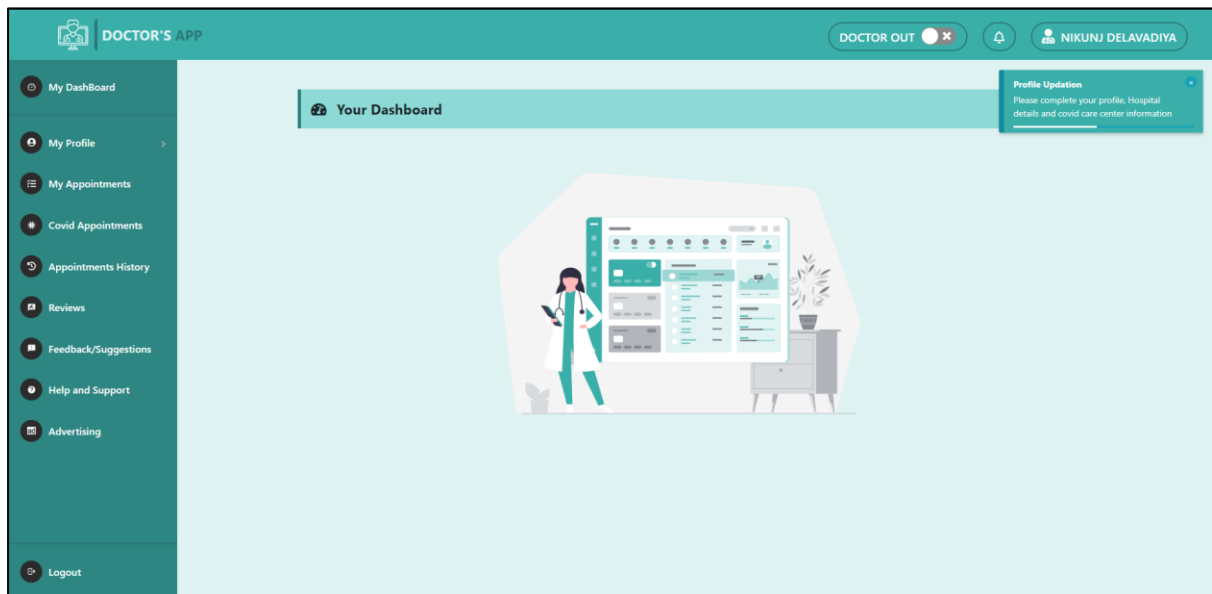


Fig 4.1.5 Dashboard Screen

**Doctor Profile :** Doctor Profile will be shown and can be edited. If any field is edited then it will update that field.

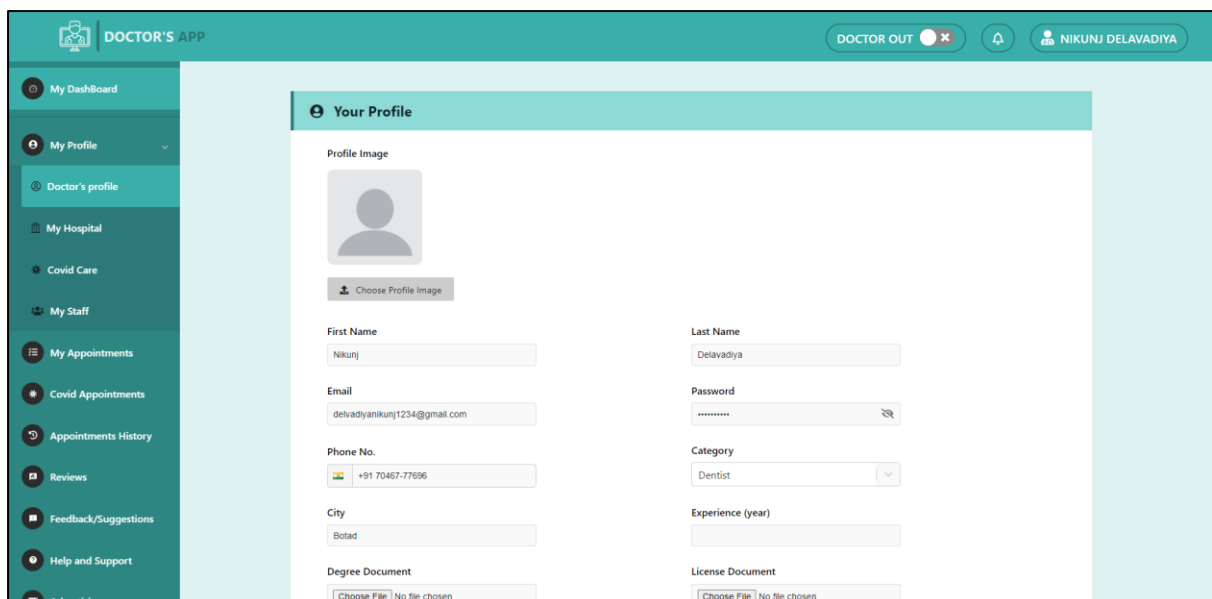


Fig 4.1.6 Doctor Profile Screen(1)

**Time slots:** Set time slots for appointment. Time slots for selected days will be added to database.

The screenshot shows the 'Time Slot Selection' interface of the Doctor's App. On the left is a sidebar menu with various navigation options. The main area displays a list of days of the week (Monday through Sunday). Each day has a corresponding 'Select slot' text input field. At the bottom of this list is a 'Save Slot' button. The top of the app shows a header with the app name, a 'DOCTOR OUT' status indicator, a notification bell, and the user's name 'NIKUNJ DELAVADIYA'.

Fig 4.1.7 Doctor Profile Screen(2)

**Hospital Information :** Hospital Details will be shown and can be edited. If any field is edited then it will update that field.

The screenshot displays the 'Hospital's Detail' screen within the Doctor's App. The sidebar menu is consistent with the previous screen. The main content area features several form fields for hospital information: 'Hospital Name' (with 'Akshar Hospital' entered), 'Google Map Link' (with a URL), 'Phone No.' (with '+91 70467-77696'), 'Email' (with 'AksharHospital@gmail.com'), and 'Address of Hospital' (with 'Paliyad Rd, near marketing yard, Kharana, Botad, Gujarat 364718'). A 'Save' button is positioned below these fields. At the bottom, there is a 'Doctor in/out log' section with a 'Show Log' button. The app header at the top shows the 'DOCTOR OUT' status, a notification bell, and the user's name 'NIKUNJ DELAVADIYA'.

Fig 4.1.8 Hospital Information Screen(1)

**Doctor's in/out log :** Log of doctor's In/Out for the day will be shown. In database that status is also updated.

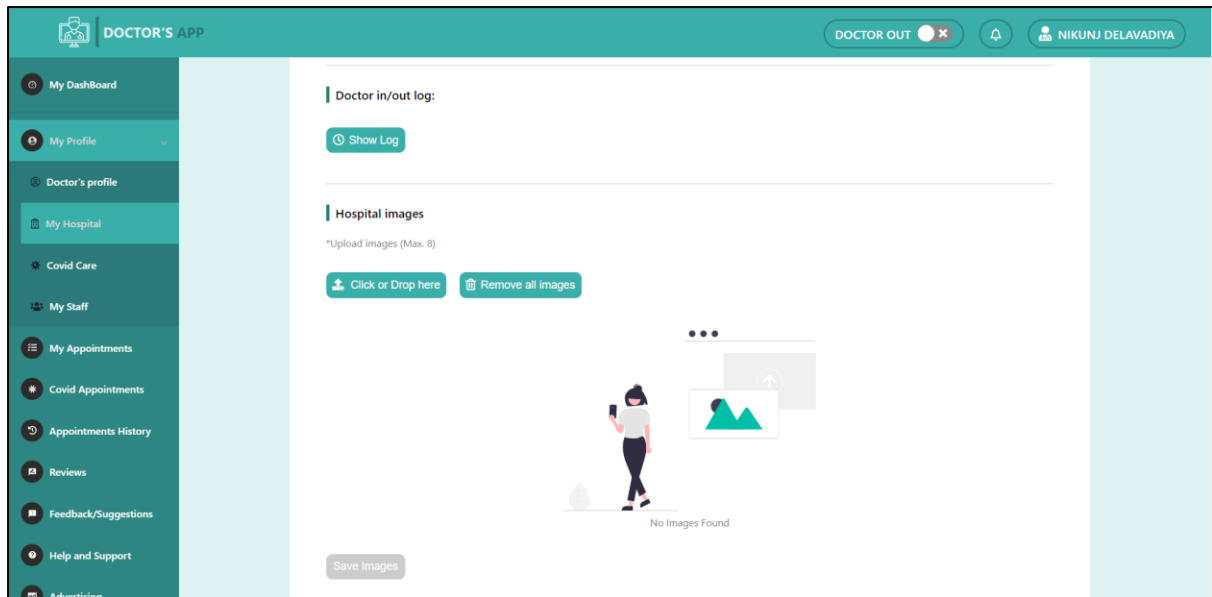


Fig 4.1.9 Hospital Information Screen(2)

