

**DOCTOR BOOK: Android Application**

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

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**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

**DECEMBER 2019**

## APPROVAL

This Project/internship titled “**Doctor Book**”, submitted by Ruhul-Amin-Hira, ID No: 161-15-7289 and Md. Sall Sabil Sabbir, ID No: 161-15-7318 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 December 5, 2019.

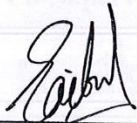
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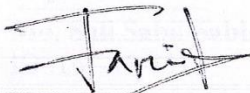
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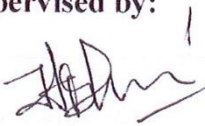
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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Ms. Itisha Nowrin, Lecturer, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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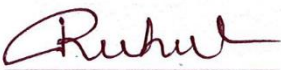
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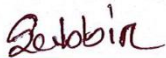
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## **ABSTRACT**

People generally face problem when they want to visit a doctor. Because usually patient doesn't know which doctor they should visit and which one is appropriate based on category of doctors? Sometime patient doesn't know the location of the doctor and share their problem to take suggestion. Now there are some apps which give some functionalities like doctor list, nearby doctors, chat etc. But most of are out dated and based on their countries and one single app doesn't contain all the features. That's why we are developing an android app. This project creates bridge between Doctors and Patients. There are many functionalities which will reduce the gap between doctor and patient. This app will help a patient and to share his problem by posting it and get help from different kind of many doctors. The patient can search different categories of doctor and select his appropriate doctor. He can chat with doctor and get useful information and get the details of the doctor, medicine, hospital etc. Both patient and doctor will use this app and help each other. This will reduce the difficulty to find a doctor, ambulance and hospital.

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# **CHAPTER 1**

## **Introduction**

### **1.1 Introduction**

The rapid development of information and communication and the smart technology have become an extensive and integral part of everyday life. We can use this technology through our app where patient will create a profile to share his problem by posting it and communicate with doctor by chat and comment. Patient can find nearby doctors or search different categories of doctors. They can also find valuable information about a doctor, hospital, medicine and ambulance. They can also find health tips. Doctor will help by posting different types of health tips and medical related topics. Doctor can customize his profile to express himself and give information about his ability, when and where he seats and visit patient. This project is an attempt to bring closer of doctor and patient where they can both be beneficial.

### **1.2 Motivation**

We all want an easy way to live and do all of our works. But we face many problem to do that. As an example health issue plays an important role in our life. We all become sick and go to visit a doctor. But finding a appropriate doctor within desire location is quite a problem sometime. We don't know the name of the doctor, which doctor is best for our diseases and where to find them. Even some time we go to other city to visit a special doctor. For that we have to ask other people. If we find one then getting information about appointment is another problem. It is also problematic for doctors to give an appointment at desire time and also introduce themselves, where they visit patient etc. How about we solve all of these problems by using an app. Yes, I am talking about an android app where all of these problem can be solved. There is no such app current now in Bangladesh to solve these kind of problems. There are some website and app that gives you some information about the doctor but isn't that kind of helpful. Some are out of date, some doesn't have proper information etc. And there are not as many feature that we will give in this app.

### **1.3 Objectives**

To solve the above problems, we will make an android app. Why android? Because it is everywhere now. Almost everybody uses android. And we live in a digital country with internet access. So android will be appropriate. To solve problem of the patient we will add some feature where they can find the best doctors according their desire location. They can search any location where they will find the doctors. They can also find the doctors by searching there name too. Or they can find the best doctors according the category of doctors. As an example there will be a category of doctors where someone can search a medicine specialist of all place or specific place. Then they can contact from the profile of the doctor. They can also keep them in their list in the app. They can also give review to the doctor. Now you have found the doctor. How about their appointment? Well we have solution. There will be a phone number in the profile of doctor. They can contact on the number to get an appointment. You can either call directly by phone number or message them to get an appointment through the app. You can get any information about the doctor with messaging. Now they have fixed a date but don't know the road to go there. Here comes the google map. Google map will be integrated in the app where they can see the distance and route from their location. Now how about the doctors? We will solve that problem too. They will create a profile and put there all kind of information so that a patient can find useful information. They will also give some tips for better health according their sector. So beside there profile there will be a section of tips so that a user (patient) can get benefit from it.

## 1.4 Expected Outcome

The main motto of this project is to give the ability to patient to find all medical related solution including doctor in one app, where doctor can also help the patient and increase their popularity. Sometimes patient don't know what that medicine does, where is the phone number of ambulance, where can I find appropriate doctor or which doctor I should visit, all of this problem can be solved by this app. Patient can post about their problem and all the doctor can see his post and they can comment on the post and recommend a doctor.

The users can obtain the following things:

- Can access according to their own id
- Can do the registration via patient or doctor.
- Can login in social and google account
- Can see nearest doctor or hospital.
- Can see various category of doctor.
- Can see the details of the doctor.
- Can post about a problem or solution both doctor and patient.
- Can comment on the post.
- Can chat with doctor.
- Can find the details of a medicine.
- Can add a doctor on their favorite list.
- Can find the ambulance and phone number.
- Can get the phone number for appointment.
- Can set a reminder.
- Can search a doctor or hospital by name or location.

## **1.5 Report Layout**

### **Chapter 1: Introduction**

In this chapter we have discussed about the motivation, objectives and the expected outcome of the project. Later followed by the report layout.

### **Chapter 2: Background**

We discuss about the background circumstances of our project. We also talk about the related work, comparison to other candidate system, the scope of the problem and challenges of the project.

### **Chapter 3: Requirement Specification**

This chapter is all about the requirement's like business process modeling, the requirement collection and analysis, the use case model of the project and their description, the logical relational database model and the design requirements.

### **Chapter 4: Design Specification**

In this chapter all the design of the project. Front-end design, back-end design, interaction design and UX and the implementation requirements.

### **Chapter 5: Implementation and Testing**

This chapter contains the implantation of database, front-end design, interactions and the test results of project.

### **Chapter 6: Conclusion and future scope**

We discussed about the conclusion and the scope for further developments which petty much derive about the project.

