

DOCTOR APPOINTMENT BOOKING & LIVE CHAT APP

BY

Abu Sufian
ID: 191-15-2532

AND

Md. Mustakim
ID: 191-15-2563

This Report Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Computer Science and Engineering

Supervised By

Nadira Anjum Nipa
Lecturer
Department of CSE
Daffodil International University

Co-Supervised By

Shayla Sharmin
Lecturer
Department of CSE
Daffodil International University



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APPROVAL

This Project/internship titled “**Doctor Appointment Booking & Live Chat App**”, submitted by Abu Sufian, ID No: 191-15-2532 & Md. Mustakim, ID No: 191-15-2563 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 04 February.

BOARD OF EXAMINERS


Dr. Touhid Bhuiyan

Professor and Head

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Chairman

Internal Examiner


Dr. S. M. Aminul Haque

Associate Professor and Associate Head

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

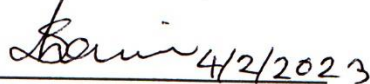
Internal Examiner


Dewan Mamun Raza

Senior Lecturer

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

External Examiner


Dr. Shamim H Ripon

Professor

Department of Computer Science and Engineering
East West University

DECLARATION

We hereby make a declaration that this project has been done by us under the supervision of **Nadira Anjum Nipa, Senior Lecturer, Department of CSE, Daffodil International University, Dhaka.** We also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

Supervised by:



Nadira Anjum Nipa

Lecturer (Senior Scale)

Department of CSE

Daffodil International University

Co-Supervised by:

----- *Shayla Sharmin* 4.2.23
Shayla Sharmin

Lecturer (Senior Scale)

Department of CSE

Daffodil International University

Submitted by:

----- *Abu Sufian*

Abu Sufian

ID: 191-15-2532

Department of CSE

Daffodil International University

----- *Mustakim*

Md. Mustakim

ID: 191-15-2563

Department of CSE

Daffodil International University

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ABSTRACT

An innovative app called "Doctor Appointment Booking & Live Chat" allows users to easily book appointments with their preferred healthcare providers, as well as have the option to securely chat with a doctor in real time. This app aims to revolutionize the way people access medical care by providing a convenient and efficient way to schedule appointments and speak with a doctor from the comfort of their own home. The process of booking an appointment is simple and straightforward. Users simply need to search for a healthcare provider in their area, select a date and time that works for them, and confirm their appointment. The app also allows users to view and manage their upcoming appointments, as well as cancel or reschedule if necessary. In addition to appointment booking, the app also offers a live chat feature that allows users to securely message a doctor and receive immediate responses. This can be particularly useful for minor health concerns or for obtaining quick medical advice. Doctor Appointment Booking & Live Chat is a valuable tool for anyone seeking quick and easy access to medical care. It is perfect for busy individuals who may not have the time to physically visit a doctor's office, as well as for those who prefer to communicate with their healthcare providers digitally. The Doctor Appointment Booking & Live Chat App is a revolutionary tool that allows patients to easily book appointments with their healthcare providers and engage in live chat communication with them. With this app, patients no longer have to endure long wait times on the phone or in-person to schedule appointments or ask simple questions. They can simply open the app, browse available appointment times, and select the one that works best for them. The live chat feature allows patients to ask their healthcare provider any questions they may have about their treatment or condition and receive a timely and accurate response. The app also includes features such as appointment reminders and the ability to view past appointment history. Overall, the Doctor Appointment Booking & Live Chat App improves the efficiency and convenience of the healthcare process for both patients and providers, ultimately leading to better patient outcomes.

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CHAPTER 01

INTRODUCTION

1.1 Introduction

Doctor appointment booking and live chat apps are digital platforms that allow patients to schedule appointments with healthcare providers and communicate with them in real time through chat or video calls.[1] These apps can be particularly useful for people who live in remote areas or have busy schedules, as they allow for more convenient and efficient access to healthcare services. With a doctor appointment booking and live chat app, patients can often find and book appointments with providers in their network, view their medical history and test results, and receive personalized health recommendations. Live chat functionality can also be used to communicate with a healthcare provider about non-urgent concerns or questions, providing an alternative to in-person visits or phone calls.

One of the main advantages of using a doctor appointment booking and live chat app is the convenience it offers. Patients can easily schedule appointments at a time that is convenient for them, without the need to spend time on the phone or in person at the healthcare provider's office. Additionally, these apps often allow patients to view and manage their medical records, including test results and treatment plans, from their smartphone or other devices. Live chat functionality can also be useful for patients who have non-urgent concerns or questions about their health. Instead of waiting for an in-person appointment or trying to reach a healthcare provider over the phone, patients can simply send a message through the app and receive a response in real-time. This can be especially useful for people who have busy schedules or who live in areas with limited access to healthcare services. Overall, doctor appointment booking and live chat apps are designed to make it easier and more convenient for patients to access healthcare services. By providing a range of features and functionality, these apps can help patients manage their health more effectively and stay connected with their healthcare providers..

1.2 Motivation of this project

Our app making motivation come from those people who lost their valuable time by standing in hospital line a long time for dr. appointment. The poor or middle-class people who can easily reach the specialist dr. Sometimes it becomes important to take advice or taking primary treatment from a good or specialist doctor. Some people can't afford a good doctor.[2] By using this app they will be benefited. Our country has a large population, a lot of patients, but doctors are limited in

comparison. We are working for the people who can't afford a doctor easily. It is a time and cost saving app to get Service for home. Many deadly diseases are preventable and can be cured if treated at an early stage. The Online Doctor Application proposed here is an android-based smart application that will help the users to identify a disease based on the symptoms. When a patient feel bad and sick he can imediatly contact with Doctor and talks about his /her symptoms. The patients can book an appointment with the doctors as per their preferred time & date. The patients can also chat with a doctor to get consultations. In this system, the admin can manage or view the details of doctors, patients, diseases and can also receive feedback from the patients. It also manages all the information of the doctor's schedule, doctor fees, and appointments for the doctor. The doctor can chat with the patients directly to keep track and be up-to-date about their health status by this app.

1.3 Objectives

The main objective of a doctor appointment booking and live chat app is to provide a convenient and efficient way for patients to schedule appointments and communicate with their healthcare providers. This can help improve access to healthcare, enhance the patient experience, and increase the overall efficiency of the healthcare system.

Here are some specific objectives that a doctor appointment booking and live chat app might aim to achieve:

1. Simplify the appointment scheduling process: The app should make it easy for patients to find and book appointments with their healthcare providers, and allow them to view, reschedule, or cancel appointments as needed.
2. Enhance communication between patients and healthcare providers: The app should provide an easy and convenient way for patients to ask questions or get answers to their concerns from their healthcare providers.
3. Improve access to healthcare: The app should be accessible to as many people as possible, and should be easy to use for people of all ages and technical abilities.
4. Increase efficiency: The app should help streamline the appointment scheduling process and reduce the workload for clinic staff, freeing up time for them to focus on other tasks.
5. Reduce no-shows: By allowing patients to easily reschedule or cancel appointments through the app, the app can help reduce the number of missed appointments and improve the efficiency of the clinic.

1.4 Features

Here are some software features that you might find in a doctor appointment booking and live chat app:

1. Appointment scheduling: Patients should be able to browse available appointment times, select a preferred appointment time, and book the appointment through the app. The app should also allow patients to view, reschedule, or cancel appointments as needed.
2. Live chat: The app should provide a live chat feature that allows patients to communicate with their healthcare providers in real time. This can be useful for getting quick answers to questions or concerns, or for discussing treatment options.
3. Health records: The app should allow patients to access their health records, including information about their medical history, allergies, medications, and test results. This can be useful for keeping track of their health and for sharing information with their healthcare providers.
4. Reminders: The app should allow patients to set reminders for things like taking their medications or booking follow-up appointments.
5. Video consultations: Some apps may offer the option for patients to have video consultations with their healthcare providers, which can be useful for people who live in remote areas or have difficulty getting to the clinic in person.
6. Integration with other healthcare systems: The app should be able to integrate with other healthcare systems, such as electronic health record systems, to ensure that the most up-to-date information is available to patients and healthcare providers.

1.5 Report Layout

- Chapter 1: First, we must describe the project's goals, objectives, traits, problem description, and societal impact.
- Chapter 2: The background, scope, and issues of the concerns are covered in the section that follows.
- Chapter 3: We'll discuss data flow diagrams, requirement collecting analyses, design requirements, advanced features, and descriptions in addition to use case modeling and descriptions..
- Chapter 4: We assess the front-end, back-end, and implementation needs.

- Chapter 5: The configuration of the database, the front-end design, the interface design, the testing, the test results, and the reports will all be covered. Finally, a summary of the findings and their implications for the future are provided.
- Chapter 6: We'll discuss over the Impact on Society, Impact on the Environment, Ethical Aspect
- Chapter 7: We'll go over the application discussion once again. We'll go through how it's changed throughout the course of the paper's main body, give a succinct review of the key ideas raised there, explain how each one contributes, and go over the application's long-term goals.

CHAPTER 02

BACKGROUND

We've got built the challenge in Android Studio. As the programming language for this venture, we applied java. We used Firebase as a database. With its 18 services, the software program improvement platform Firebase allows the advent of both web and Android programs. This app is available for more excellent than 18 services. Moreover, it could be incorporated with iOS, Android, net, and team spirit installations.

2.1 Purpose of the System

The people who lost their valuable time by standing in hospital line for a long time for dr. Appointment. The poor or middle-class people who can easily reach the specialist dr. Sometimes it becomes essential to take advice or taking primary treatment from a good or specialist doctor. Some people can't afford a good doctor. by using this app, they will be benefited. Our country has a large population and many patients, but doctors are limited in comparison. We are working for the people who can't afford a doctor quickly. It is a time and cost-saving app to get Service for the home.

2.2 Comparative Studies

We have observed some similar kinds of apps for comparing with ours and tried to solve these problems in our app as much as possible. With "Sebaghar" comparing study has shown below:

Table 2.3: Comparison between Our App and Related Apps

Mobile Application	Application Name	Key Features	Pros and Cons
Application	Sebaghar	User Friendly	Costly
Our	Dr.OnCall	Easy and Smooth	Less Cost

2.3 Scope of the Problem

The development of an Android application for Doctor appointment booking and live chat apps has several problems currently faced by the Health care industry. One of the main problems is add doctors in this platform. Currently, Doctor appointment booking and live chat app type are very beneficial but starting process is so difficult without marketing this app.

Another problem is the lack of transparency and trust in the Online platform. Many health care apps have had negative experiences with fraud or scams when booking appointments online or time management problems. This has led to a lack of trust in the Healthcare industry.

2.4 Challenges

The development of a doctor appointment booking and live chat app can present several challenges are:

1. **Integration with existing healthcare systems:** The app may need to be integrated with existing electronic health record (EHR) systems, hospital information systems (HIS), and other healthcare systems to ensure seamless and accurate communication between patients, doctors, and healthcare facilities.
2. **Data security and privacy:** The app will store sensitive patient information, and it is crucial to implement robust security measures to prevent data breaches and ensure that patient privacy is protected.
3. **User experience design:** The app must be designed to be user-friendly, accessible, and intuitive for patients, doctors, and healthcare administrators.
4. **Technical challenges:** The app must be reliable and scalable, able to handle high volumes of traffic and support multiple devices and platforms.
5. **Marketing and adoption:** To be successful, the app must be marketed effectively and adopted by a large number of patients, doctors, and healthcare facilities.
6. **Cost of development and maintenance:** Developing and maintaining the app can be expensive, requiring significant investment in technology, infrastructure, and resources.