**Covid care Information :** Covid facility information for hospital. Details will be updated on database.

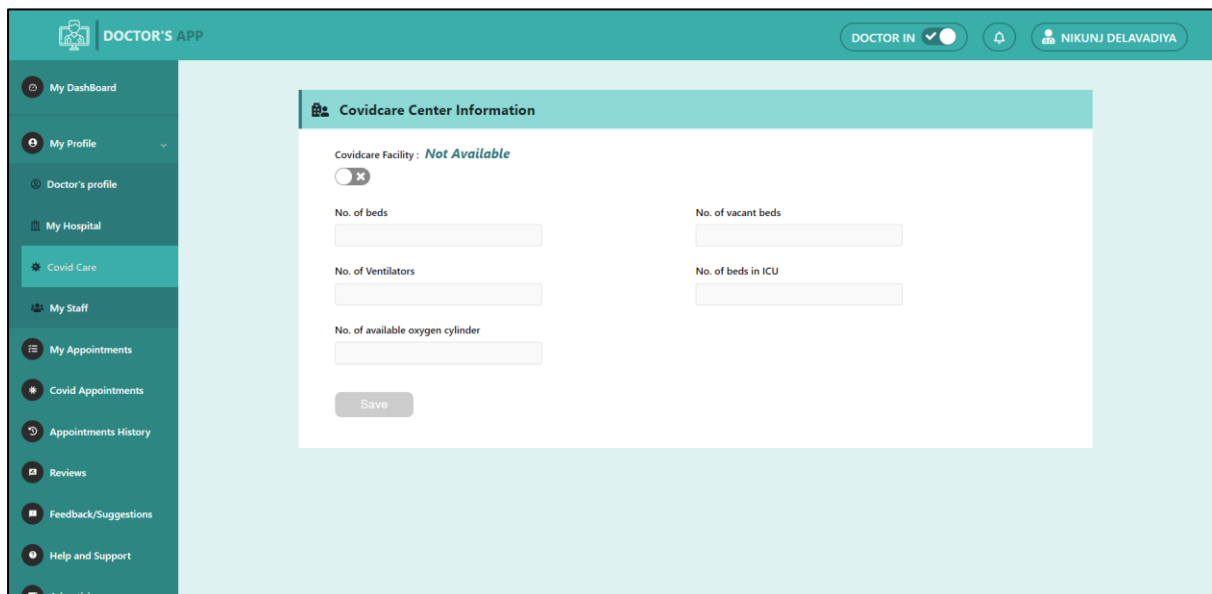


Fig 4.1.10 Covid care Information Screen

**Staff Member :** Staff list will be shown. Doctor can add or update the information of staff member.

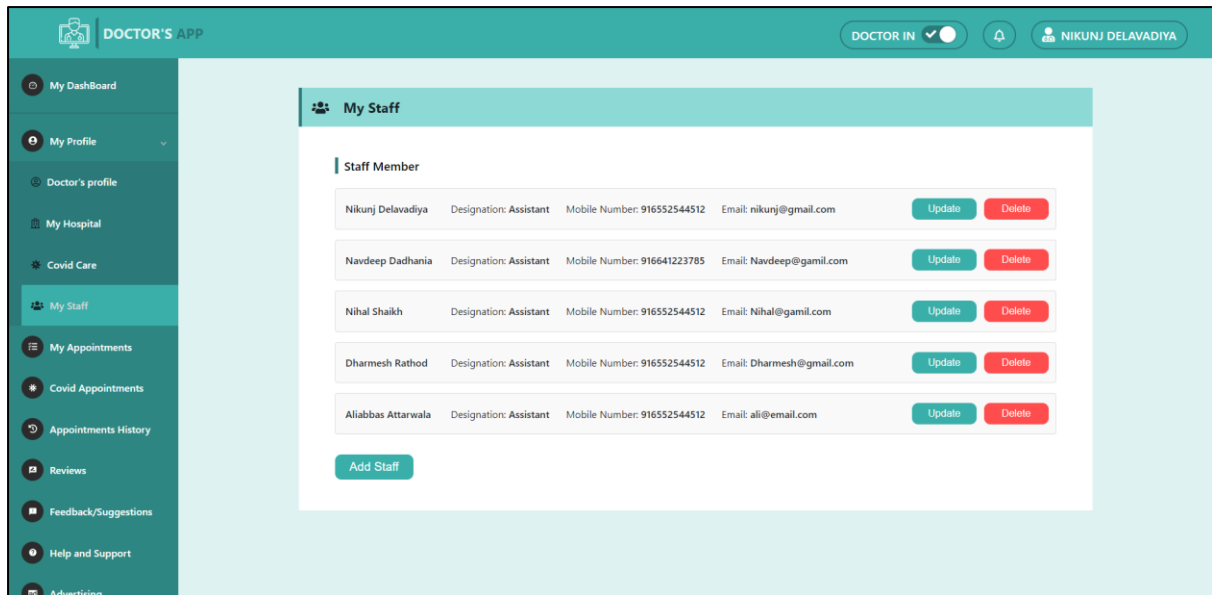


Fig 4.1.11 Staff Member Screen

**My Appointment:** Appointments booked by user will be shown here. Doctor or staff can accept or reject the appointment.

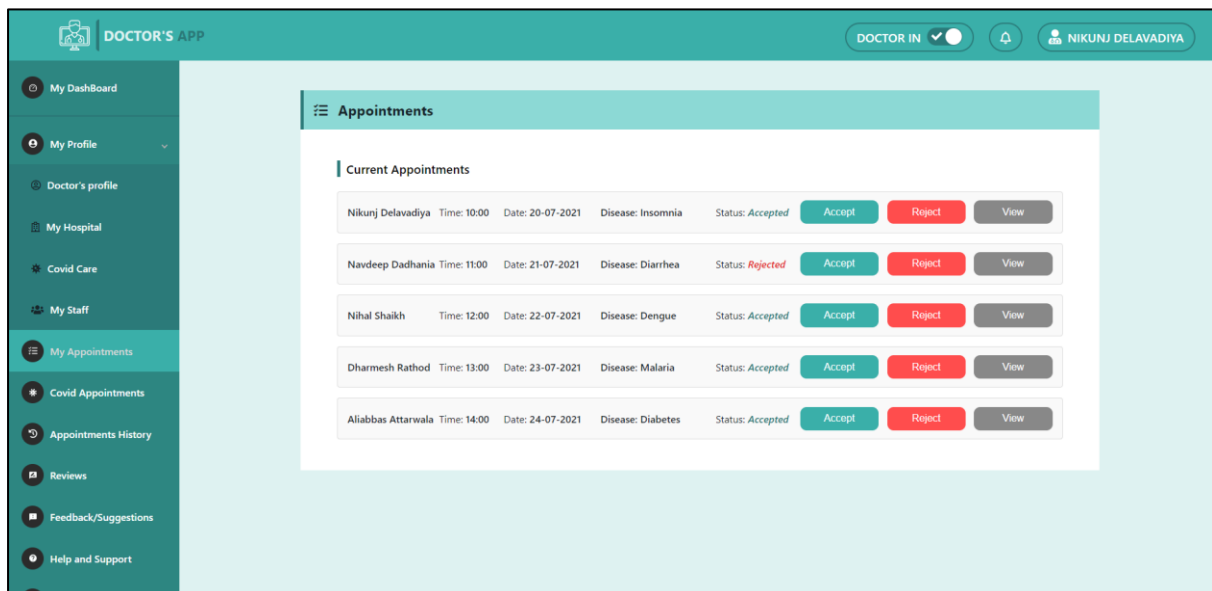


Fig 4.1.12 Appointments Screen

**Covid Appointments :** Appointments booked for covid facility will be shown here. Doctor or staff can accept or reject the appointment.