## **CHAPTER 2**

### **Background**

#### **2.1 Introduction**

Nowadays we can see that the development of android application and mobile technology are increasing day-by-day. The development of communication and the smart technology have become an extensive and integral part of our everyday life. People want an easy way to do all of their works. For this same reason we can see that people are using different types of application to gather information about their desire doctor and want to communicate with them but they fail because most of the apps don't have proper information about the doctor and their acquaintance, some apps are out of date, some apps are with only some names of doctors, some doesn't have proper information etc. after all isn't that kind of helpful. So we thought about an application which will provide proper information about doctor and about their acquaintance, hospital and ambulance for the user/patient. This app will make communication between Doctors, Patient, Hospital and Ambulance a lot of easier than any other apps available now by only one application from their smart phone.

#### **2.2 Related Works**

There are various kind of website and communication app to make communication between doctor and patient, communication with hospital, communication with ambulance. But most of the apps has lake of information and for different information you need to different apps which is quit problematic. During working with this android app we analyzed some old and new related application such as My Doctor<sup>[1]</sup>, BD-Doctor<sup>[2]</sup>, and Doctor List BD<sup>[3]</sup>.

## 2.2.1: My Doctor

My Doctor<sup>[1]</sup> is a simple android app where the patient can speak to a doctor by phone call to take advice. The app help to find nearest hospital/clinic or pharmacy in Egypt.

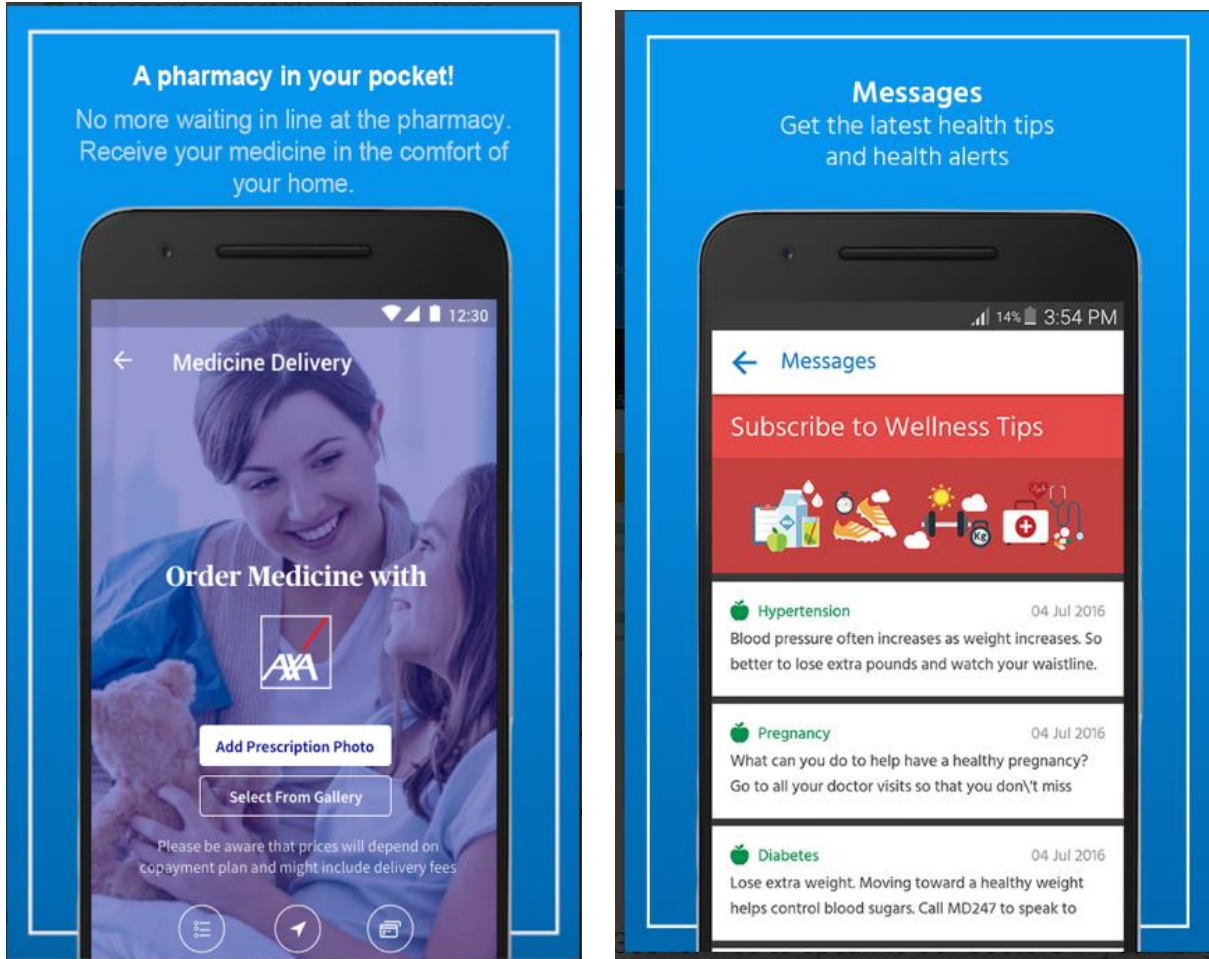


Figure- 2.2.1: My Doctor<sup>[1]</sup>



### 2.2.2: BD-Doctor

BD-Doctor<sup>[2]</sup> gives the user the possibility to see every medical or social institution in Bangladesh. People can now search for a medical service near their using the BD-Doctor app.

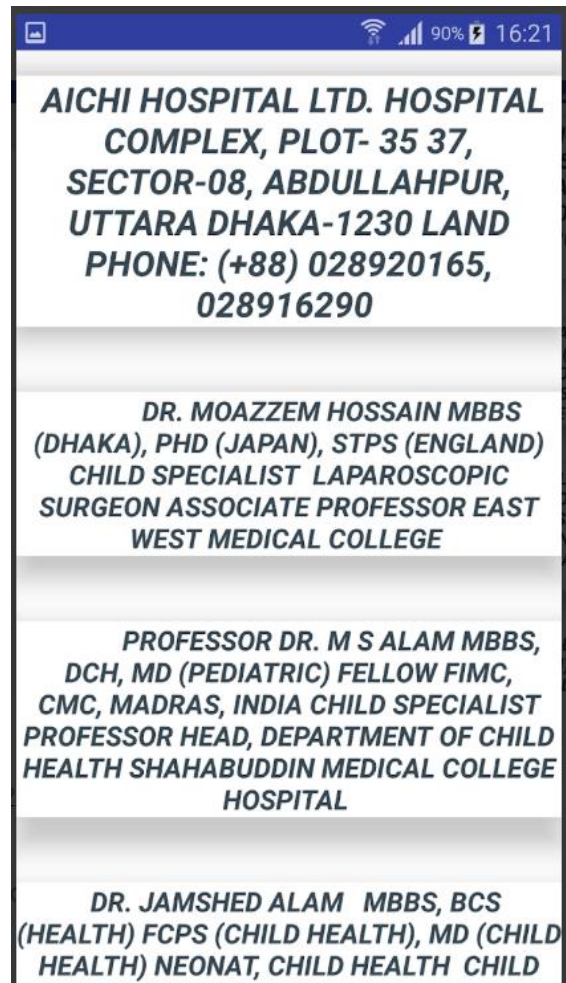


Figure- 2.2.2: BD-Doctor<sup>[2]</sup>

### 2.2.3: Doctor List BD

Doctor List BD<sup>[3]</sup> is a simple and easy to use application that helps you to find out Doctor's Information in a hassle freeway.