CHAPTER 03

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Business process modeling is the representation of a business process through the use of a visual diagram or flowchart.[3] It is used to document, analyze, and improve business processes by identifying the steps involved, the inputs and outputs of each step, and the resources required to complete the process. Business process modeling is an important tool for businesses because it allows them to understand better and optimize their processes. Businesses can develop strategies to improve efficiency and reduce costs by identifying inefficiencies and bottlenecks in a process. Business process modeling is often used in conjunction with business process management (BPM) software, which allows organizations to automate and monitor their processes in real-time. This can further improve the efficiency of business processes and help organizations to achieve their goals more effectively.

3.1.1 Process Model

To represent the business processes in our project, we are using the agile methodology. The following are the explanations for why a working application is frequently provided.

1. Patient downloads the app and creates an account.
2. Patient searches for doctors or medical facilities in their area, using criteria such as location, specialty, and availability.
3. Patient selects a doctor or medical facility and views their profile, which includes information such as education, experience, and ratings from other patients.
4. Patient selects an available appointment time and confirms the appointment details.
5. The app sends a confirmation of the appointment to the patient and the medical facility.
6. The app sends reminders to the patient about the upcoming appointment.
7. The patient has the option to cancel or reschedule the appointment through the app.
8. The patient has the option to communicate with the doctor through the app's live chat feature.
9. The patient has the option to view and manage their medical records through the app.
10. The patient has the option to rate and review the doctor and medical facility after the appointment.

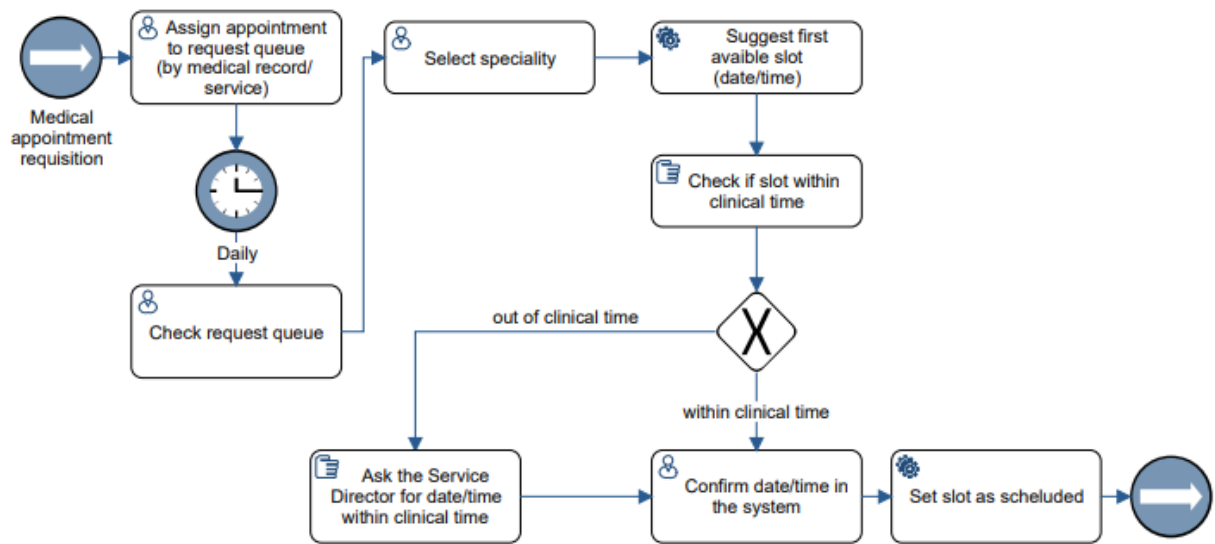


Fig 3.1.1: Process Model

3.2 Requirement Collection and Analysis

An analysis is a crucial component of every undertaking. Without enough analysis and training, an undertaking cannot be performed efficiently. Whilst designing the task, the delivery date has already been set, project work needs to be organized and completed by the deadline. Our suggestion is an Android-primarily based online control solution for health practitioner management. While we commenced thinking about this task, analysis changed into a sizable hurdle. We discover numerous vital trends as a way to assist our assignment whilst we start the investigation.

Software Requirements

- Java [4]
- Android Virtual Devices (AVD)
- Android Studio
- Firebase
- Adobe Illustrator

Software Requirements

- Windows Operating System

Requirements for User

- Smartphone (Android 5.0+)
- Internet Connection

3.3 Use Case Modeling and Design

In System analysis, a use case is a technique for determining, outlining, and arranging gadget wishes.[5] The use case comprises some of the capability communication styles among humans and systems in a particular place that might be connected to a particular intention. It is composed of some factors that, taken as an entire, have an enormous extra impact on the sum in their personal effects. The utilization case has to cover all machine methods which apply to the customers. In other phrases, a use case is a collection of ability scenarios that could arise so that you can accomplish a selected aim. Use Case Diagram is a graphic depiction of the interactions of a few of the elements of health practitioner Appointment machine. It represents the methodology

used in system analysis to identify, clarify, and organize system requirements of Doctor

Appointment System. The main actors of Doctor Appointment

System in this Use Case Diagram are. super Admin, System User, Doctor, Patient, who perform the different type of use cases such as manage

Doctors, Manage Appointment, Manage Booking, Manage Fees, manage schedule, Manage Clinics, Manage Users and Full Doctor Appointment

System Operations. Major elements of the UML use case diagram of Doctor Appointment System are shown in the picture below.

he relationships between and among the actors and the use cases of Doctor Appointment System:

- Super Admin Entity: Use instances of Super Admin are managed medical doctors, control Appointment, manipulate booking, control costs, control schedule manage clinics, manage Users and full doctor Appointment system operations
- System User Entity: Use cases of system User are managed medical doctors, manage Appointment, manage booking, manage fees, manipulate agenda, manage Clinics
- Doctor Entity: Use cases of doctor are Check Appointments, Create Prescriptions, Search Patient, Appointment History
- Patient Entity: Use cases of patient are Request for Appointments, Check Appointment Status, Make Payment

The following figure 3.3.1 shows the Use Case Diagram of the project.

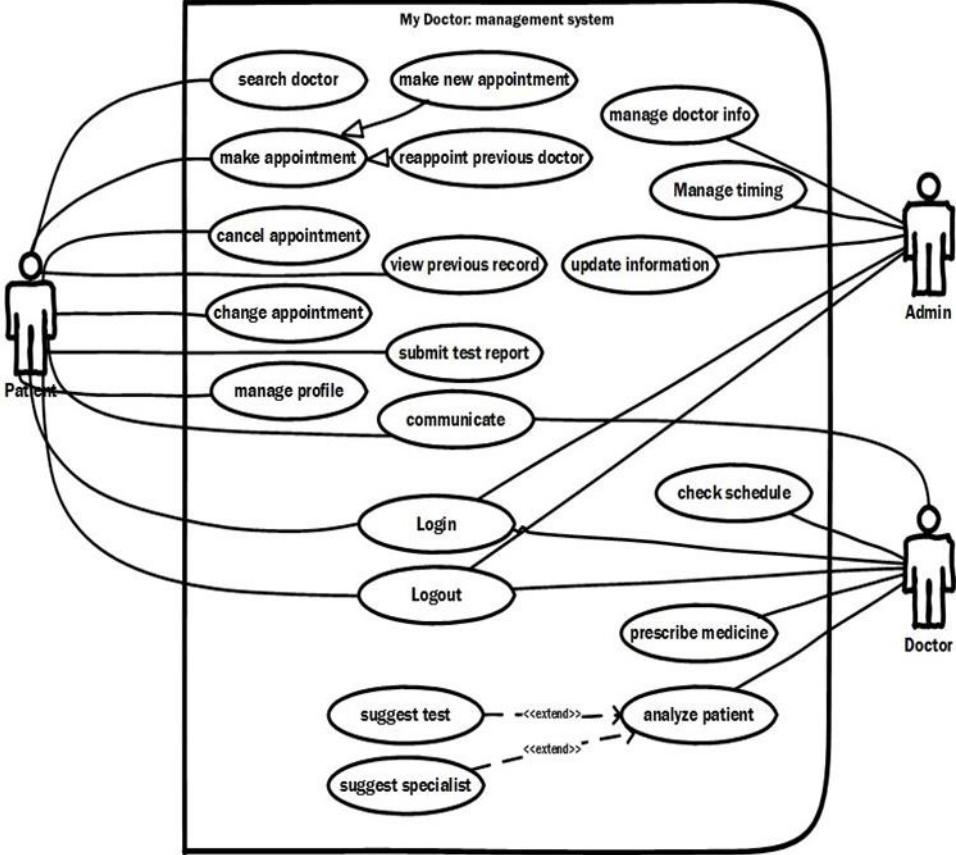


Fig 3.3.1: Use Case Diagram of Doctor Appointment Booking

3.4 ER Diagram

An Entity Relationship (ER) diagram is a visual representation of the relationships between entities in a database.[06] An entity is a person, place, object, or concept about which data is stored. A relationship is the way in which two or more entities are connected or related. ER diagrams are used to design and model databases, and are commonly used in the field of computer science and data management. They are a useful tool for understanding the structure of a database and the relationships between different entities. ER diagrams consist of a set of symbols and notations that represent the entities and relationships in a database. The most common symbols used in ER diagrams include rectangles, which represent entities, and diamonds, which represent relationships. Arrows are used to indicate the direction of the relationship between entities. ER diagrams can be used to model a wide range of databases, from simple to complex, and are useful for understanding the structure and relationships of a database before it is implemented. They can also be used to identify potential issues or problems with a database design and to make necessary changes before the database is built. The following figure 3.4.1 shows the Entity Relationship Diagram of the project.

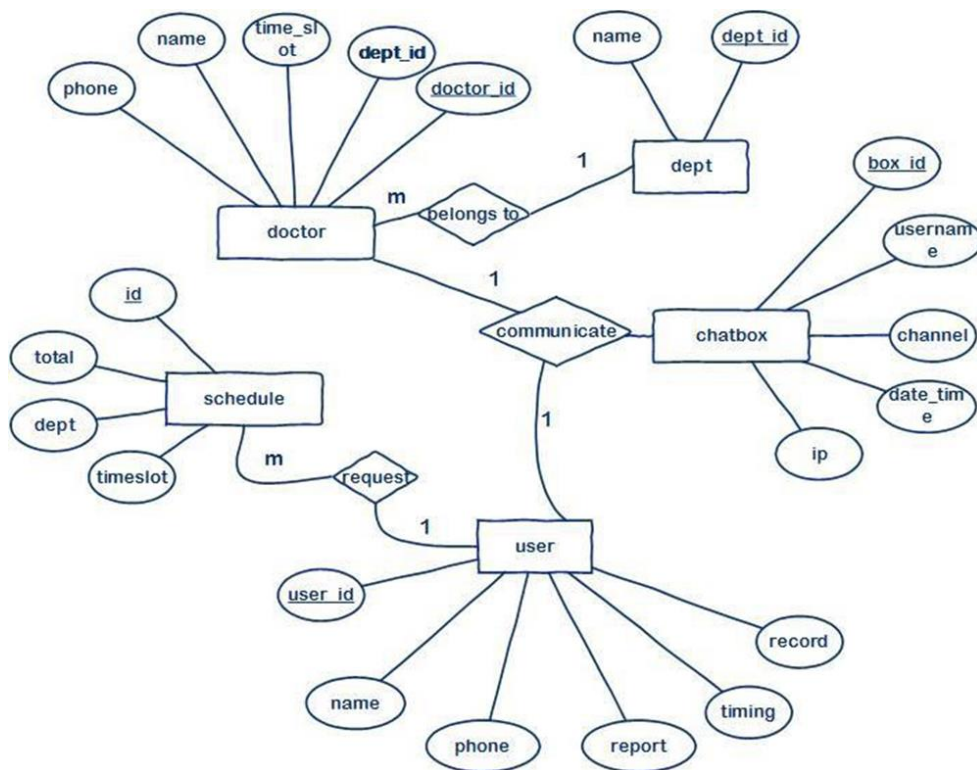


Fig 3.4.1: ER Diagram of Doctor Appointment Booking App

3.5 Flow Chart Diagram

A flow chart diagram is a visual representation of a process or system that shows the steps or tasks involved. Flow charts are commonly used in business and engineering to document, analyze, and improve processes by identifying the steps involved, the inputs and outputs of each step, and the resources required to complete the process. Flow chart diagrams consist of a series of shapes and symbols representing the process steps. The most common symbols used in flow charts include rectangles, which represent tasks or steps; diamonds, which represent decision points; and arrows, which show the flow of the process. Flow chart diagrams can be used to represent a wide range of processes, from simple to complex. They are a useful tool for understanding the steps and decisions involved in a process and can help to identify opportunities for improvement. Flow chart diagrams are often used in conjunction with business process management (BPM) software, which allows organizations to automate and monitor processes in real time. This can further improve the efficiency of processes and help organizations to achieve their goals more effectively.