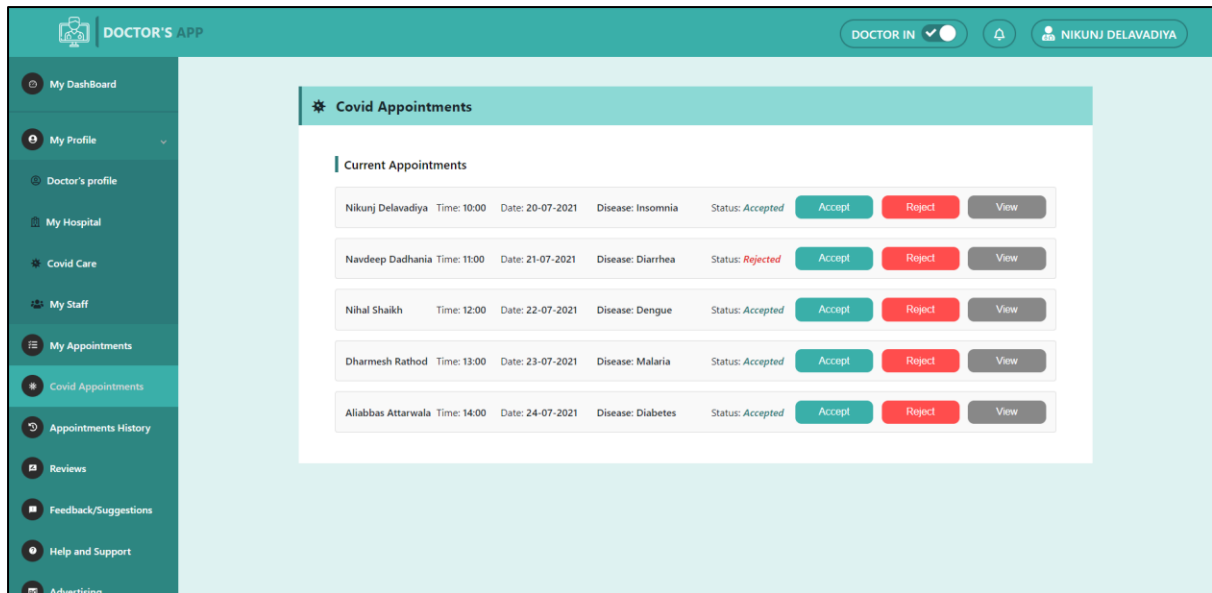


Fig 4.1.13 Covid Appointments Screen

**Appointment History:** History of all the appointment and its detail along with review given by user will be shown here.

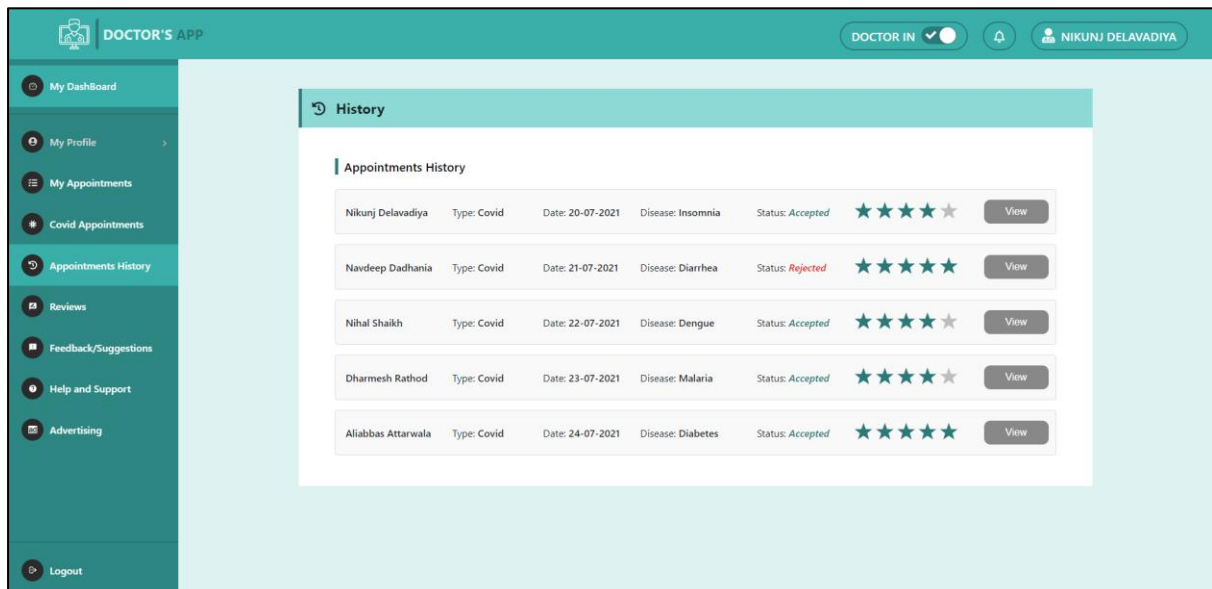


Fig 4.1.14 History of Appointments Screen

**Appointments Review :** Review given by user for any appointment will be shown here. Doctor and staff can see detail review by clicking on view button.