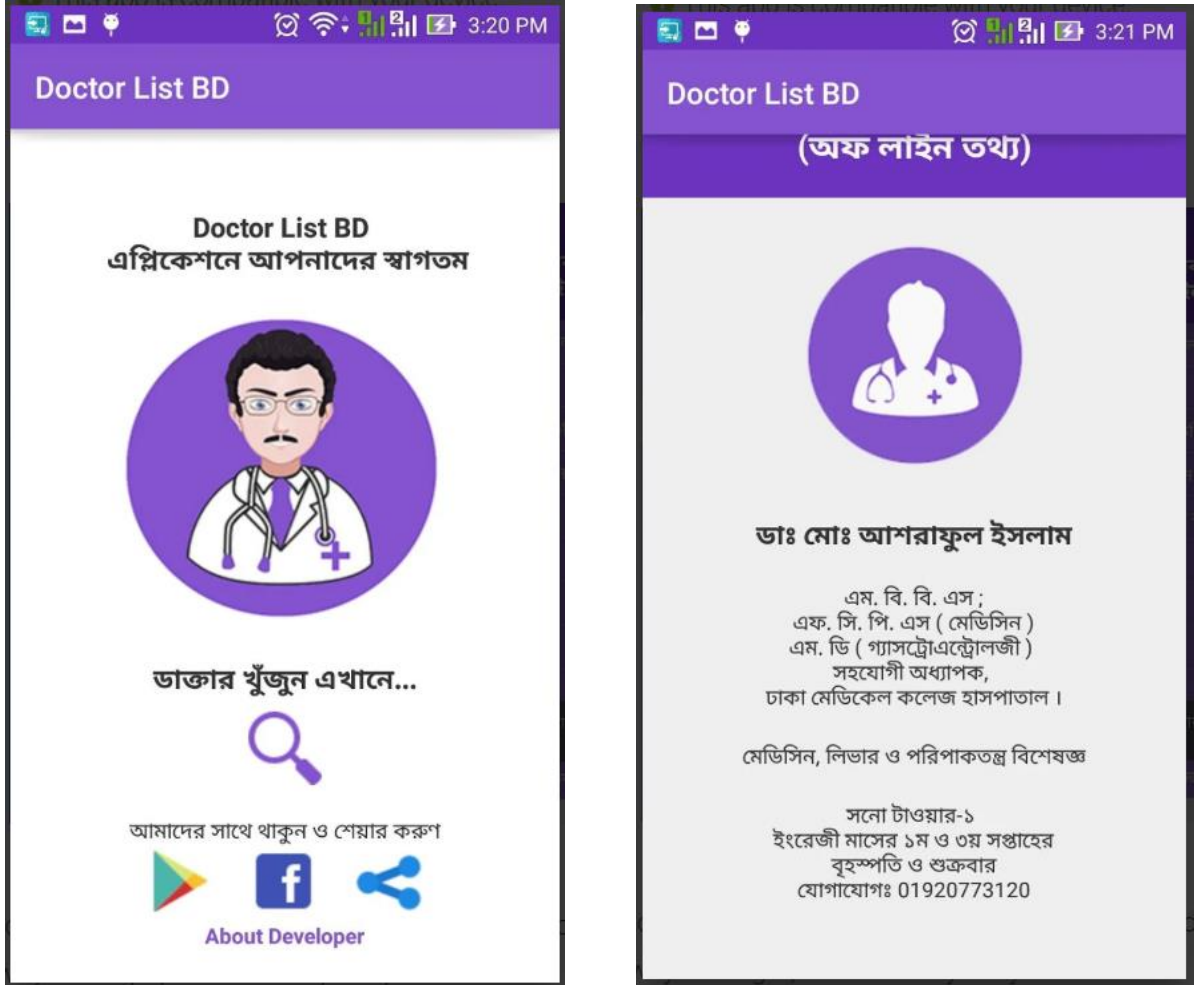


Figure- 2.2.3: Doctor List BD<sup>[3]</sup>

## **2.3 Comparative Studies**

Currently there are some apps which help people in specific problem and specific country. However those apps which work in our country don't contain all features and mostly are out of dates. They don't give update as much as it need. Some apps take money for communicating with doctors. There are no functionality for doctors to create their own profile and share their complement. Patients can not share his problem by posting it and get response properly from doctors. Doctors cannot create their profile and update their profile. Patient cannot find appropriate details of a doctor based on their location or category. Most of the patient don't know which doctor they should visit for their problems. The apps which contain reminder functionality doesn't work properly. To get all the functionality like finding hospitals, ambulance and health tips user have to use different apps. They cannot share their problem with image. We have made a developed and user friendly medical related app which will solve most of the problem and give some effective solutions to the problems with previous apps.

## **2.4 Scope of Problem**

We developed an application by which both patient and doctor can communicate with each other and solve many problems. We already have added few smart features so that both the user will be benefited. At first, we have thought about the patient who is suffering from different kinds of health or medical related problems. The patient doesn't know which doctor is good for him or which medicine is from which group and what it does, the side effects of the medicine etc. We will solve this problem by this app. Secondly we have consider about the doctor who wants to help patient an increase their popularity. The doctors can comment on a patient post and give a suggestion or solution based on patient problems. Doctors can also chat with patient if he wants.