Login:

To login is to enter your unique identifier (usually a username) and password to gain access to a system or account. This could be a website, app, or some other type of system that requires a login to access. Login is typically used to protect an account from unauthorized access and to ensure that only the correct user has access to the account.

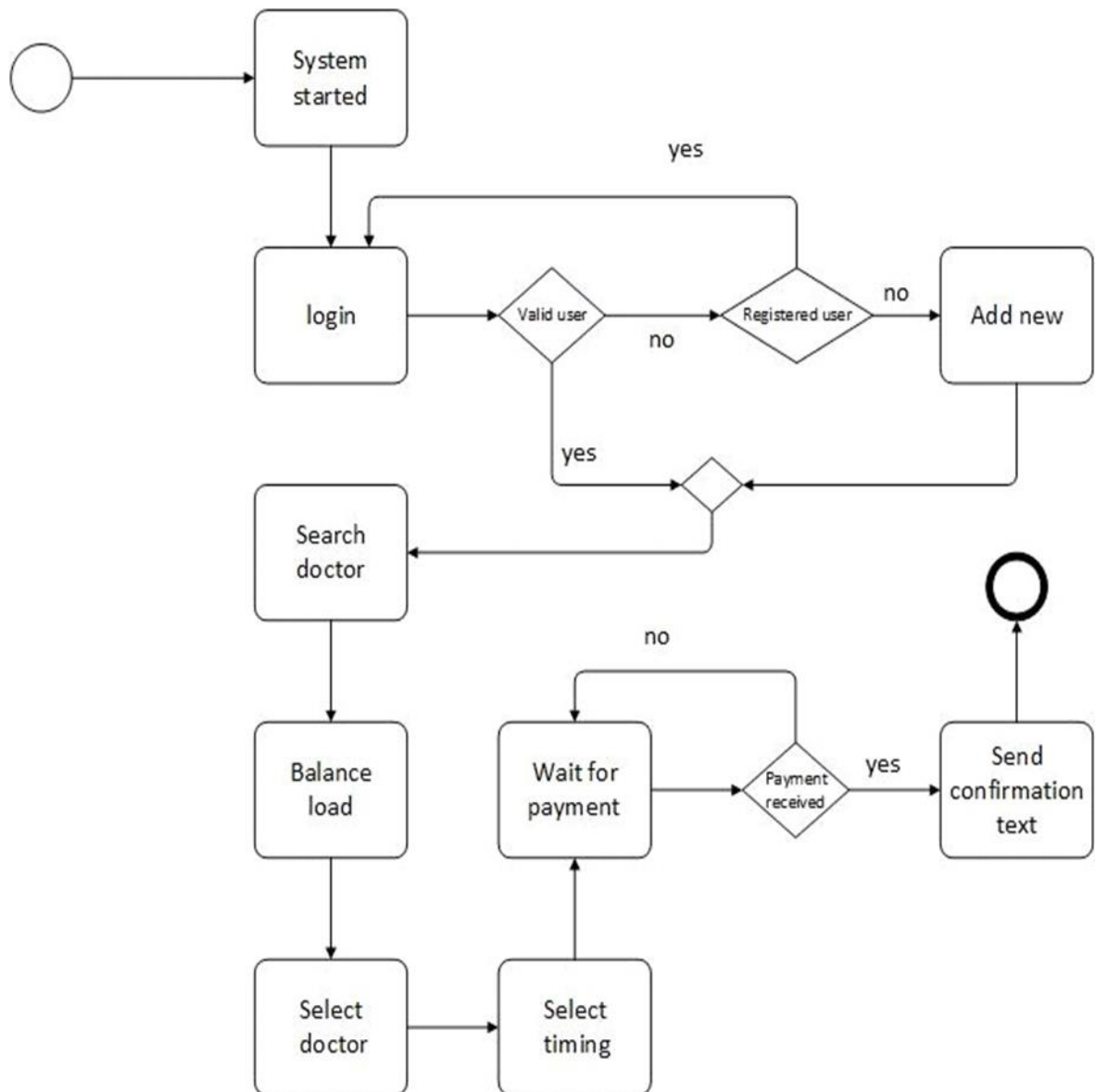


Fig 3.5.1: Log-in Flow Chart Diagram

Doctor and Patient Registration:

User registration is the process of collecting and storing personal and contact information about Patients or customers for an organization. It is used to create a database of Patients that an organization can use to manage relationships, communicate with Patients, and track interactions. Patient registration is an important process that helps organizations to manage relationships with their Patients and ensure that they are providing the best possible service. The following figure 3.5.2 shows the flowchart of the Patient Registration page.

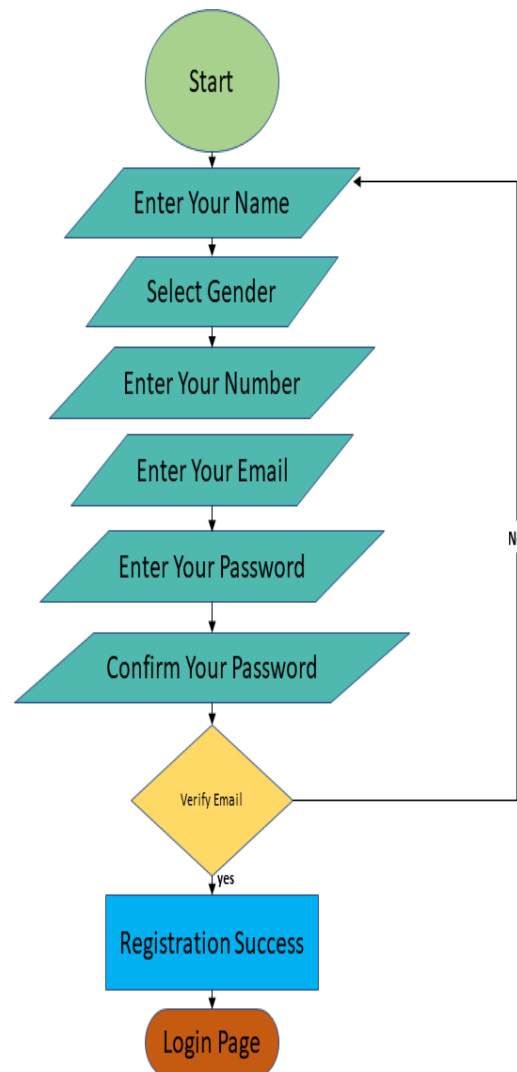


Fig 3.5.2: Patient Registration Flow Chart Diagram

3.6 Design Requirement

1. Login Page
2. Doctor Registration Page
3. Patient Registration Page
4. Admin Dashboard
5. Doctor Dashboard
6. Patient Dashboard

3.7 Database Design

The android app is run by Google's Firebase database. Firebase is Google's Backend-as-a-Service (BAAS) tool for creating mobile applications. Firebase provides extensive documentation and cross-platform SDKs to help you build and distribute Android apps. A quick, dependable database with user authentication and use monitoring is Firebase. We made use of this platform to add or remove product data. Additionally, we may view our user information and, if necessary, remove users from the database.

CHAPTER 04

DESIGN SPECIFICATION

4.1 Design Specification

Doctor appointment booking and live chat app is a software application that allows patients to schedule appointments with doctors and communicate with them through a live chat feature. This type of app can be accessed through a smartphone, tablet, or computer and can provide a convenient and efficient way for patients to access healthcare services. The following are the modules that we incorporated into the database.

- Admin
- Patient
- Doctor

4.2 Admin

There are several options available in the admin module. Admins can view the registered user details, Doctor details and may remove any user and doctor if needed. Admins can also update Doctor list, price or fee and availability.

4.3 Patient

Patient users will be able to complete actions such as registering with the program and establishing an account by submitting information such as Name, Gender, Mobile Number, Email, Password in the database. Patient can take appointment a doctor. Patient users can also find emergency ambulance option where they can find information about emergency ambulance contact.

4.4 Doctor

Doctor will be able to complete actions such as registering with the program and establishing an account by submitting information such as prescription, Doctored Degree, Mobile Number, Email, Password in the database. They can manage patient appointment tiem

4.5 Back-end Design

For the back-end design, we rely on the logic data model. Despite providing tremendous detail about the data, it gives little thought to how the database will use it. The following characteristics define a logical data model:

- Includes all that is, including how objects interact with one another.
- The virtues of each entity are listed in full.
- A list of foreign keys is provided.
- At this point, individuals start to comprehend.

The following figure 4.5.1 shows the class diagram of our project.