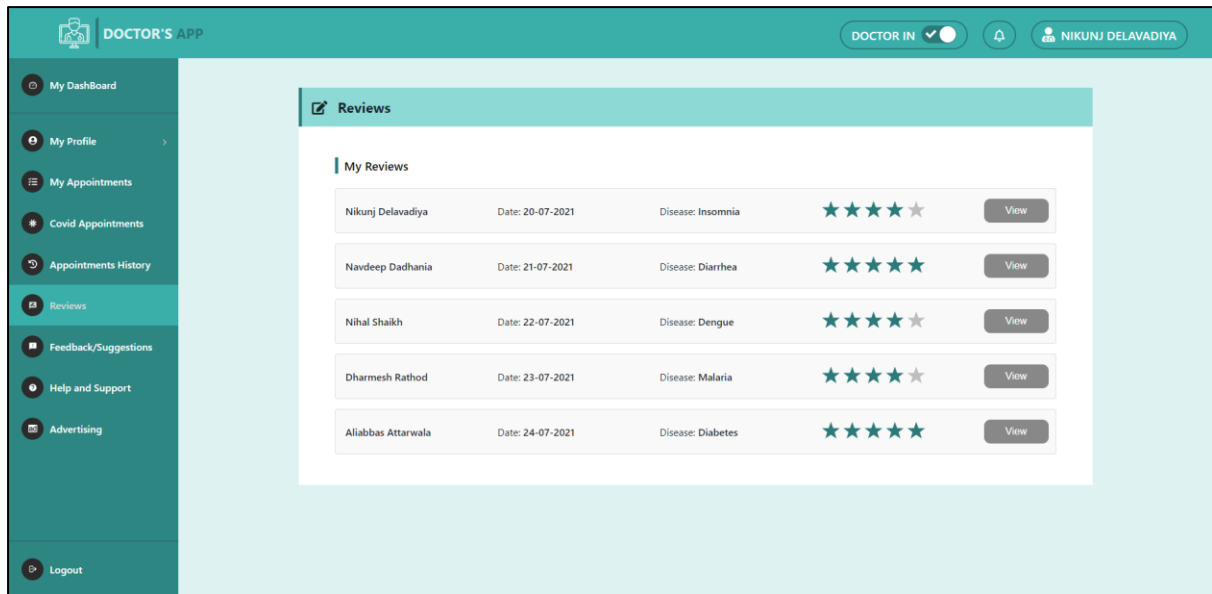


Fig 4.1.15 Reviews of Appointments Screen

**Feedback/Suggestions :** Doctor or staff can provide feedback or suggestions for website.

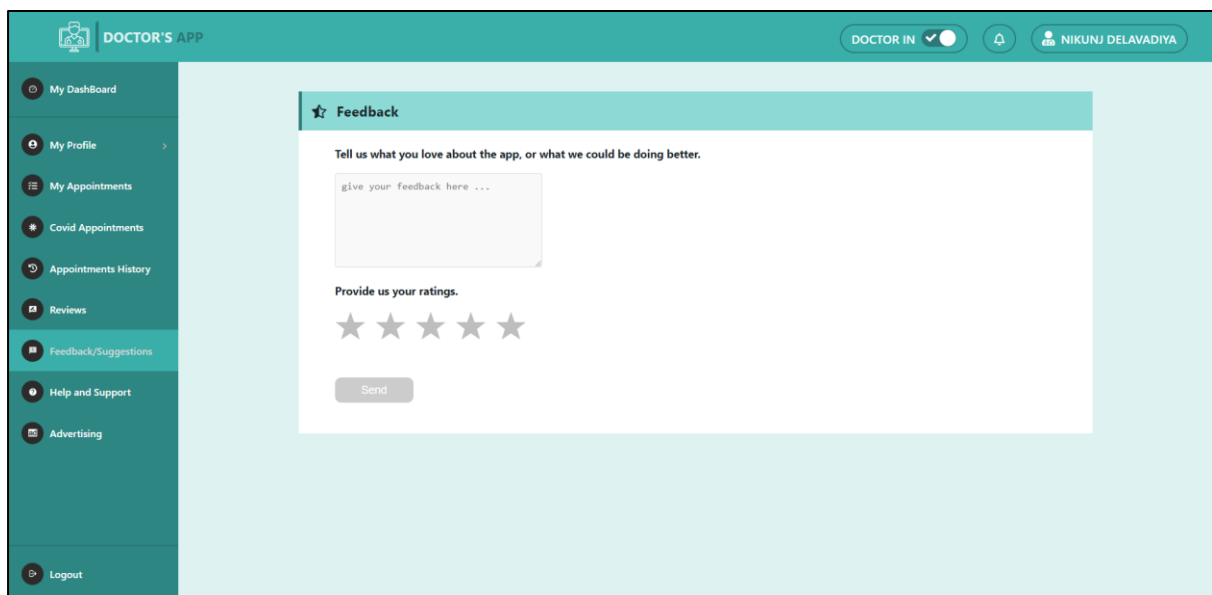


Fig 4.1.16 Feedback/Suggestions Screen

**FAQ :** Frequently asked questions will be shown here.

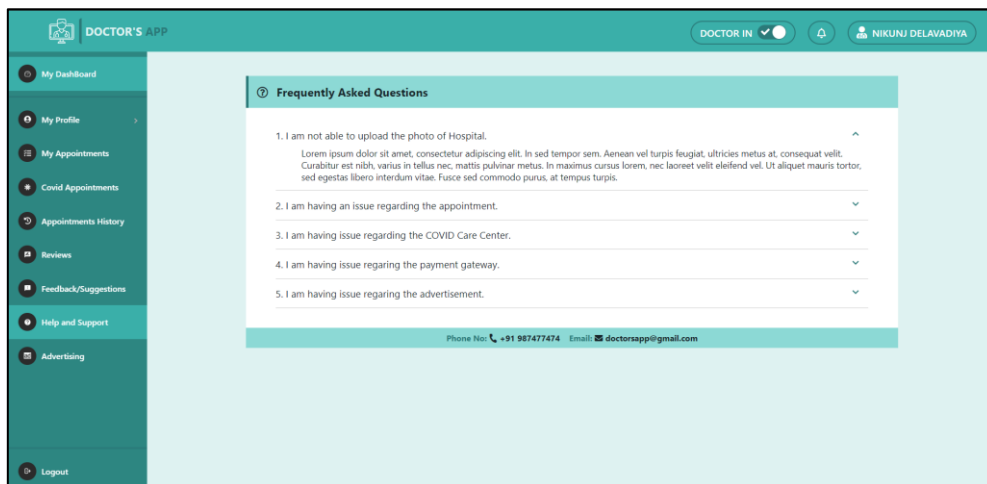


Fig 4.1.17 FAQ Screen

**Advertisement :** Here staff or doctor can upload images for advertisement.

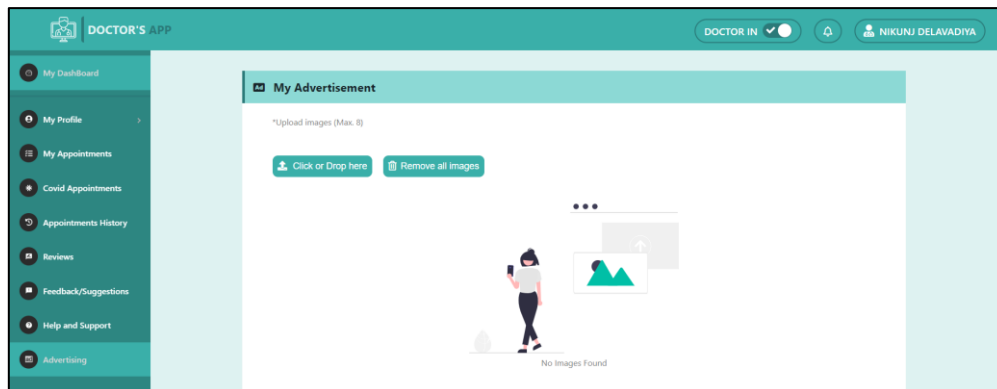


Fig 4.1.18 Advertisement Screen(1)

**Advertisement Payment :** Payment details for advertisement will show here according to starting date and ending date.

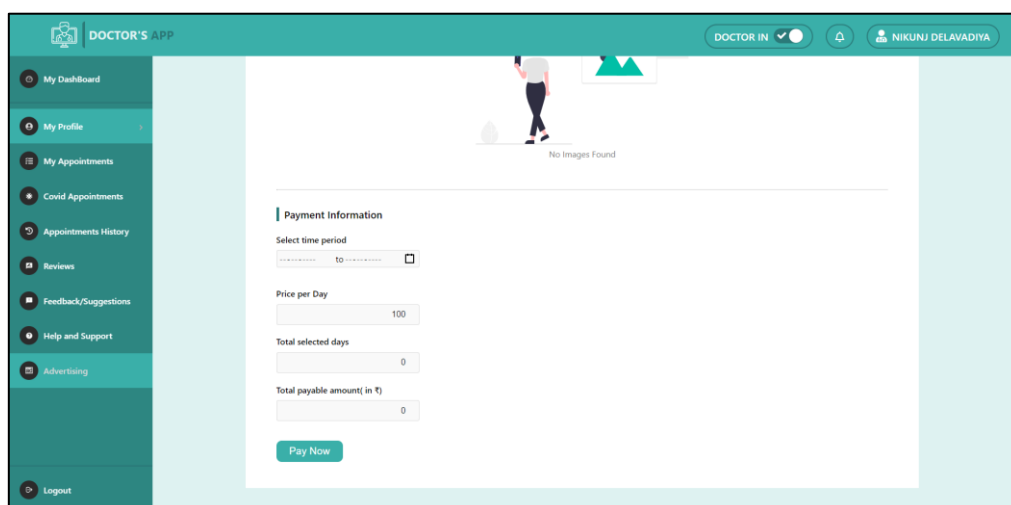


Fig 4.1.19 Advertisement Screen(2)