## 2.5 Challenges

There are some challenges and problem to do a work. Our project is not an exception from that kind of problems. During implementing the idea in our project we have faced following challenges:

- We are new in this platform and face some problem while developing. We implemented as much as possible error free method and still trying to do improvement.
- Ensuring connection with database was a complicated task for us.
- Making a user friendly and good looking app was a work of long time.
- Designing the materials was hard. The app crushed many times when we were editing the design and implement new materials.
- Because of our poor knowledge we have to search and research on different methods to solve a specific problems.
- Our app contain location wise functionality with Google API which was totally new for us and it gives us several errors when we were implementing this.
- While researching and collecting data of different doctors, hospitals, ambulance, medicine it was quite difficult.
- Android studio crushed many times for small problems which is difficult to notice.
- We didn't know how to implement many features, so we have to research it in google and find a proper solution which was very time consuming.

# CHAPTER 03

## Requirement analysis and design

### 3.1 Business Process Modeling

The technique to represent the work flow of a system is called business process model. Based on “Flow Diagram” the methodology work. Below the figure 3.1 shows the business process model of our “Doctor Book” app.

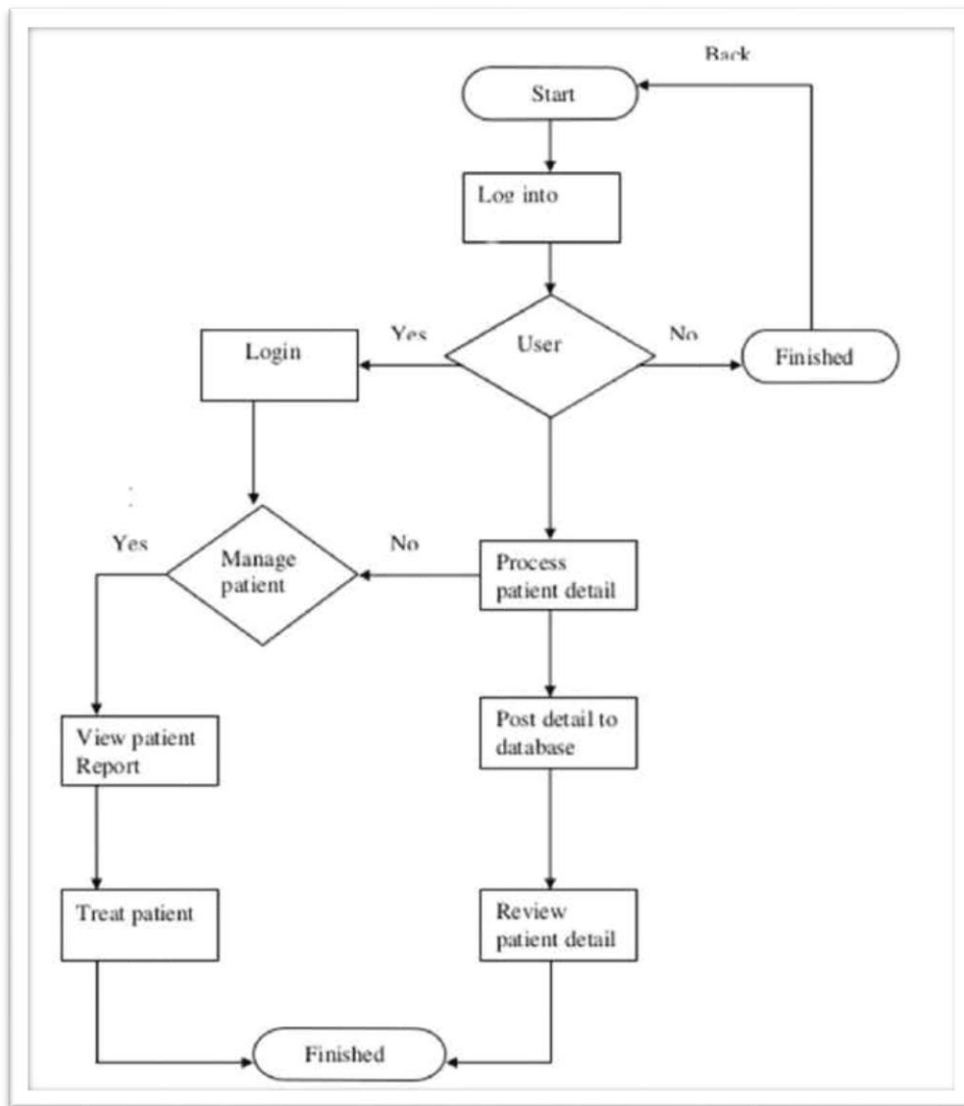


Figure 3.1: Business Process Module

## **3.2 Requirements Collections and Analysis**

For our application development there is requirement collection and analysis. There are two types of requirements for deployment of our application such as functional requirements and the other one is nonfunctional requirements. The functional requirements is the functionality of our app can perform. How much efficient and the performance etc. of our application and many more defines nonfunctional requirements.

### **3.2.1 Functional Requirements**

There are many functionality like search a doctor, chat with doctor or set a reminder etc. which can be accessed only by registered user. Login and registration functionality, searching functionality, posting and commenting etc. function is required to work properly.

### **3.2.2 Nonfunctional Requirements**

Nonfunctional requirement are the performance and memory efficient, less time consuming, load and fetch data from database as quickly as possible. The application should be operate smoothly. The UI design of the app should be user friendly and look beautiful so that the users can feel comfortable.

### 3.3 Use Case Diagram and Description

A use case contains the characteristics of below:

- Organizing functional requirements.
- Modeling the interactions of system or user.
- Recording the path which triggers an event.