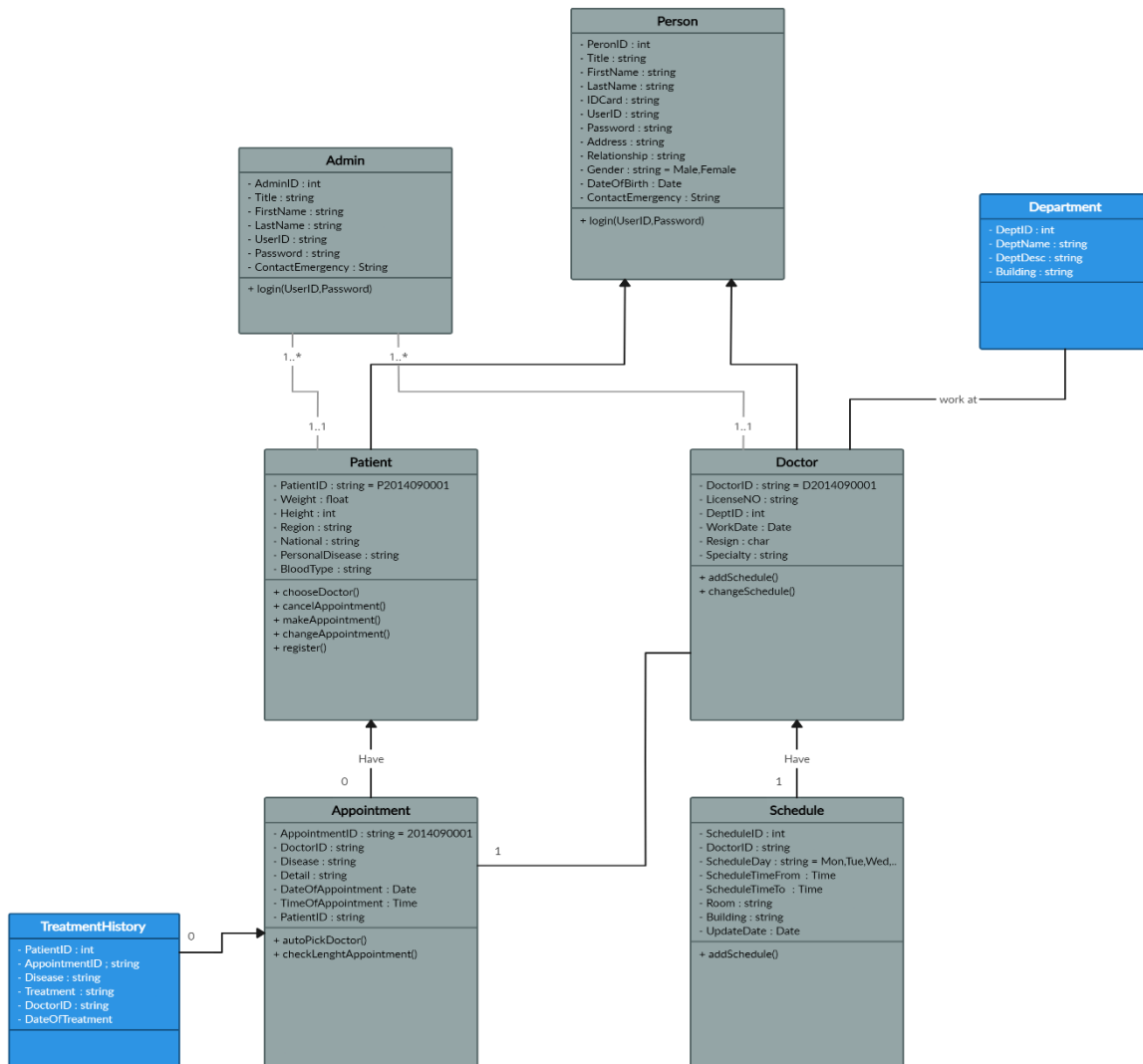


Fig 4.5.1: Class Diagram of Doctor Appointment Booking App

CHAPTER 05

IMPLEMENTATION & TESTING

5.1 Implementation

We've included a few examples of our work to demonstrate its installation and testing.

Welcome to Doctor Appointment Booking App

On this page, you can find options to choose to register as Patient or Doctor. There is an option to go to the login page if you already have an account. The following figure 5.1.1 shows the welcome page of our app. Users can go to the login or registration page from this page.

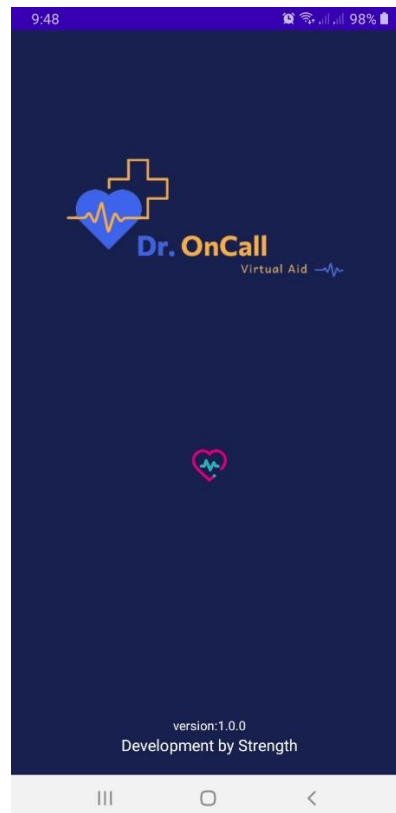


Fig 5.1.1: Welcome to Doctor Appointment Booking App

Patient Registration And Login Page

The following figure 5.1.2 shows that you can register as Patient by submitting the information below or if you already have an account then you can go to login page from here by pressing the login button at the end of the page.

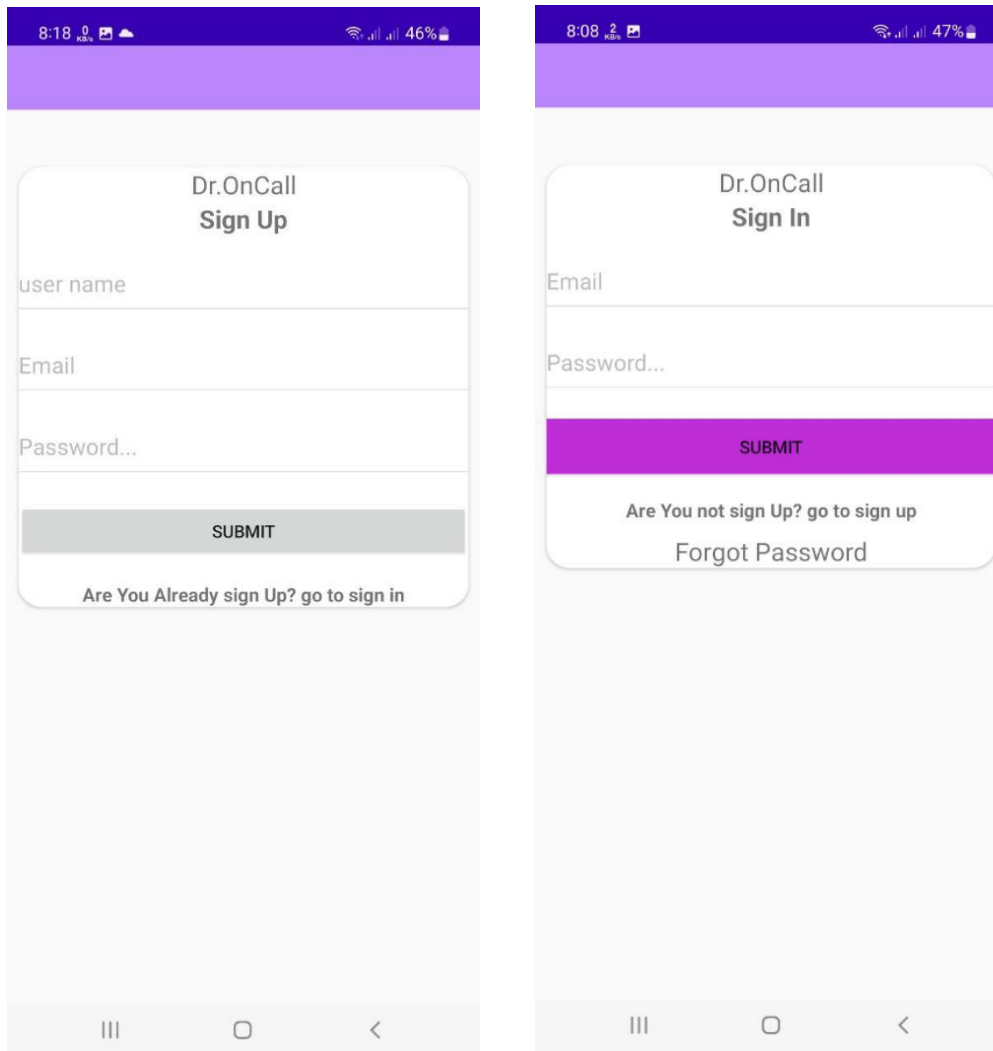


Fig 5.1.2: Patient Registration Page

Doctor Registration/ Login Page

The following figure 5.1.3 shows that you can register as Patient by submitting the information below or if you already have an account then you can go to login page from here by pressing the login button at the end of the page.

The figure displays two screenshots of the Dr.App mobile application interface. The left screenshot shows the registration page, titled "Dr.App", with fields for Name, Age, Gender (set to Male), Phone, Doctor type (set to None), and a text area for "Write your sort profile...". Below these fields is a profile picture placeholder with a camera icon and the text ": CV". Further down are fields for User Name, Enter Gmail..., and Password..., followed by a grey SUBMIT button and a link "Are You Already sign Up? go to sign in". The right screenshot shows the login page, also titled "Dr.App", with a "Sign In" header, fields for Email and Password..., a purple SUBMIT button, and links for "Are You not sign Up? go to sign up" and "Forgot Password". Both screens feature a purple header bar and a white background with rounded corners. The status bar at the top shows the time (8:13 and 8:15), signal strength, and 46% battery.

Fig 5.1.3: Doctor Registration Page

Home Page

You can see in the following figure 5.1.5, you can find Doctor, Appointment option, prescription, Pharmacy list, Order Now and access Emergency Ambulance in the middle. Health package, emergency doctor, medical shop, and QA section with the doctor, Hospital list, diagnostic center list and much more.

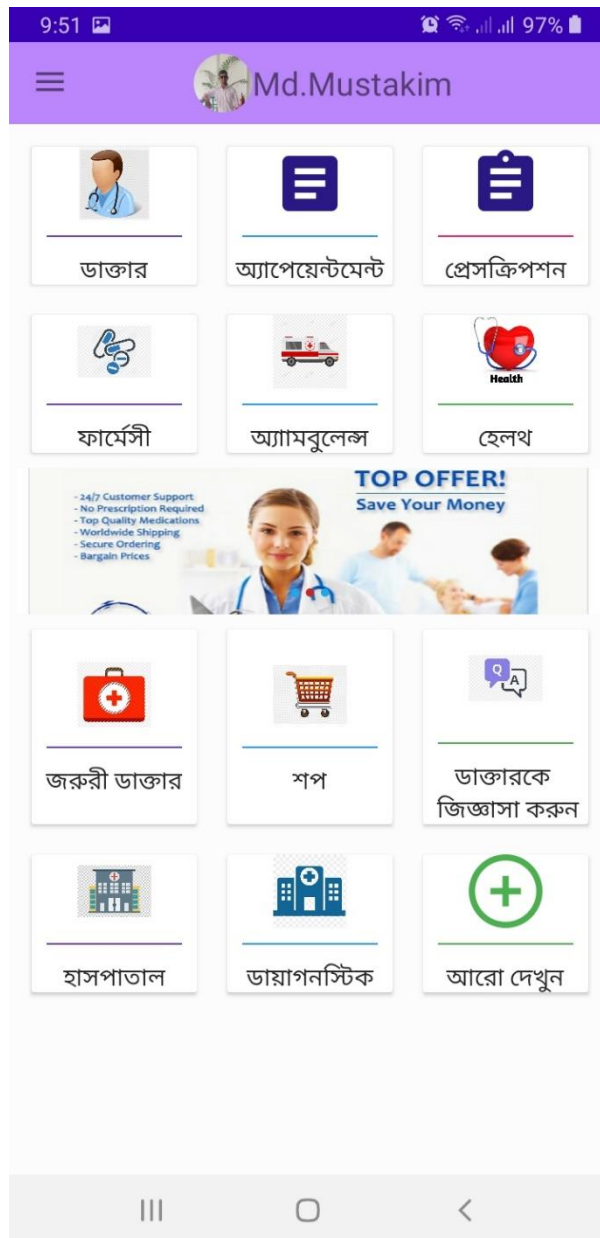


Fig 5.1.4: Home Page

Doctor Page

You can see in the following figure 5.1.5, you can find the department of Doctors, you can select doctor department and select your necessary doctor.