## 4.2 MOBILE APPLICATION - DOCTOR SIDE

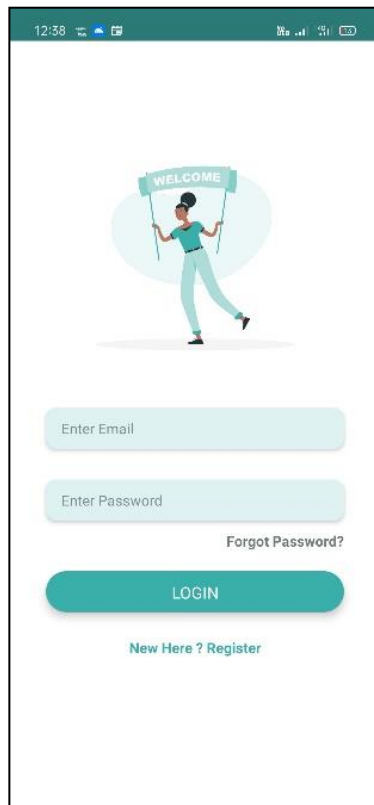


Fig 4.2.1 Login Screen

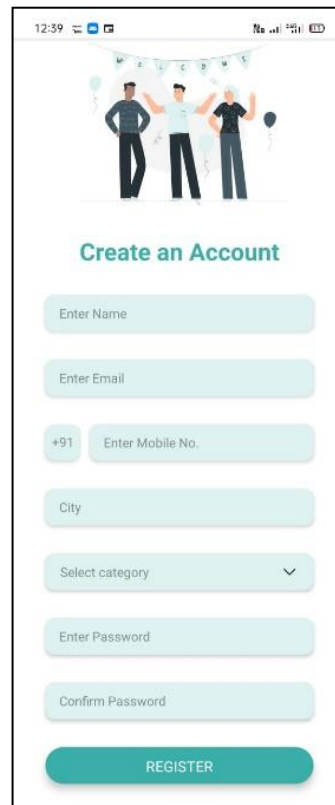


Fig 4.2.2 Sign UP Screen

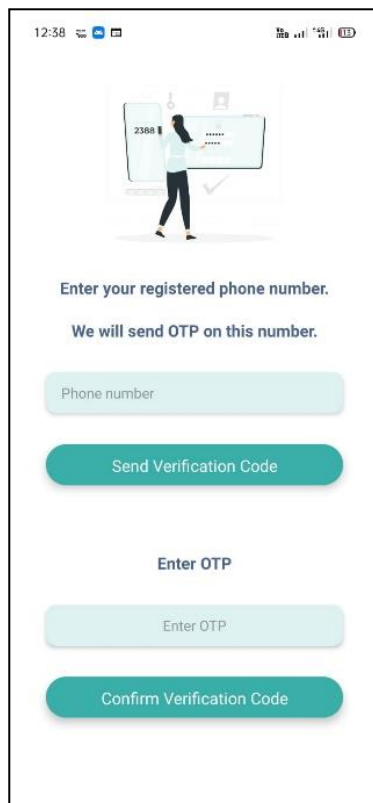


Fig 4.2.3 Forget Password Screen

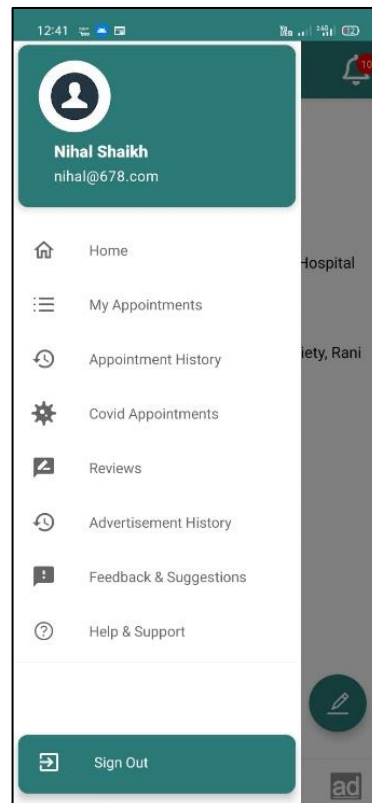


Fig 4.2.4 Sidebar Screen

## CHAPTER 4: IMPLEMENTATION SCREENSHOTS



Fig 4.2.5 Covid Care Screen

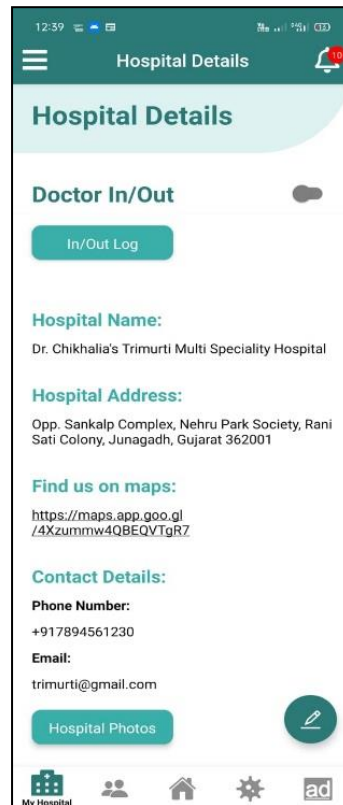


Fig 4.2.6 Hospital information Screen

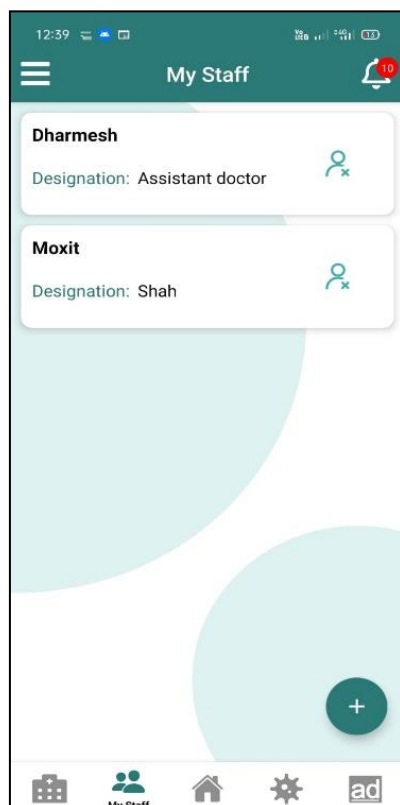


Fig 4.2.7 Staff Member Screen

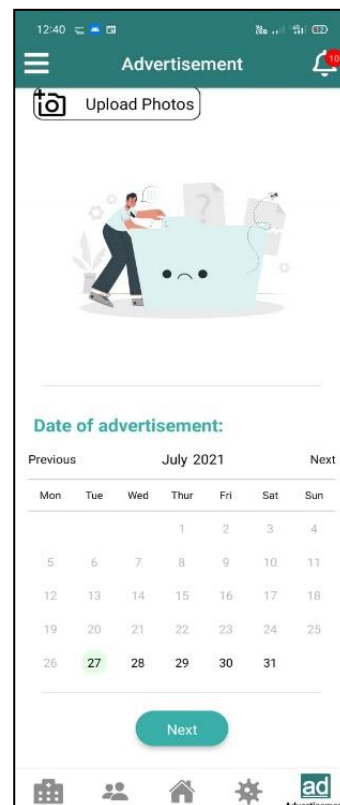


Fig 4.2.8 Advertisement Screen

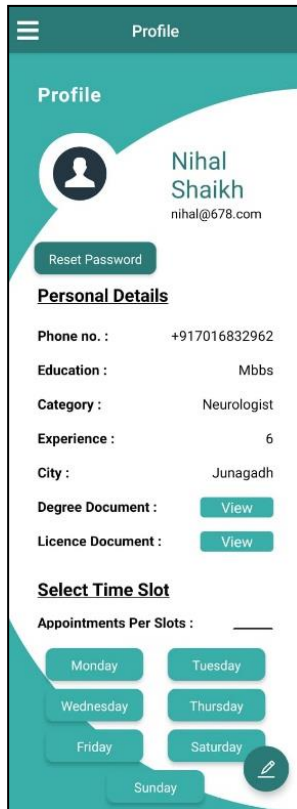


Fig 4.2.9 Doctor Profile Screen

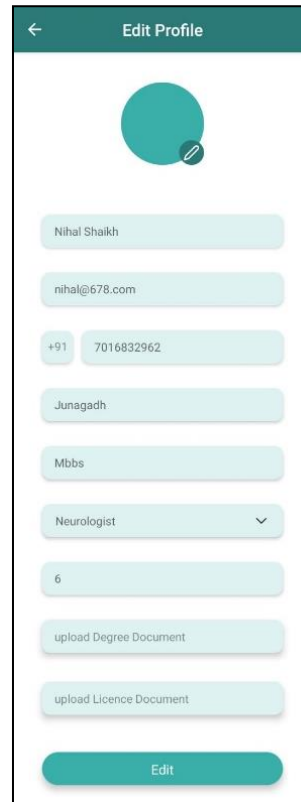


Fig 4.2.10 Edit Profile Screen

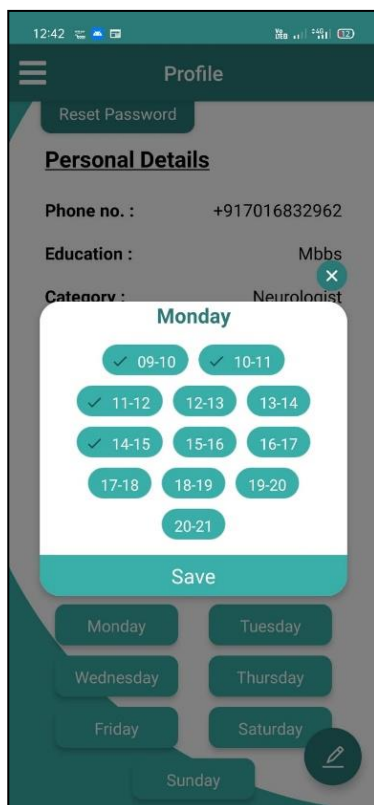


Fig 4.2.11 Time Slot Selection Screen

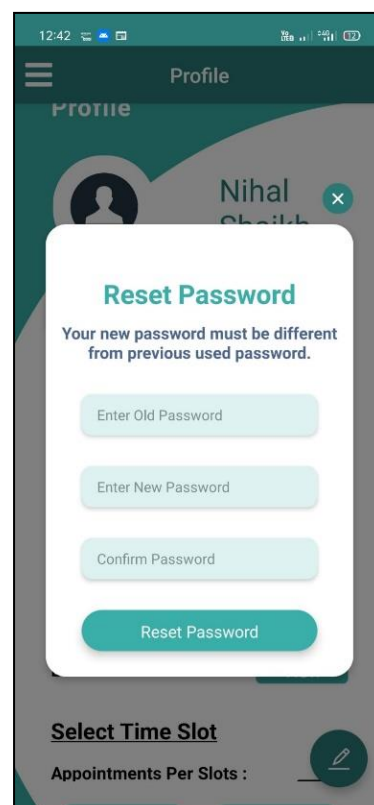