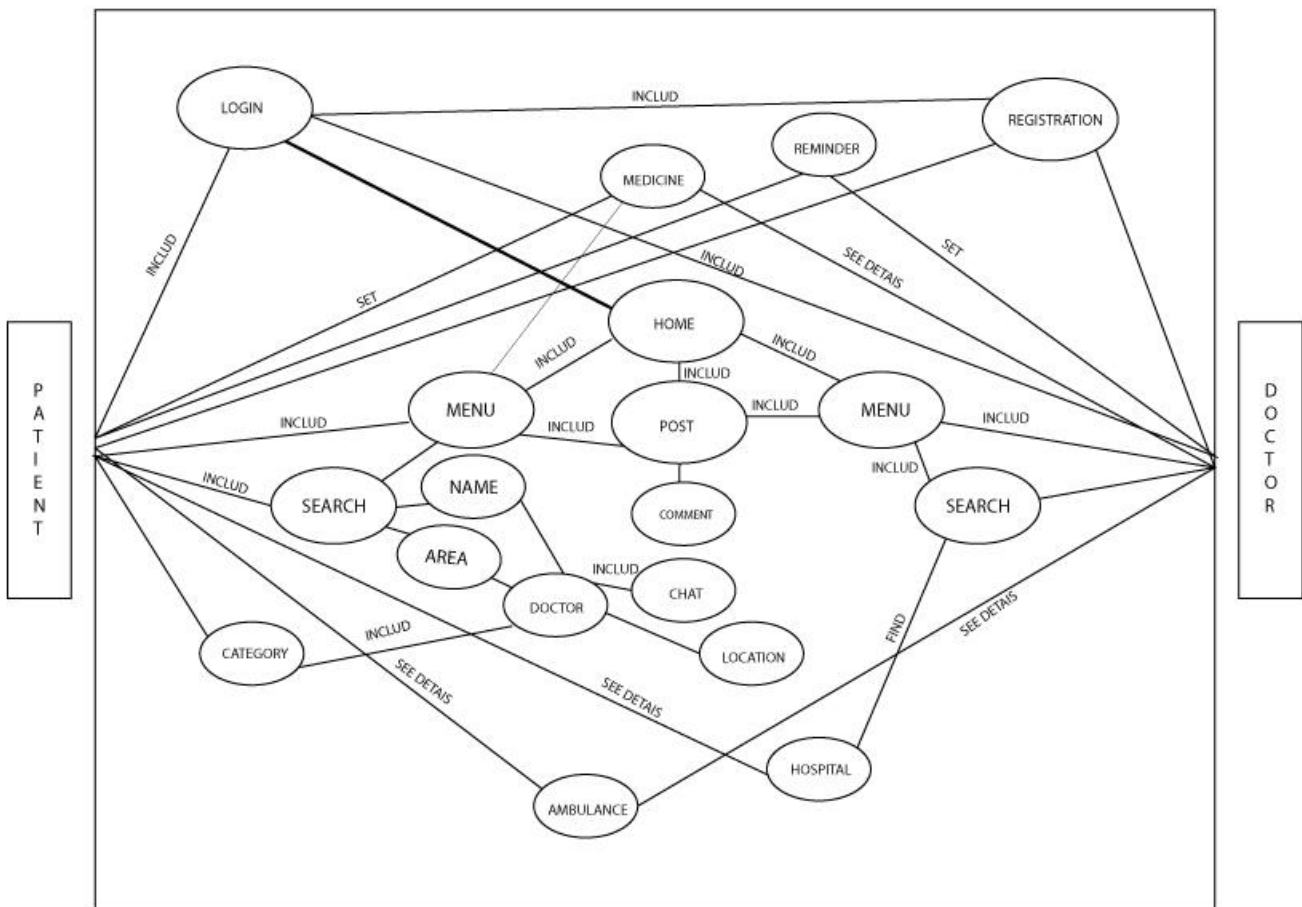


Figure- 3.2: Use Case Diagram

Table 3.1: Use Case Description of Sign UP for Patient

Use case	Sign up
Primary Actor	Patient
Secondary Actor	null
Precondition	Select Patient
Scenario	<ul style="list-style-type: none"> <li>• User name</li> <li>• Email</li> <li>• Password</li> </ul>
Post condition	<ul style="list-style-type: none"> <li>• Sign up successful or failed</li> <li>• Log in</li> <li>• Edit profile</li> </ul>

Table 3.2: Use Case Description of Sign UP for Doctor

Use case	Sign up
Primary Actor	Doctor
Secondary Actor	null
Precondition	Select Doctor
Scenario	<ul style="list-style-type: none"> <li>• User name</li> <li>• Email</li> <li>• Password</li> <li>• Category</li> <li>• Phone number</li> <li>• Location</li> </ul>
Post condition	<ul style="list-style-type: none"> <li>• Sign up successful or failed</li> <li>• Email verification</li> <li>• Log in</li> </ul>



Table 3.3: Use Case Description of Log in

Use case	Log in
Primary Actor	Doctor/Patient
Secondary Actor	null
Precondition	Sign up as a Doctor/Patient
Scenario	<ul style="list-style-type: none"> <li>• Email</li> <li>• Password</li> </ul>
Post condition	<ul style="list-style-type: none"> <li>• Log in successful or failed</li> <li>• Browse app</li> </ul>

Table 3.4: Use Case Description of Post

Use case	post
Primary Actor	Doctor/Patient
Secondary Actor	null
Precondition	Log in as a Patient/Doctor
Scenario	<ul style="list-style-type: none"> <li>• Image</li> <li>• Text</li> </ul>
Post condition	<ul style="list-style-type: none"> <li>• Edit post</li> <li>• Delete post</li> </ul>

Table 3.5: Use Case Description of Choose Doctor

Use case	Choose Doctor
Primary Actor	Patient
Secondary Actor	null
Precondition	Log in as a Patient
Scenario	<ul style="list-style-type: none"> <li>• See Doctor details</li> </ul>
Post condition	<ul style="list-style-type: none"> <li>• Chat</li> <li>• See location</li> </ul>

Table 3.6: Use Case Description of Comment

Use case	Comment
Primary Actor	Doctor/Patient
Secondary Actor	null
Precondition	Log in as a Doctor/Patient
Scenario	<ul style="list-style-type: none"> <li>• See post</li> <li>• Comment</li> </ul>
Post condition	<ul style="list-style-type: none"> <li>• Edit comment</li> <li>• Delete comment</li> </ul>

Table 3.7: Use Case Description of Medicine

Use case	Medicine details
Primary Actor	Doctor/Patient
Secondary Actor	null
Precondition	Log in
Scenario	Medicine details
Post condition	null

Table 3.8: Use Case Description of Ambulance

Use case	Ambulance details
Primary Actor	Doctor/Patient
Secondary Actor	null
Precondition	Log in
Scenario	<ul style="list-style-type: none"> <li>• Ambulance details</li> <li>• Phone number</li> </ul>
Post condition	null

Table 3.9: Use Case Description of Hospital

Use case	Hospital details
Primary Actor	Doctor/Patient
Secondary Actor	null
Precondition	Log in
Scenario	Hospital details
Post condition	null

Table 3.10: Use Case Description of Reminder

Use case	Remind by notification
Primary Actor	Patient
Secondary Actor	null
Precondition	Log in
Scenario	<ul style="list-style-type: none"> <li>• Reminder text</li> <li>• Set alarm</li> </ul>
Post condition	null