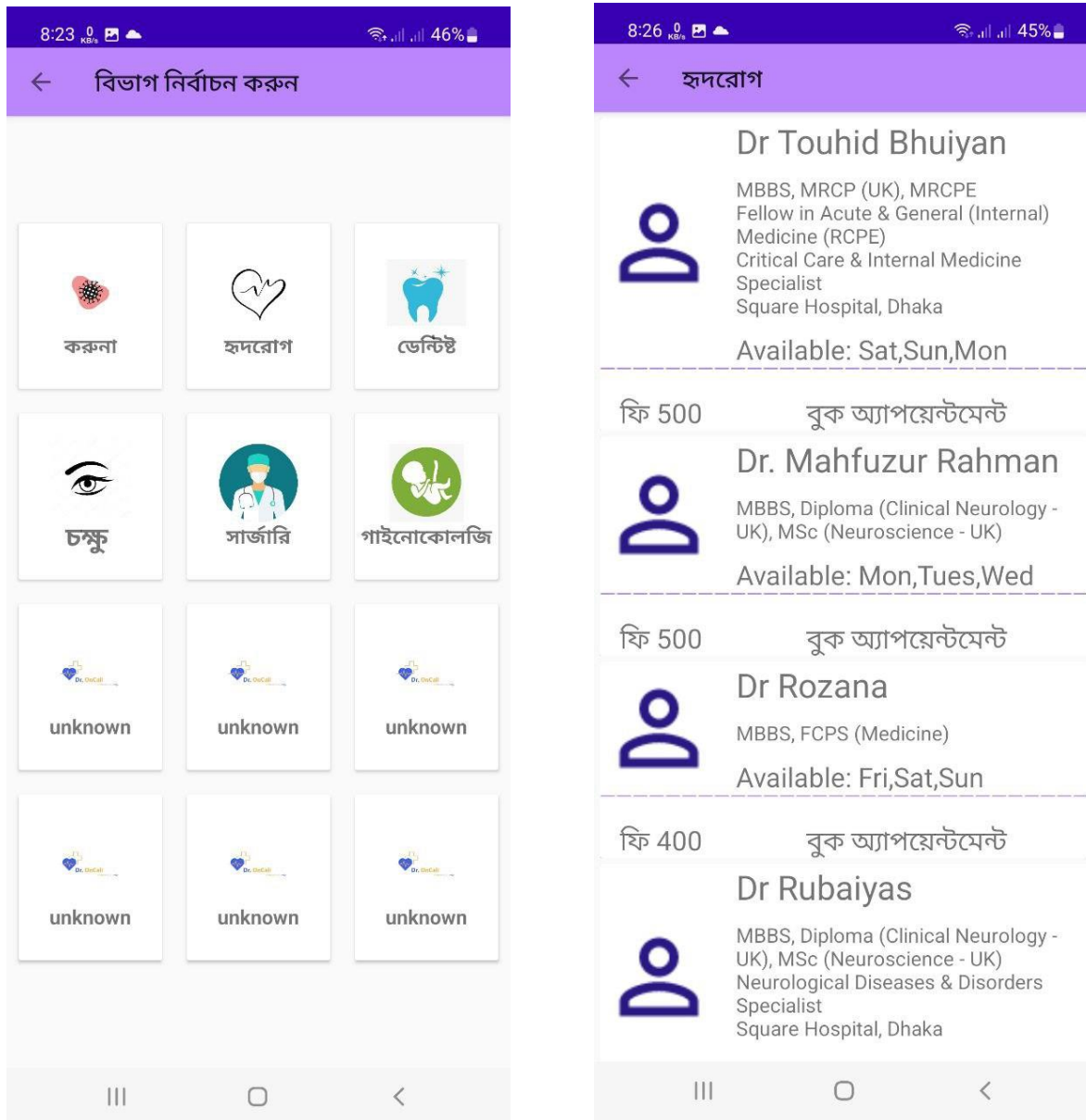


Fig 5.1.5: Dr Department and list

Question Answer with Doctor

The following figure 5.1.6 shows that anyone can ask question to doctor via chat.

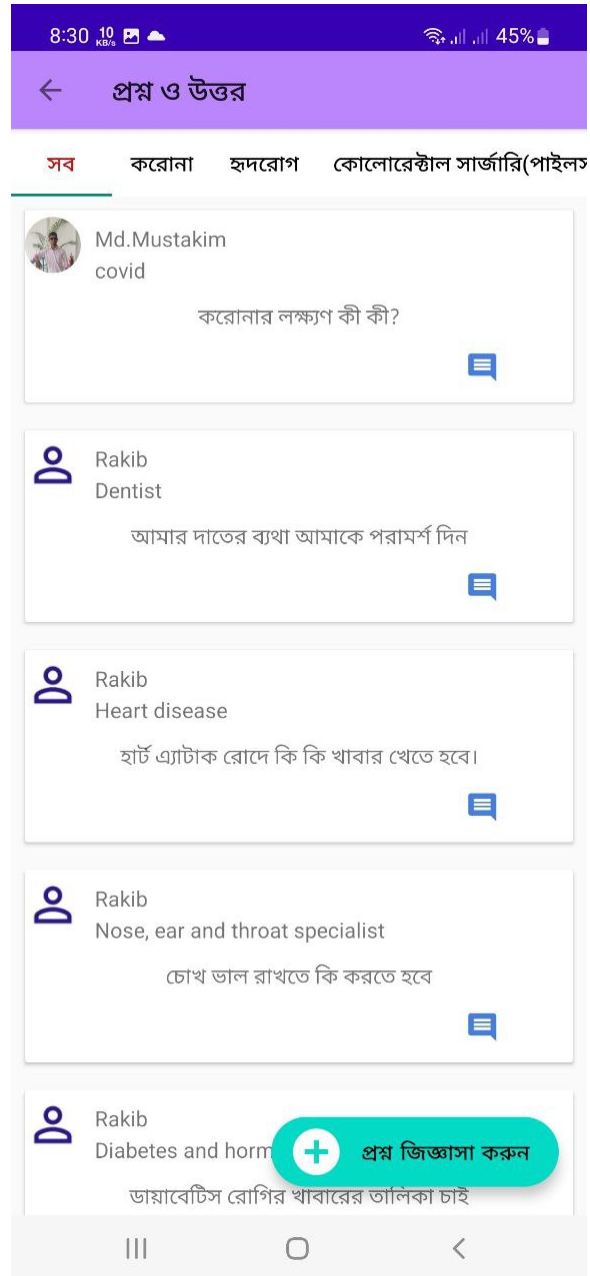


Fig 5.1.6: Question Answer With Doctor

Product List

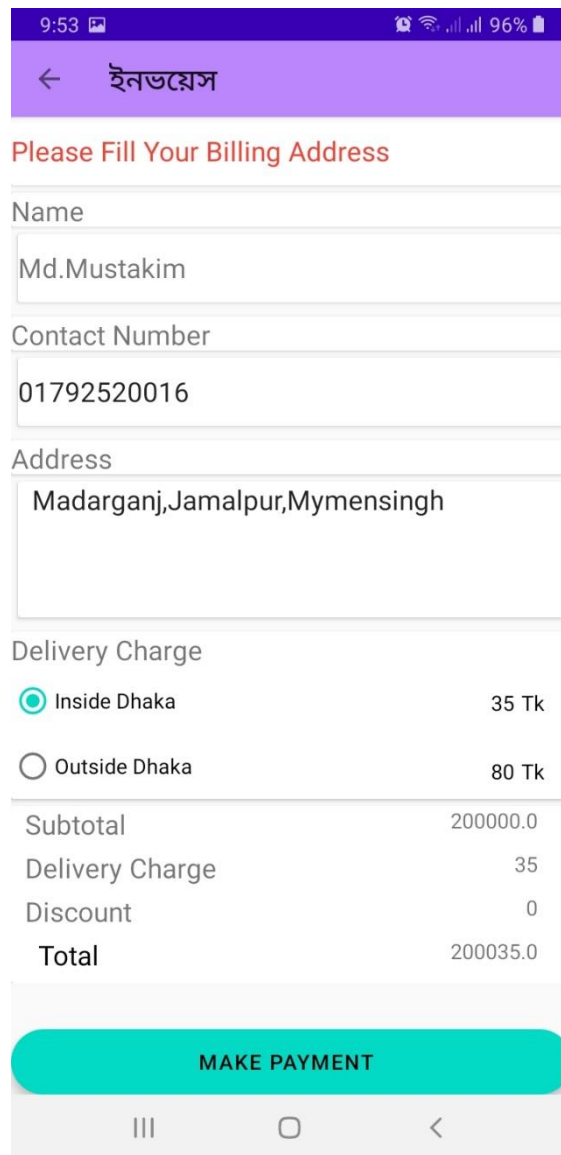
In the following figure 5.1.7, you can see the medicine generic name here and you can also search by product name or generic name in the search bar. When you tap into generic names shown below the search bar, you'll see different medicines from different companies.



Fig 5.1.7: Product List

Product Details and Order

In the following figure 5.1.7, you can see the product name. You can order by entering your location and by go through payment system.



The screenshot shows a mobile application interface for a billing address form. The top status bar displays the time 9:53, signal strength, Wi-Fi, and 96% battery. The app title is 'ইনভয়েস' (Invoice) with a back arrow. The form is titled 'Please Fill Your Billing Address' and contains three input fields: 'Name' (Md.Mustakim), 'Contact Number' (01792520016), and 'Address' (Madarganj,Jamalpur,Mymensingh). Below the form, there are radio buttons for 'Delivery Charge' with options 'Inside Dhaka' (35 Tk) and 'Outside Dhaka' (80 Tk). A summary table shows Subtotal (200000.0), Delivery Charge (35), Discount (0), and Total (200035.0). A large red 'MAKE PAYMENT' button is at the bottom, with an Android navigation bar below it.

9:53 96%

← ইনভয়েস

Please Fill Your Billing Address

Name
Md.Mustakim

Contact Number
01792520016

Address
Madarganj,Jamalpur,Mymensingh

Delivery Charge

Inside Dhaka 35 Tk

Outside Dhaka 80 Tk

Subtotal	200000.0
Delivery Charge	35
Discount	0
Total	200035.0

MAKE PAYMENT

Fig 5.1.8: Product Details and Order

My Orders

In the following figure 5.1.8 you can see that you can view the product you have ordered and the brief details of those product.

9:53 96%

← ইনভয়েস

Please Fill Your Billing Address

Name
Md. Mustakim

Contact Number
01792520016

Address
Madarganj, Jamalpur, Mymensingh

Delivery Charge

Inside Dhaka 35 Tk

Outside Dhaka 80 Tk

Subtotal	200000.0
Delivery Charge	35
Discount	0
Total	200035.0

MAKE PAYMENT

Fig 5.1.9: My Orders

Emergency Ambulance

The following figure 5.1.9 shows that you can find the emergency contact number of the ambulance of the hospitals we've added.