Fig 4.2.12 Reset Password Screen

## CHAPTER 4: IMPLEMENTATION SCREENSHOTS

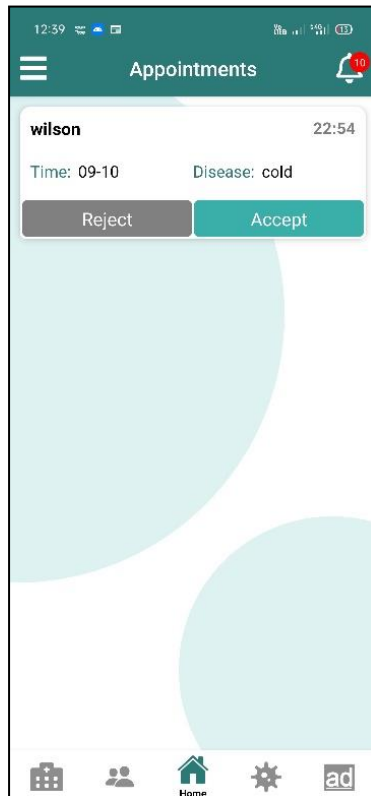


Fig 4.2.13 Appointment Screen

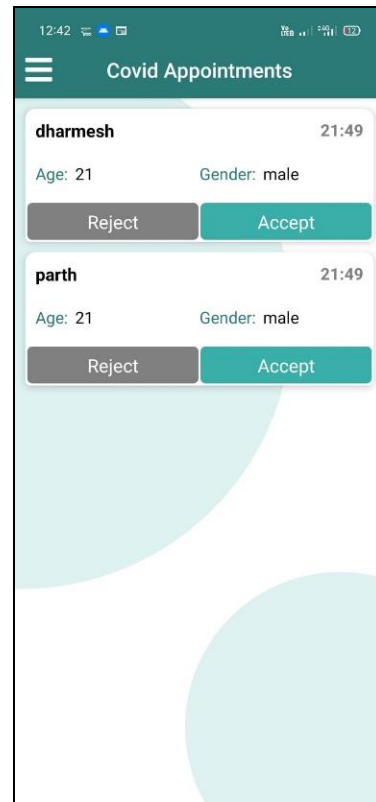


Fig 4.2.14 Covid Appointment Screen

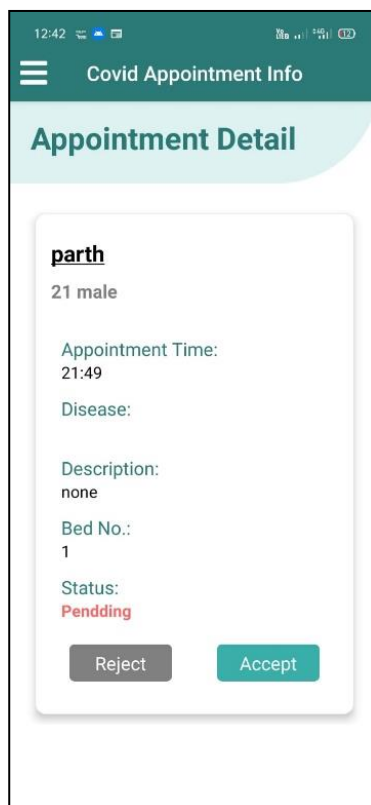


Fig 4.2.15 Covid Appointment Detail Screen



Fig 4.2.16 Appointment History Screen

## CHAPTER 4: IMPLEMENTATION SCREENSHOTS

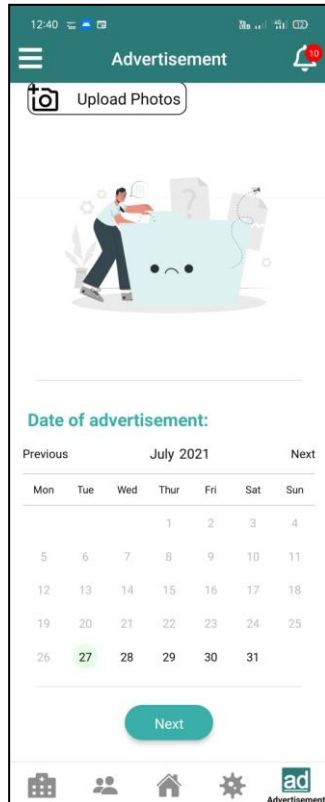


Fig 4.2.17 Advertisement Screen

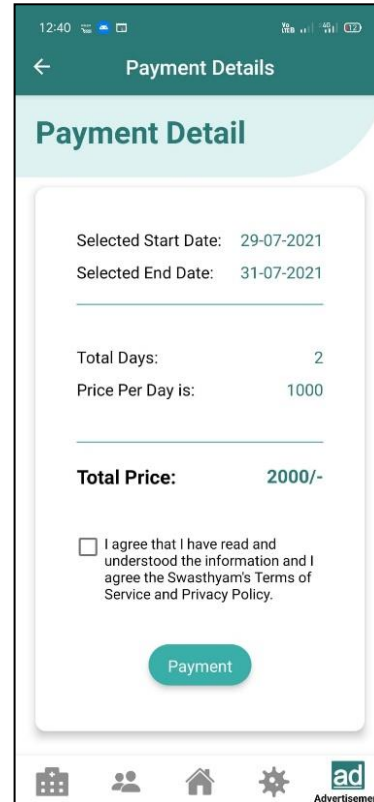


Fig 4.2.18 Advertisement Payment Screen

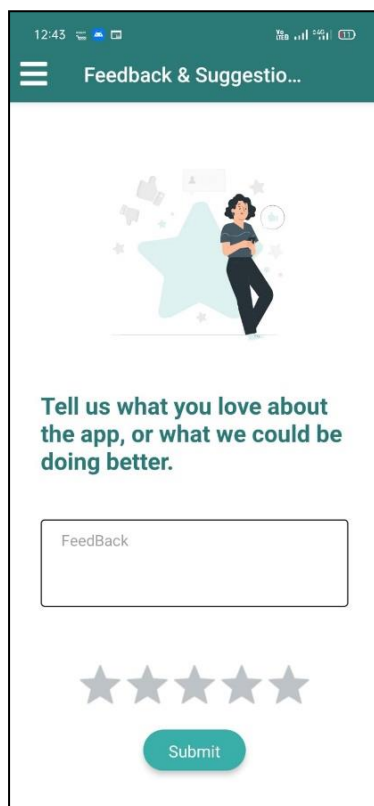


Fig 4.2.19 Feedback Screen

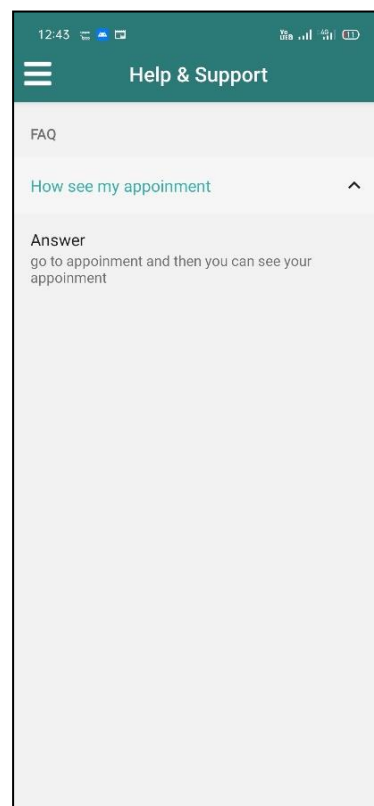


Fig 4.2.20 Help and Support Screen

### 4.3 MOBILE APPLICATION – USER SIDE



Fig 4.3.1 Splash Screen

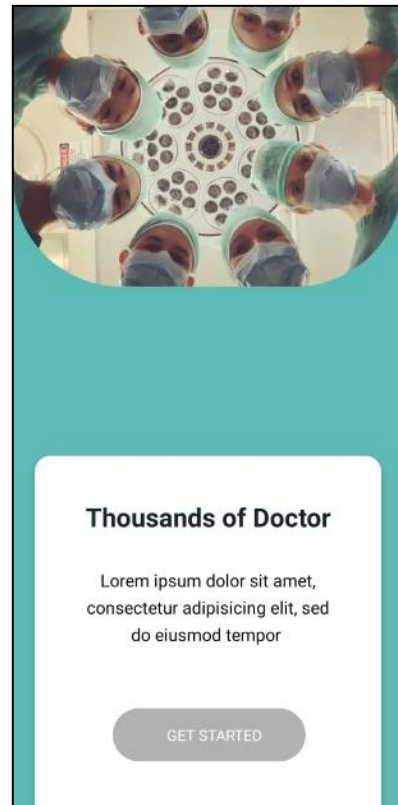


Fig 4.3.2 Introduction Screen(1)

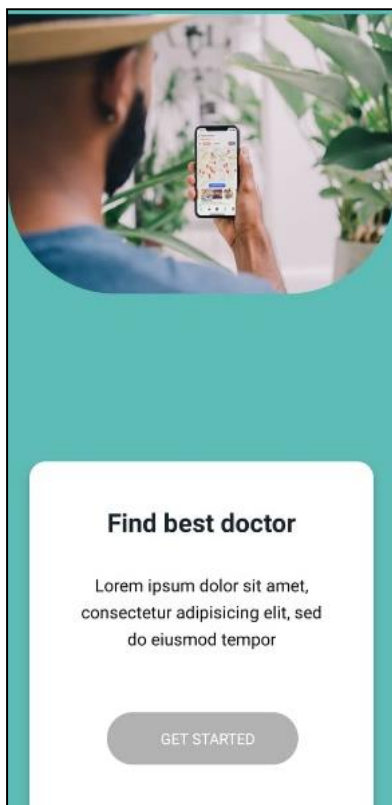


Fig 4.3.2 Introduction Screen(2)