Table 3.11: Use Case Description of Profile setting

Use case	Profile setting
Primary Actor	Patient/Doctor
Secondary Actor	null
Precondition	Log in
Scenario	<ul style="list-style-type: none"> <li>• Change name</li> <li>• Change image</li> <li>• Change Password</li> <li>• Change details</li> </ul>
Post condition	<ul style="list-style-type: none"> <li>• Update profile successful or failed</li> <li>• View profile</li> </ul>

### 3.4 Logical Data Model

Figure 3.3 shows logical data model of our app. The model is below:

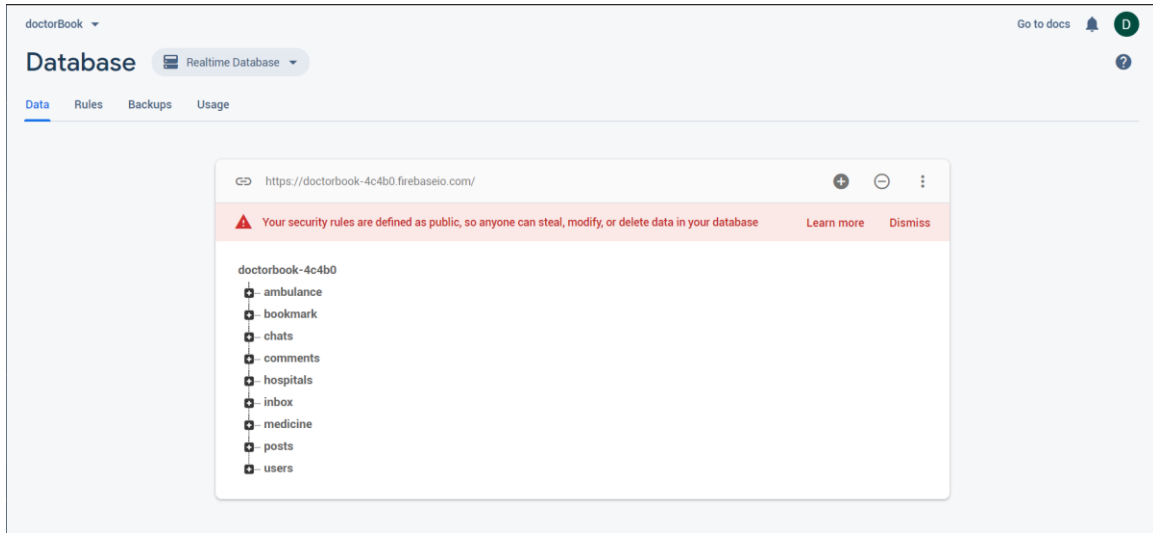


Figure 3.3: Image of Database

### **3.5 Design Requirements**

The design requirement is an important part for an application. We have create our application in an unique way which makes our apps different from other existing application. We have focused for better user experience and great user friendly app. We provided many features where user can operate our app easily.

- In our application we designed a great registration process with email verification so that any patient or doctor can register and use our app.
- We designed a multifunctional search category where patient can search for a doctor or hospital.
- Profile editing functionality is added so that both patient and doctor can edit their profile and upload their image.
- We designed a home menu where patient and doctor can post, get notification and comment.
- In our application doctor and patient can chat through a user friendly messaging functionality.
- Both doctor and patient can see hospital details and medicine details.
- Patient can set a reminder.

# CHAPTER 04

## Design Specification

### 4.1 Front End Design

Front End design is the visual part of an application by which the user interact with the application. Front End design plays a major part of an android application. It is essential for every application which help user to use the app in easy way. It creates an introduction layer by which a user can directly communicate with this. It is very important to build up an excellent straight forward and very easily understandable to create the front end for an application so that user can understand easily. That's why we have tried our best to keep the design very simple. Here is the front end design of our application:

In figure 4.1, 4.2 shows the log in process of our application

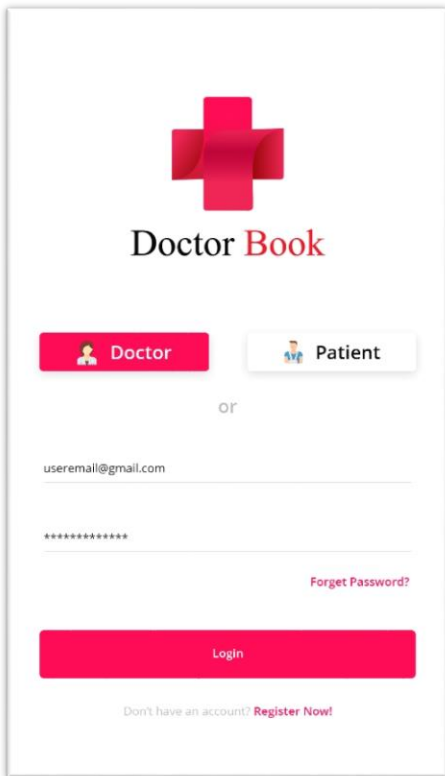


Figure 4.1: Log in field filled

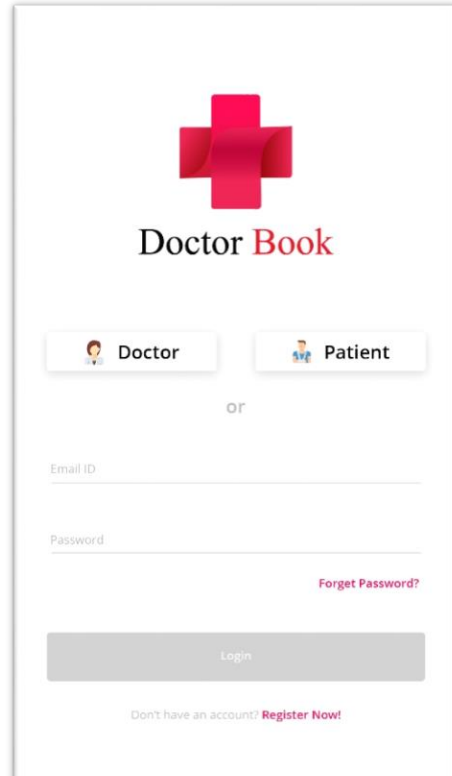
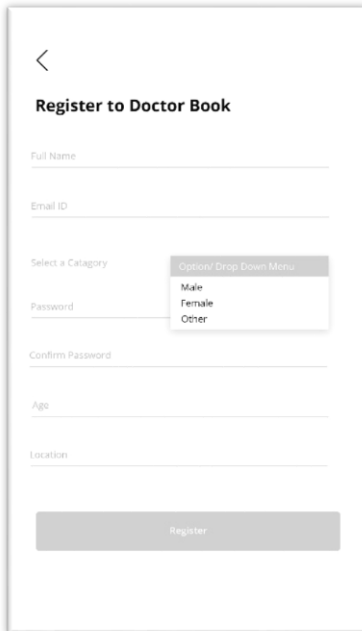