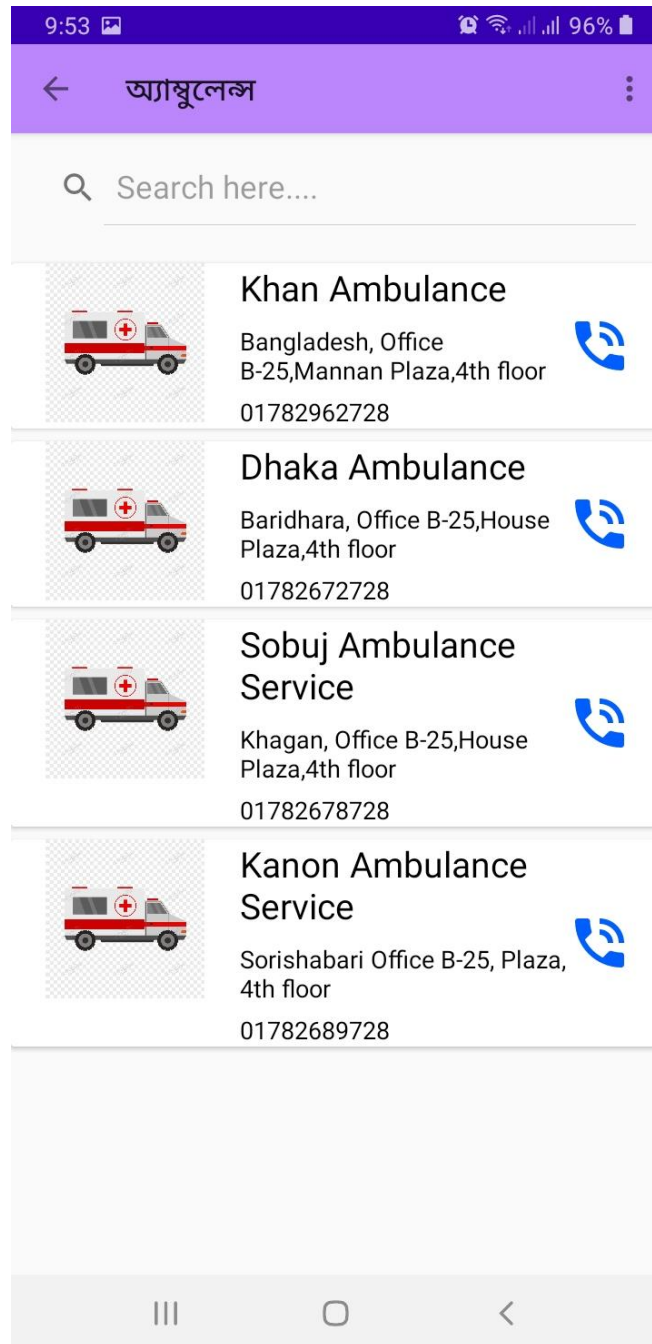


Fig 5.1.10: Emergency Ambulance

Admin Home Page

The following figure 5.1.10 shows that admins can log in and add medicines and emergency ambulance information.

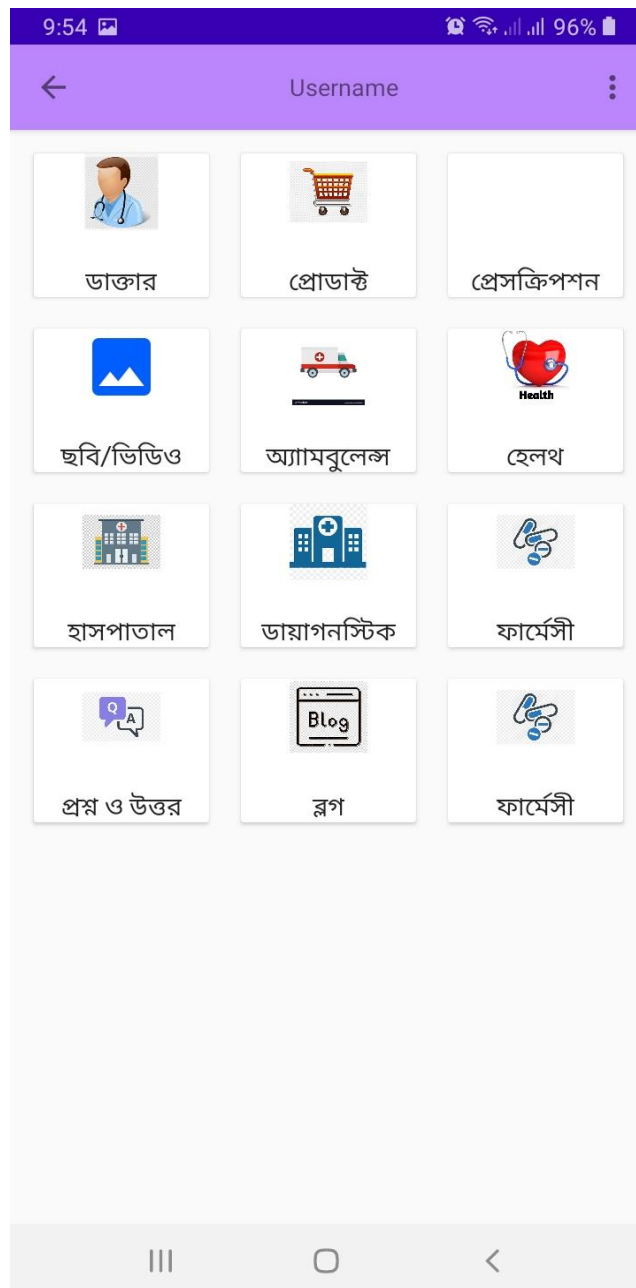


Fig 5.1.11: Admin Home Page

Information Adding

The following figure 5.1.11 shows that, admins can add products and emergency ambulance information by using these options respectively.

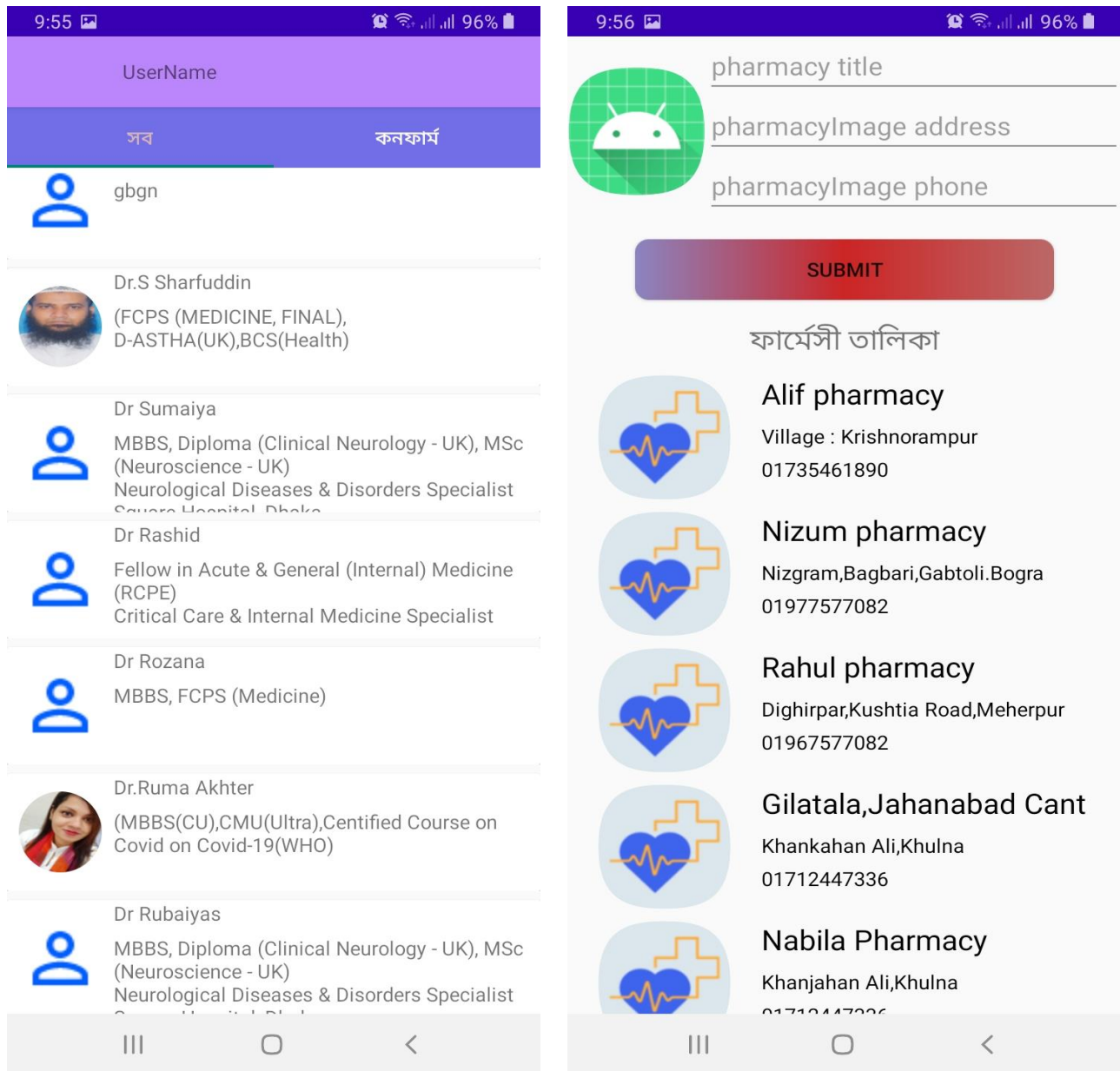


Fig 5.1.12: Information Adding

5.2 Database Implementation

The following figure 5.2.1, figure 5.2.2, figure 5.2.3, figure 5.2.4, figure 5.2.5, figure 5.2.6, figure 5.2.7 shows that, here in firebase this is the admin panel. Admins can view and add/remove item/user from here.