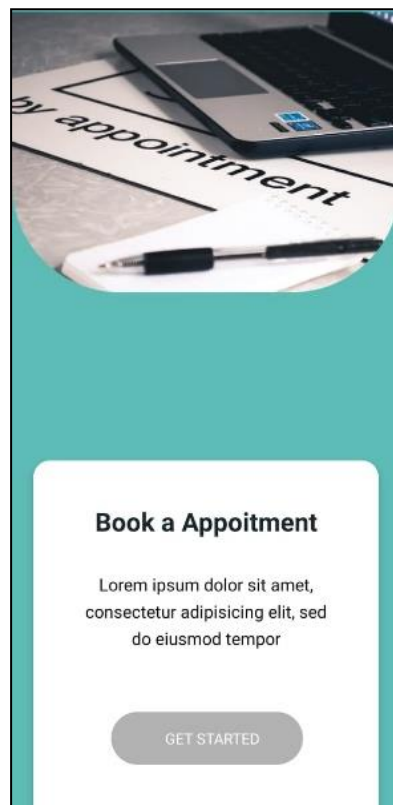


Fig 4.3.4 Introduction Screen(3)

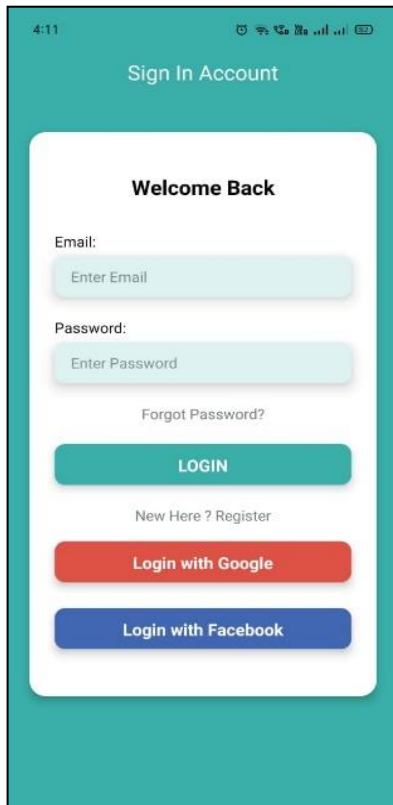


Fig 4.3.5 Login Screen

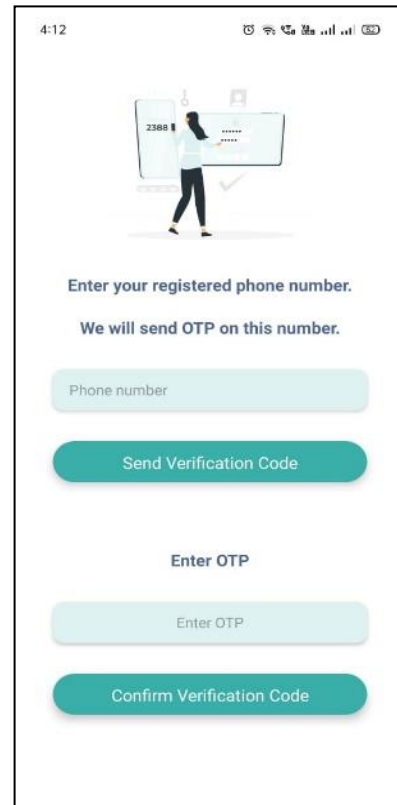


Fig 4.3.6 Forget Password

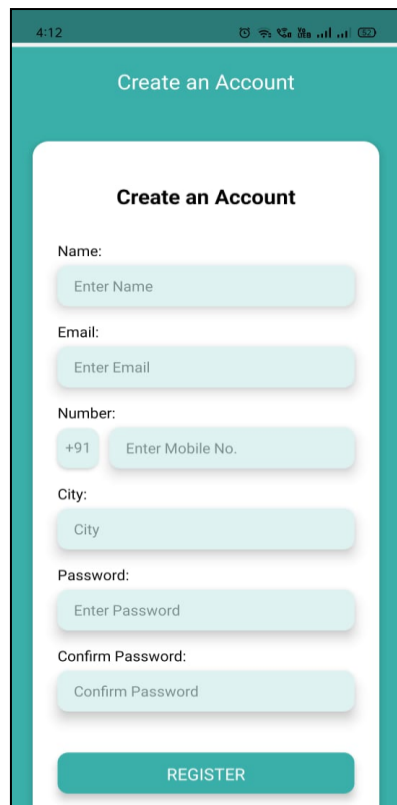


Fig 4.3.7 Registration Screen

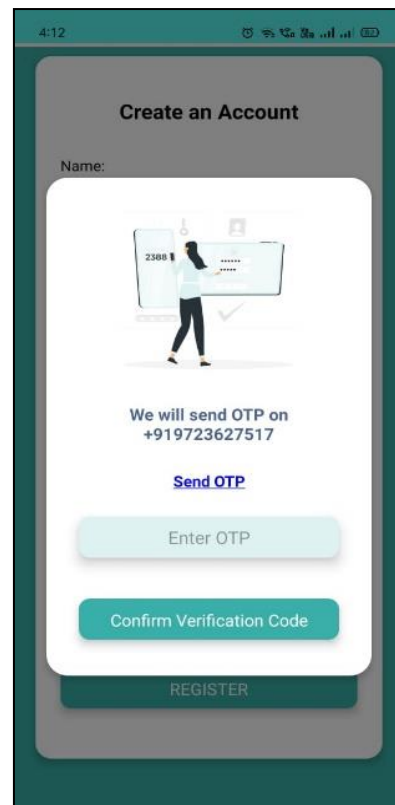


Fig 4.3.8 OTP Screen



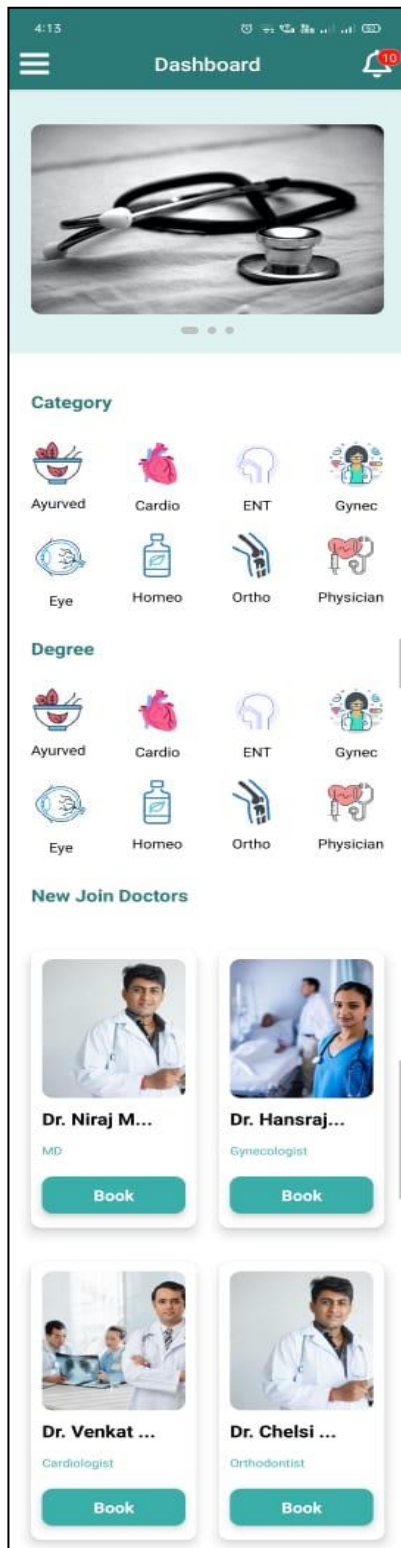


Fig 4.3.9 Dashboard Full Screen



Fig 4.3.10 Hospital Full Screen



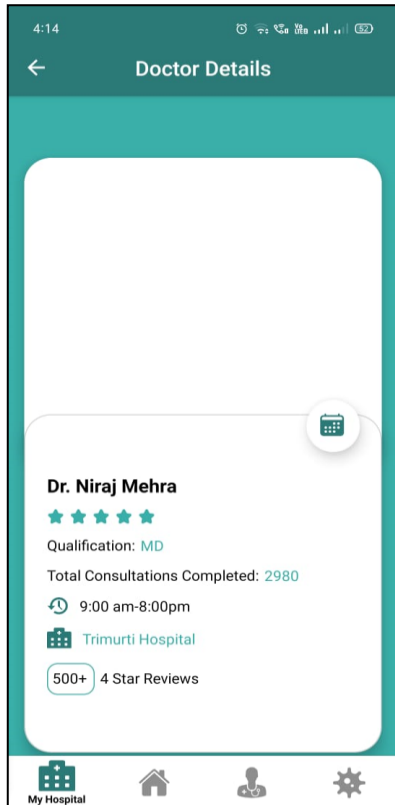


Fig 4.3.11 Doctor details Screen

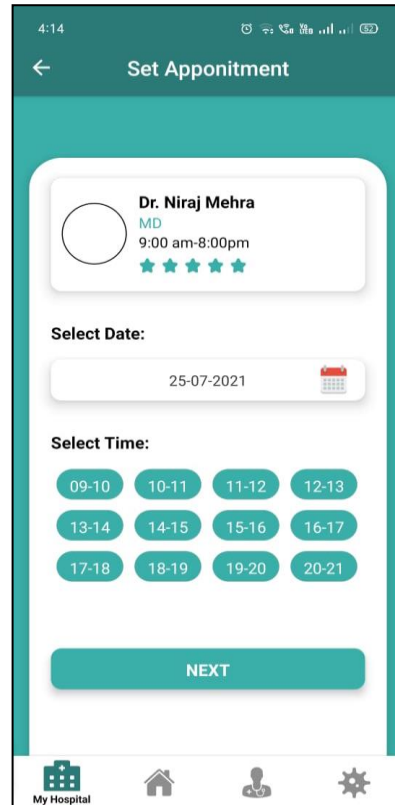


Fig 4.3.12 Set Appointment Screen

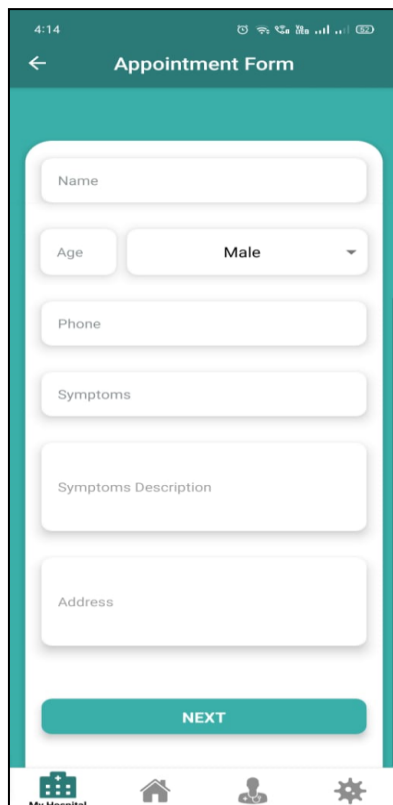


Fig 4.3.13 Appointment Form Screen

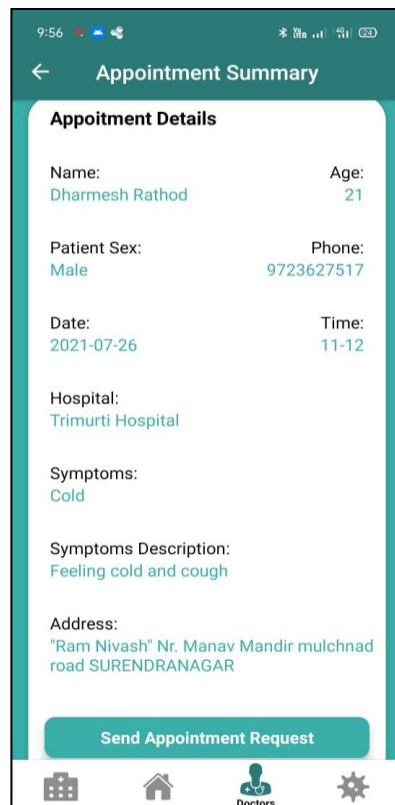


Fig 4.3.14 Appointment Summary Screen

## CHAPTER-5 TEST CASES

### 5.1 TESTING STRATEGY

In this project unit testing was carried out and each section were tested one by one.

Module Name – **Registration of Doctor**

Table 5.1 Registration of Doctor test case

Test Case No.	Test Scenario	Pre-Condition	Test Steps	Test Case	Test Data	Expected Result	Actual Result	Post Condition	Status
1	Enter the First Name, Last Name, Email, Password, City, Phone No., Category	User must be accessing the SignUp Page	Enter the required data	Value entered is valid	Enter all required values for test cases	Display the successfully registered model	Display the successfully registered model	Redirect to the login module	Pass
				Value entered is not valid		Display the error messages according to the field	Display the error messages according to the field	Reload the registration module	Pass
				Value not entered		Display the error messages according to the empty field	Display the error messages according to the empty field	Reload the registration module	Pass

Module Name – **Login of Doctor**

Table 5.2 Login of Doctor test case

Test Case No.	Test Scenario	Pre-Condition	Test Steps	Test Case	Test Data	Expected Result	Actual Result	Post Condition	Status
1	Enter the Email and Password	User must be pre-registered	Enter the required data	Value entered is valid	Enter all required values for test cases	Display the Dashboard	Display the Dashboard	Redirect to the Dashboard	Pass
				Value entered is not valid		Display the error messages according to the field	Display the error messages according to the field	Reload the login module	Pass
				Value not entered		Display the error messages according to the empty field	Display the error messages according to the empty field	Reload the login module	Pass
2	Forget Password	User must be pre-registered	Enter the registered phone number	Enter the registered phone number	Enter all required values for test cases	Display the model to enter new password	Display the model to enter new password	Display the successfully updated password	Pass
				Enter the invalid phone number		Display the error message to enter valid phone number	Display the error message to enter valid phone number	Reload the login module	Pass

Module Name : **Profile, Hospital, Covid Care information**

Table 5.3 Profile, Hospital, Covid Care test case

Test Case No.	Test Scenario	Pre-Condition	Test Steps	Test Case	Test Data	Expected Result	Actual Result	Post Condition	Status
1	Update Name, Profile picture, Email, Password, Phone number, city, Degree document, License document	User must be registered	Enter the required field value	Value entered is valid	Enter the required field value	Display model of successful updating of profile	Display model of successful updating of profile	Reload the profile page with updated value	Pass
				Value entered is not valid		Display error message according field	Display error message according field	Enter the valid values again	Pass
2	Update Hospital name, Google Map link, Phone number, Email, Address of Hospital, Hospital images	User must be registered	Enter the required field value	Value entered is valid	Enter the required field value	Display model of successful updating of hospital	Display model of successful updating of hospital	Reload the hospital page with updated value	Pass