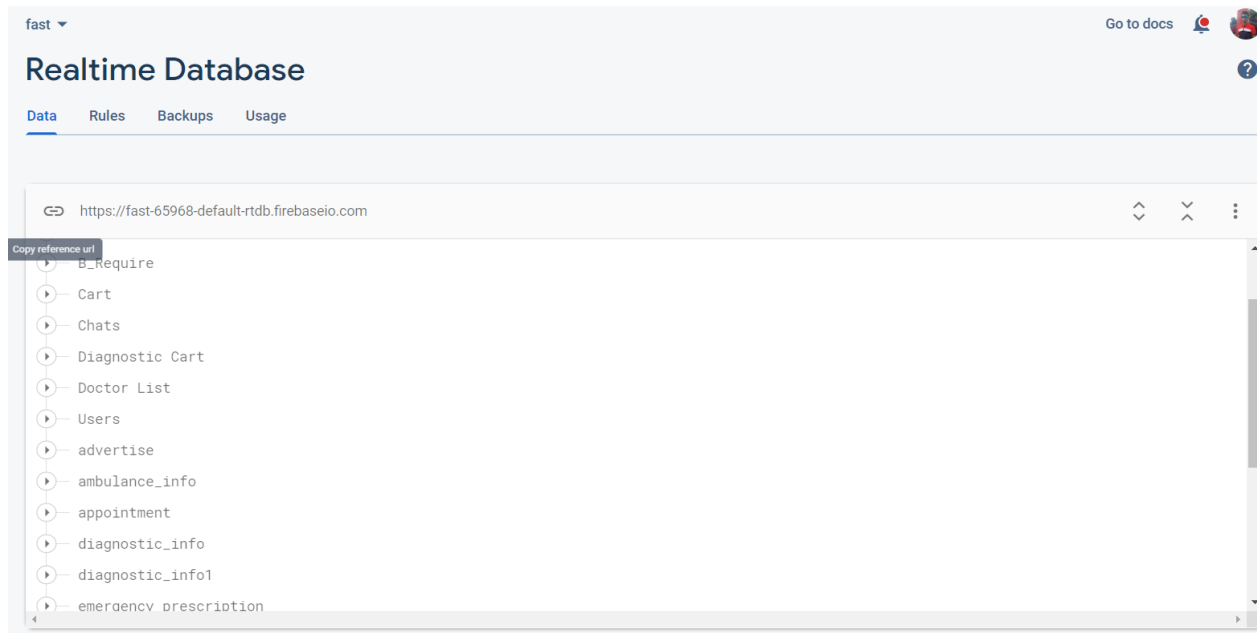


Fig 5.2.1: Realtime Database

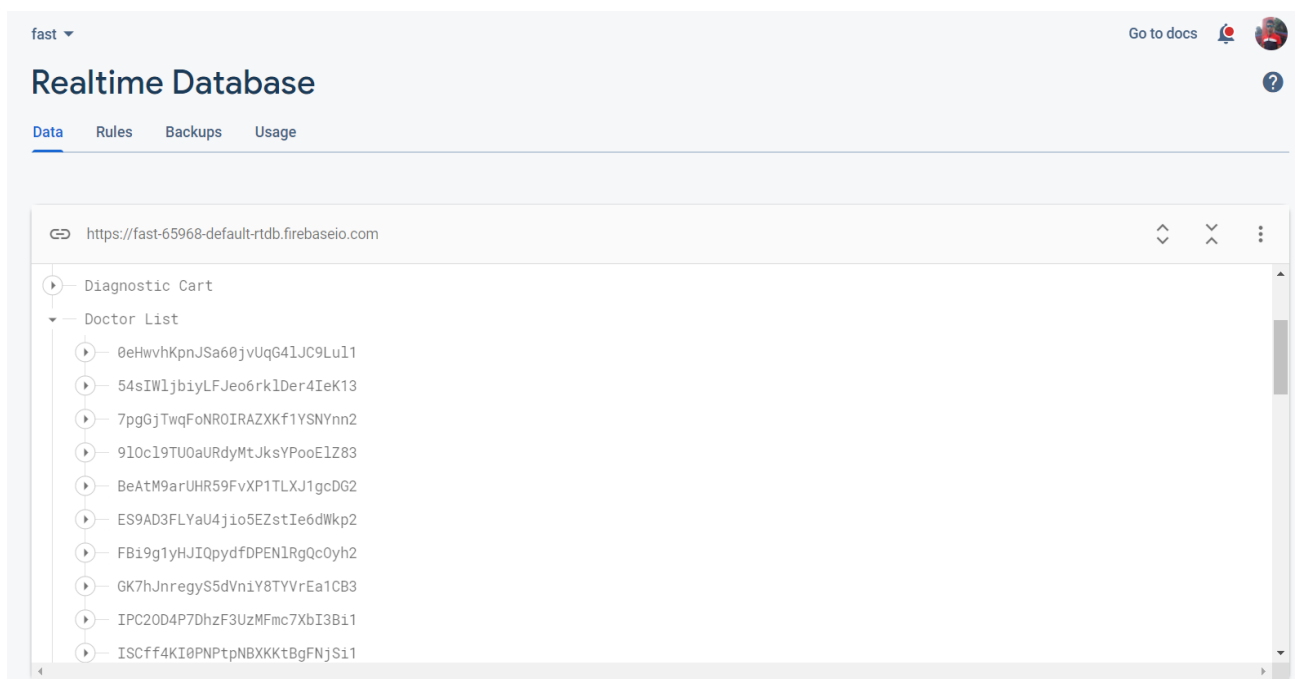


Fig 5.2.2: Doctor List

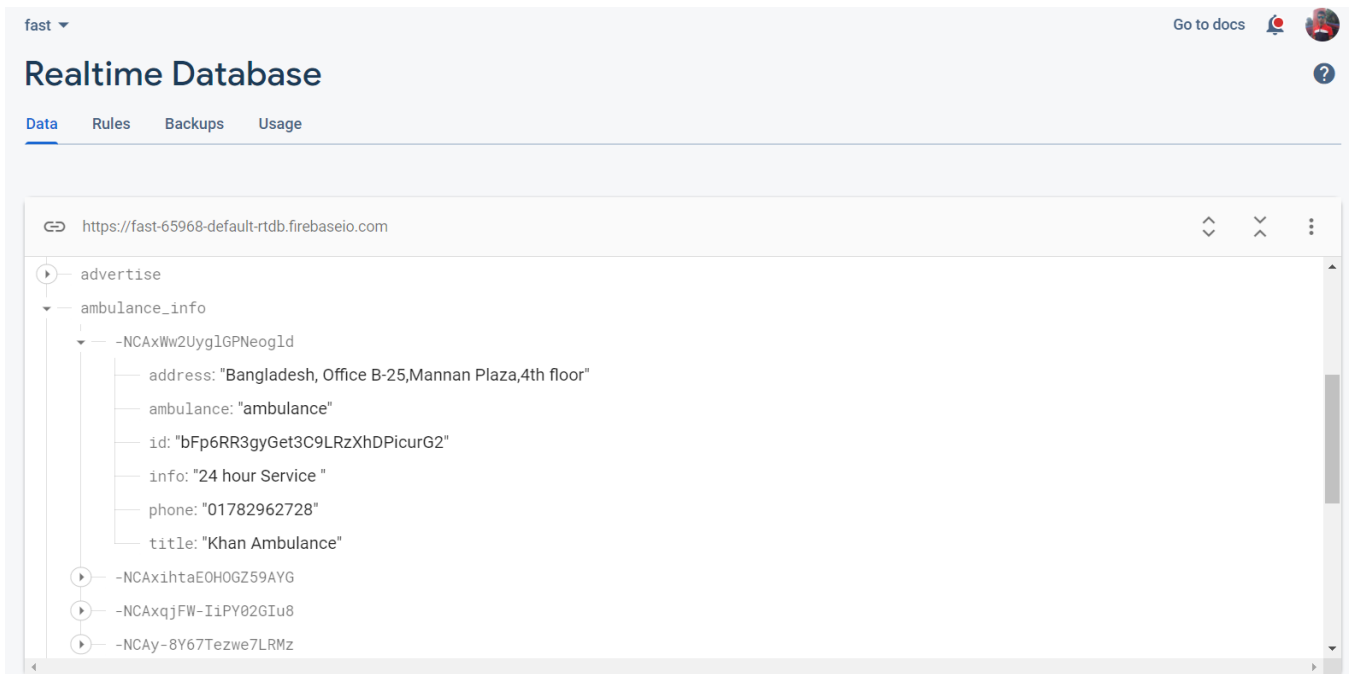


Fig 5.2.3: Emergency Ambulance

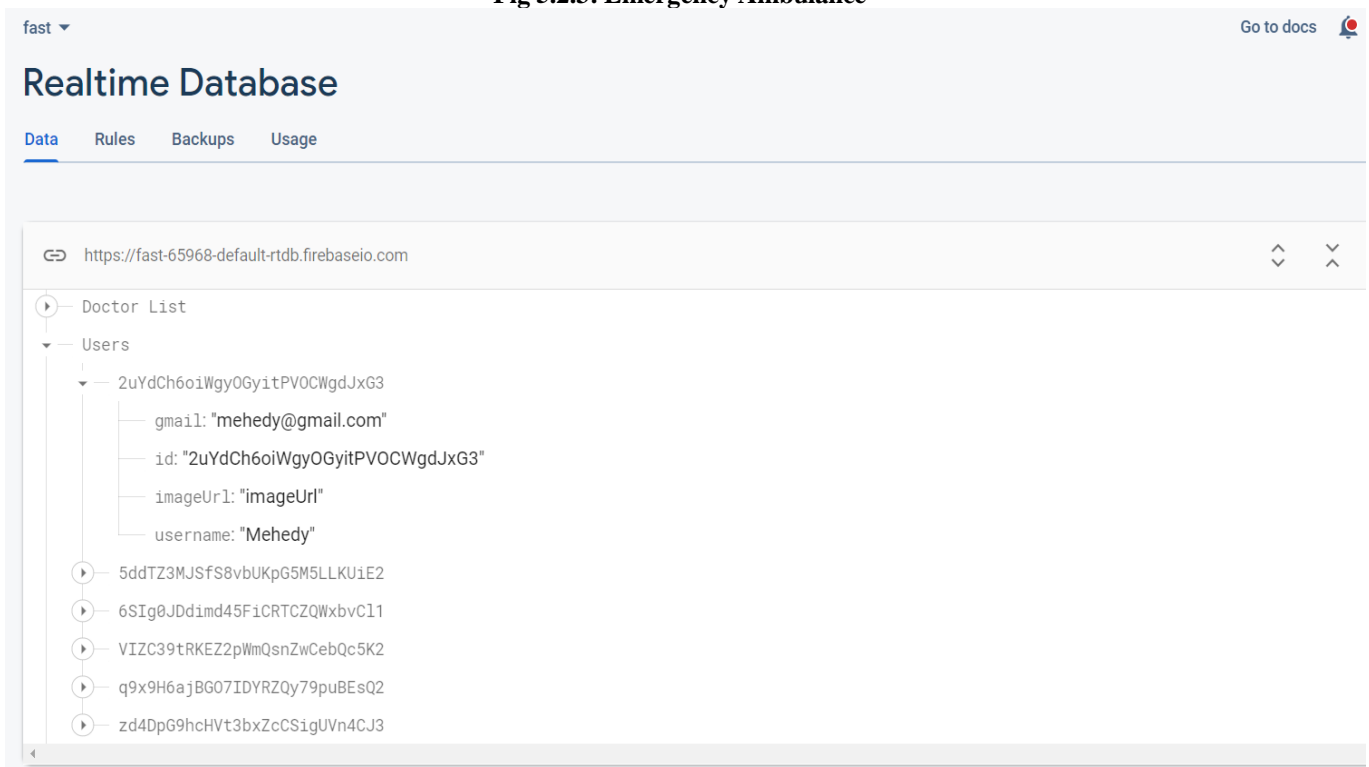


Fig 5.2.4: User

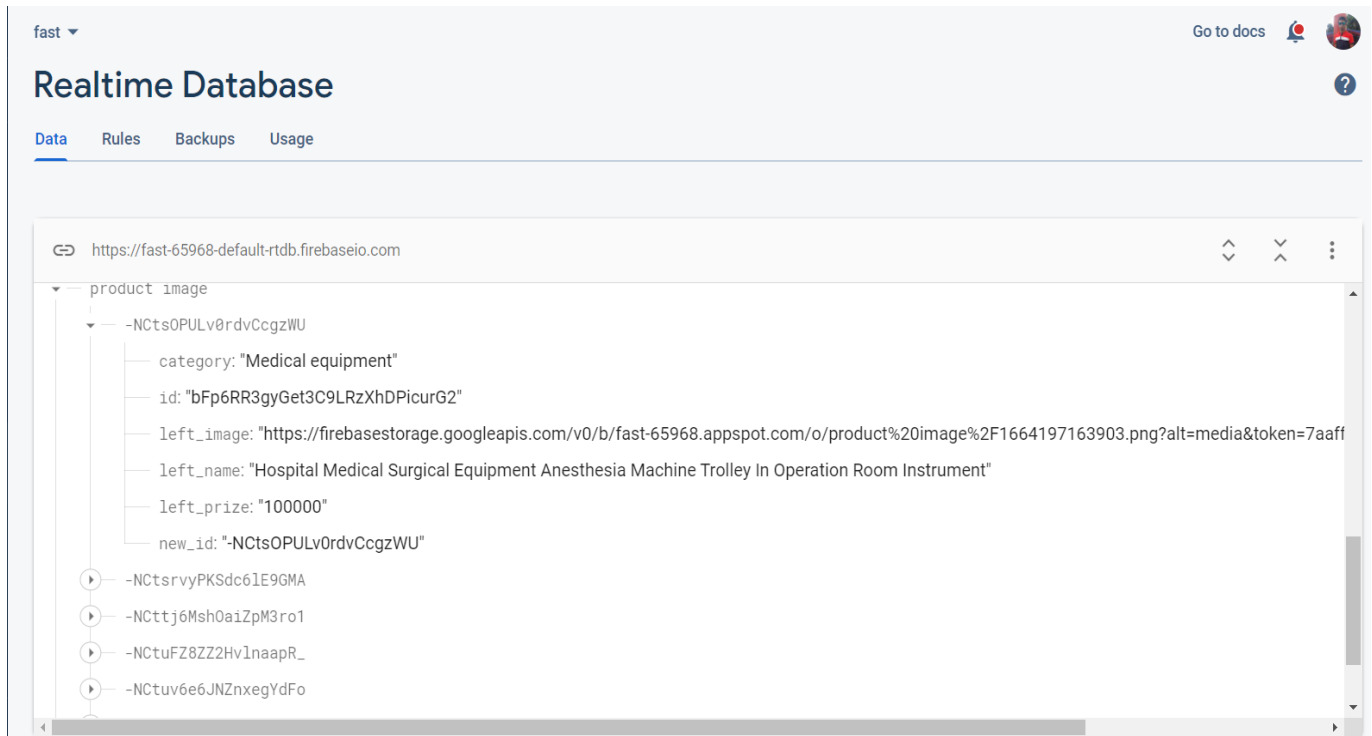


Fig 5.2.5: Product List

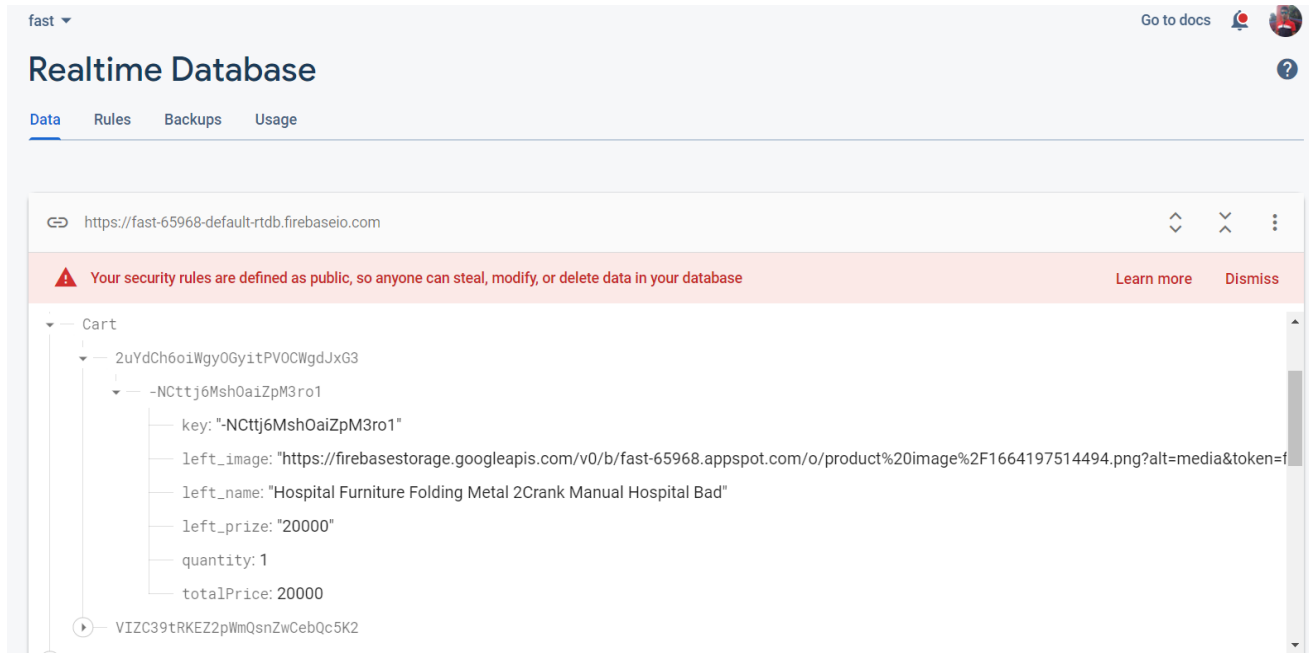


Fig 5.2.6: Carts

raST GO TO QOCS

Authentication

Users [Sign-in method](#) [Templates](#) [Usage](#) [Settings](#)

🔍 Search by email address, phone number, or user UID Add user ↻ ⋮

Identifier	Providers	Created ↓	Signed In	User UID
mosharof@gmail.com	✉	Jan 4, 2023	Jan 4, 2023	q9x9H6ajBGO7IDYRZQy79puBEsQ2
rakin@gmail.com	✉	Jan 4, 2023	Jan 4, 2023	6Slg0JDdimd45FiCRTCZQWxbvC11
admin@gmail.com	✉	Dec 26, 2022	Jan 3, 2023	0sFeavVsbEWOM4g4gSNyahsDXx...
sobuj@gmail.com	✉	Dec 4, 2022	Dec 4, 2022	zd4DpG9hcHVt3bxZcCSigUVn4CJ3
ritubissas@gmail.com	✉	Dec 4, 2022	Dec 4, 2022	54slWjbjlyLFJeo6rklDer4leK13
sofiqulislam@gmail.com	✉	Dec 4, 2022	Dec 4, 2022	gZMfcfLH3XbP7nozwcqgoQxhcgE3
sumaiya@gmail.com	✉	Dec 4, 2022	Dec 4, 2022	aEwiZofl0ZZUfA44j40Vnohhsyc2
mahinislam@gmail.com	✉	Dec 4, 2022	Dec 4, 2022	xURSqNMEYINHStXMG7nJLI9Wq...
sintheya@gmail.com	✉	Dec 4, 2022	Dec 26, 2022	sknlqSXgZb0IRgDjFleXHUn75Lu1

Fig 5.2.7: Authentication

6.1 TESTING IMPLEMENTATION

To be sure that the application works perfectly, we have done a series of tests on our project. Several tests are presented below to indicate the application's absolute readiness to function.

Table No 6.1.1 Testing

No	Tested Case	Expected Out Come	Actual Out Come	Result
1	Entre The Apps	Splash Screen, Home Page Comes Up	Splash Screen, Home Page Comes Up	Feature information
2	Click On the Button	Another activity Will open And show information	Another activity will open and Show information	Doctor list, Pharmacy list, Ambulance list, Shop item, Answer question Section, blog
3	Set Information	Invoice data collect, And other data collect	Invoice data collect, And other data collect	Send invoice list, Call paid. Send data for shoping
4	Done	Confirmation notification	Confirmation notification	Toast notification

6.2 Test Results and Reports

Table 6.2.1: Test the Site Navigation

Test Case	Test Data	Result
Doctor Appointment	Check-in different device	Works perfectly
Doctor Category	Check-in different device	Work perfectly
Pharmacy, Ambulance, Blood bank and other service	Check-in different device	Works greatly
Answer and question s	Check-in different device	Works perfectly
Logout	Check-in different device	Works perfectly
Real time chat	Check-in different device	Works perfectly

6.3 Test the Contents

Table 6.3.1: Test the Content

Test Case	Test Data	Output
Images	include "alt" text	Accurate
Blog	Easily readable and error-free	Accurate

6.4 Interface Testing

Table 6.4.1: Application Interface Testing

Test Case	Test Data	Output
From the Doctor Perspective	The prescription is successfully uploaded to the server.	Accurate
To Patient Perspective	To the patient Side, the data is shown correctly.	Accurate

6.5 Crowd Testing

Table 6.5.1: Crowded Testing of Application

Test case	Test Data	Output
Application	Always didn't Response in the same manner as the application runs without an internet connection	Accurate
Crash Occurrence	Due to peak load, the crash doesn't occur.	Not Accurate

CHAPTER 06

IMPACT ON SOCIETY, ENVIRONMENT & ETHICAL ASPECT

6.1 Impact on Society

Doctor appointment booking and live chat apps can positively impact society by improving access to healthcare and increasing the efficiency of the healthcare system.[7]

For example, doctor appointment booking apps can make it easier for patients to schedule appointments with their healthcare provider, which can help to increase the number of people who receive timely and necessary care. Live chat apps can also provide a convenient and efficient way for patients to communicate with their healthcare team, which can help to improve the overall quality of care. These apps can be particularly useful for individuals who live in rural areas or who have difficulty traveling to a healthcare facility in person. They can help to increase access to healthcare for these individuals, which can help to reduce health disparities within society. Overall, doctor appointment booking and live chat apps can positively impact society by improving access to healthcare and increasing the efficiency of the healthcare system.

6.2 Impact on the Environment