				Value entered is not valid		Display error message according field	Display error message according field	Enter the valid values again	Pass
3	Update No. of beds, No. of vacant beds, No. of ventilators, No. of beds in ICU, No. of available oxygen cylinders	User must be registered	Enter the required field value	Value entered is valid	Enter the required field value	Display model of successful updating of covid care	Display model of successful updating of covid care	Reload the covid care page with updated value	Pass
				Value entered is not valid		Display error message according field	Display error message according field	Enter the valid values again	Pass

Module Name : **Advertisement of Hospital**

Table 5.4 Advertisement of Hospital test case

Test Case No.	Test Scenario	Pre- Condition	Test Steps	Test Case	Test Data	Expected Result	Actual Result	Post Condition	Status
1	Upload images	No. of images should be less than or equal to 8	Upload the images	Image uploaded is of correct format	Upload the hospital images	Display the images in Image Viewer	Display the images in Image Viewer	Uploaded images can be updated or removed	Pass
				Image uploaded is of incorrect format		Display the error messages to upload the correct format	Display the error messages to upload the correct format	Again ask user to upload the images	Pass
2	Select the starting and ending date of advertisement	User should have uploaded at least one image	Select the starting and ending date of advertisement	Select the starting and ending date of advertisement	Select the starting and ending date of advertisement	Display the amount according to the number of days	Display the amount according to the number of days	Display the payment module	Pass

## **CHAPTER-6 LIMITATIONS AND FUTURE ENHANCEMENTS**

### **6.1 LIMITATIONS**

- We have made a doctor's portal for easy scheduling of appointments and providing the doctor a convenient way of accepting/rejecting appointments. But if sometime the doctor need to attend offline appointments then the patient's scheduled appointment may be delayed and he/she would remain unknown to this situation.
- The doctor/staff needs to timely accept/reject appointments so as to have a better coordination between the patient and doctor.
- Also same thing can be expected from the patient side and the patient should respond to the appointed timing or else the slot will be in vain.

### **6.2 FUTURE ENHANCEMENTS**

We're yet on the initial stage of this development project and hence we will be facing much more enhancement on our system. These are some of the upgrades that we thought on our end:

- To provide the patients a soft copy of the report after they attend their assigned doctor.
- To provide notifications of timely taking the medicine prescribed by the doctor to the patient.
- To provide reminder of upcoming appointments to the patient.
- To provide a blood donation centre feature.

## CHAPTER-7 CONCLUSION

Swasthyam is a Doctor-Patient system to make the task of scheduling appointments convenient and user friendly. It is an application where the doctor and patient can interact and can save both of their time. The patients can feel relaxed by not standing in queues or wait for their assigned ticket no. Instead, they would book their preferred slot and then they can meet their assigned doctor in that particular slot only. This system can also help the patients to track their covid appointments and thus help in knowing the no. of beds, oxygen cylinders, ventilators, etc.

## **BIBLIOGRAPHY**

- <https://reactjs.org/docs/getting-started.html>
- <https://www.npmjs.com/package/react-date-range>
- <https://www.freecodecamp.org/news/how-to-persist-a-logged-in-user-in-react/>
- <https://undraw.co/search>
- <https://www.youtube.com/watch?v=o2nmgbZaGMw>
- <https://firebase.google.com/docs/auth/web/phone-auth>