The environmental impact of doctor appointment booking and live chat apps can vary depending on various factors, such as the specific technologies and infrastructure used to support them, as well as the extent to which they are used to reduce the need for in-person visits to healthcare facilities. In general, doctor appointment booking and live chat apps have the potential to have a positive impact on the environment by reducing the need for patients to travel to healthcare facilities in person. This can lead to a reduction in greenhouse gas emissions from transportation, which can help to mitigate the negative impacts of climate change. In addition, these apps may also help to reduce the overall environmental impact of the healthcare system. For example, they can potentially reduce the need for paper-based systems, which can help to reduce the use of natural resources and the amount of waste produced. It is important for healthcare providers to consider the environmental impact of these apps and to take steps to minimize any negative impacts. This may include using energy-efficient technologies and infrastructure and encouraging the use of these apps to reduce the need for in-person visits and related transportation.

6.3 Ethical Aspect

There are several ethical considerations related to the use of doctor appointment booking and live chat apps in healthcare[8]. One ethical concern is the potential for these apps to contribute to healthcare disparities. If certain populations do not have access to these technologies or do not know how to use them, they may be disadvantaged when it comes to scheduling appointments or communicating with their healthcare team. It is important for healthcare providers to ensure that all patients have equal access to these tools and provide necessary support and education. Another ethical consideration is the confidentiality and security of patient information. It is important for these apps to have appropriate security measures in place to protect patient data from unauthorized access or misuse. This includes ensuring that information is only shared with authorized individuals and that data is encrypted when transmitted. In addition, there may be ethical concerns related to the use of patient data collected through these apps. It is important for healthcare providers to communicate to patients how their data will be used clearly and to obtain appropriate consent before collecting and using this information. Overall, it is important for healthcare providers to carefully consider the ethical implications of using doctor appointment booking and live chat apps and to take appropriate measures to address any potential concerns.

CHAPTER 07

CONCLUSION & FUTURE PLAN

7.1 Conclusion

Bangladesh has not been an exception to the worldwide trend of e-commerce within the business world that has been occurring for some time. The pandemic's extended shutdown of bodily markets has contributed extensively to the fashion's latest growth in reputation within the nation. It appears that the tendency will remain; this awful lot is obvious.[9] Doctor Appointment Booking & Live Chat App is a safe platform for that. It is important for healthcare providers to offer convenient and efficient methods for patients to book appointments and communicate with their care team. One way to do this is through the use of a doctor appointment booking and a live chat app.

Doctor appointment booking apps allow patients to easily schedule appointments with their healthcare provider at a time that is convenient for them. This can save patients time and effort in coordinating appointments and can help to reduce missed appointments.

Live chat apps allow patients to communicate with their healthcare team in real-time, providing a convenient and efficient way to ask questions, get clarification, and receive guidance. This can be especially useful for patients who live in rural areas or who have difficulty traveling to a healthcare facility.

7.2 Future Plan

This program will make life easier for regular people and Doctors to help people quickly. Access to Doctor Appointment Booking & Live Chat App is available in Bangladesh. It may be improved in a variety of ways.

- Develop an ISO version.
- Wish to develop for industrial purposes.
- Develop a Bangla version of the app.
- And a web platform also.

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Doctor appointment booking and live chat app

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