Figure 4.2: Log in field empty



In figure 4.3, 4.4 and 4.5 shows the Registration process of our application



Register to Doctor Book

Full Name

Email ID

Select a Category

Options/ Drop Down Menu

- Male
- Female
- Other

Password

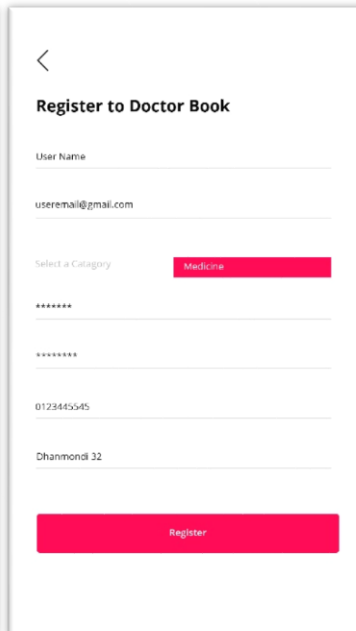
Confirm Password

Age

Location

Register

Figure 4.3: Registration



Register to Doctor Book

User Name

useremail@gmail.com

Select a Category

Medicine

\*\*\*\*\*

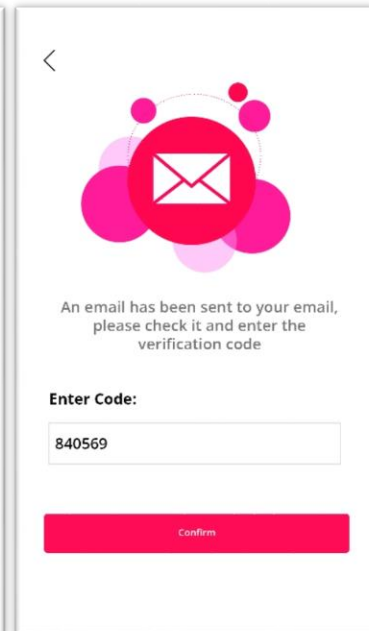
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Register

Figure 4.4: Registration



An email has been sent to your email, please check it and enter the verification code

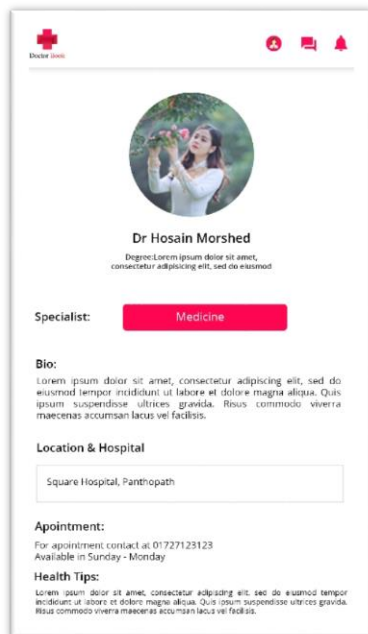
Enter Code:

840569

Confirm

Figure 4.5: Verification

In figure 4.6, 4.7 shows the Profile of user



Doctor Book

Dr Hosain Morshed

Specialist: Medicine

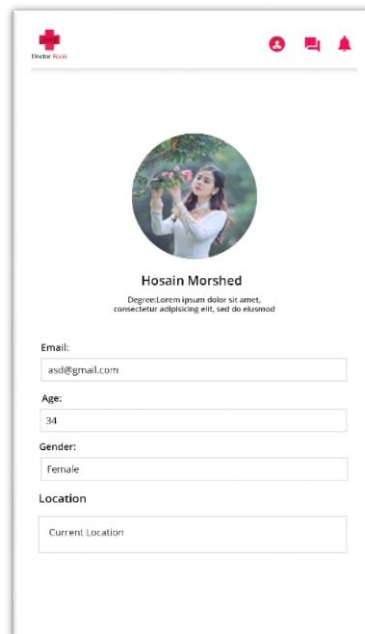
Bio:

Location & Hospital

Appointment:

Health Tips:

Figure 4.6: Doctor Profile



Doctor Book

Hosain Morshed

Email:

Age:

Gender:

Location

Figure 4.7: Patient Profile

In figure 4.8, 4.9 and 4.10 shows the Post, Category and Map Activity

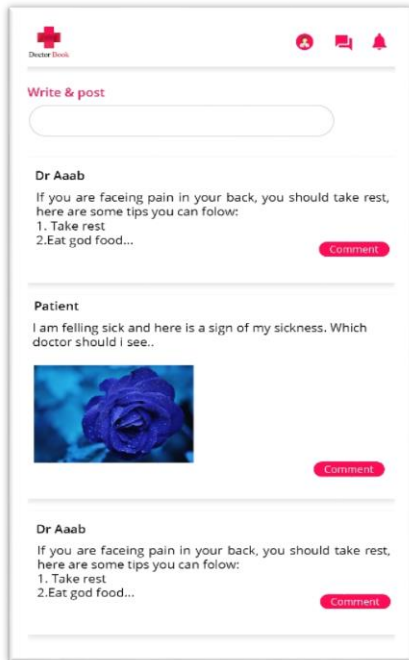


Figure 4.8: Post

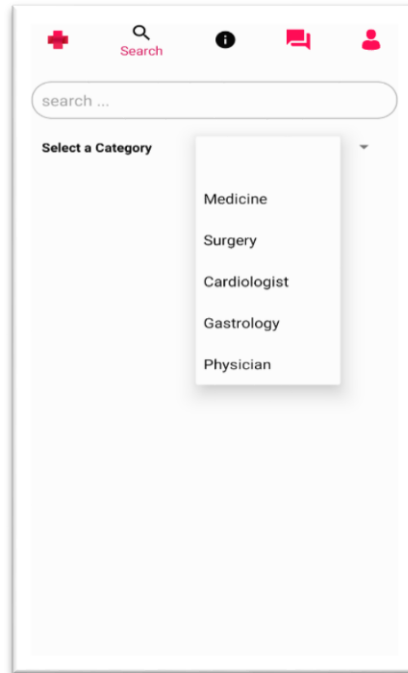


Figure 4.9: category

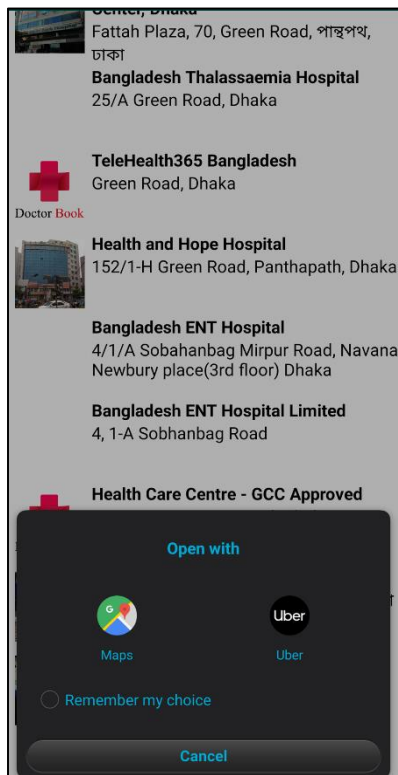


Figure 4.10: select map

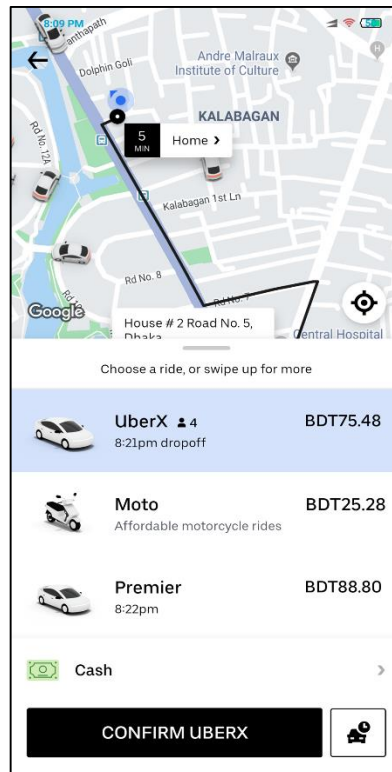


Figure 4.10: Uber map

## 4.2 Back End Design

There are two parts to develop an application front end and back end. Back end is the part which works behind the scene of an application. The user interact with the front end and front end interact with back end. The user can only interact with the front end and don't have access of back end. Back end usually means all the work that occur in the server of the application. Back end is the complex part of an application. In android it is more complex due to its limited resource that's why we have tried to use the most easy and simple one.

We have used the Firebase Database, the most popular one to maintain and develop our android application. Here is the figure of our android application which represents log in and registration information.

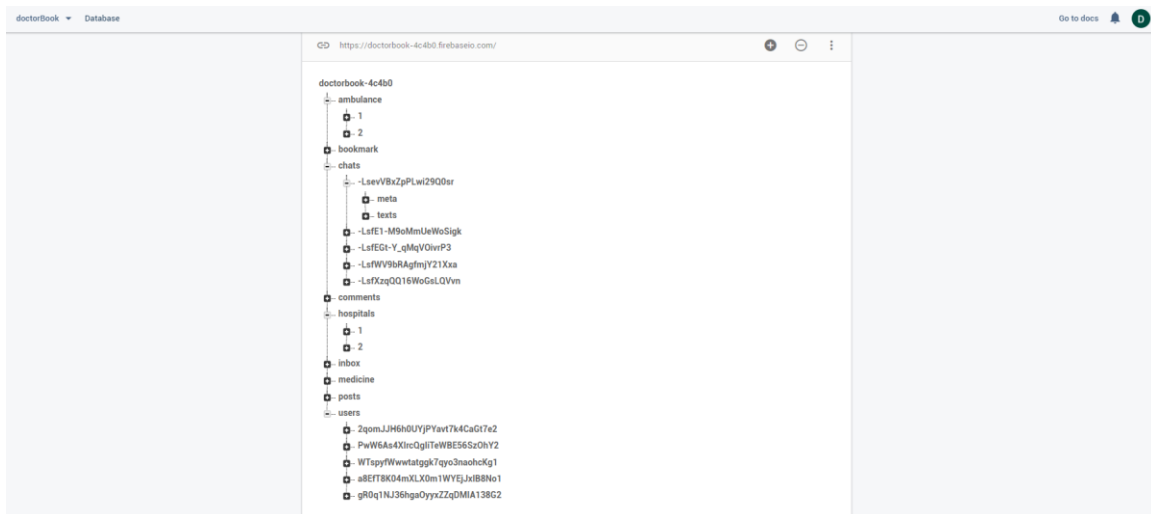


Figure 4.12: Image of Database

### **4.3 Interaction Design and UX**

Interaction design defines a set of rules and examine the interaction between the user and a system using interface. It also represents and focused on incorporate design that how the information should represents in the user interface so that a user can understand the information and functionality in best way.

UX design (user experience) focuses on overall experience of an application. It focus on how the application should look and feel so that the user can experienced most comfortable.

### **4.4 Implementation Requirements**

Every application needs some components and tools to develop it. We have used different kind of tools to implement and develop our application to make it successful. In this section we will discussed about the tools and components.

#### **4.4.1 Android Studio**

Android studio<sup>[4]</sup> is the most and major important tool to make an android application. Android studio gives us an easy and speedy environment to develop an android application. It has many excellent features like code decoration, framework integration, troubleshooting, error representing, execution tooling etc. we have used android studio as our main application IDE. As we are discussing about android studio we should also need about basic of android.

##### **4.4.1.1 Basic Android Overview**

Android application is made based on android operating system. The owner of android is Open Handset Alliance and championed by Google. Android is a comprehensive open source platform. To make an android application we have to use a programming language. There are two language that is used to make an android application which are JAVA and KOTLIN. We have used java to develop our application.

#### **4.4.2 Mobile Device**

Of course we need a physical device based on android operating system to run or test our application. But we have used android emulator which is like an actual device.

#### **4.4.3 Android SDK**

Android SDK is an essential tool to develop an android application which comes with android studio. SDK contents various kinds of libraries and simulator to develop and test an android application.

#### **4.4.4 Firebase Database**

Firebase<sup>[5]</sup> database is the most popular database which is used as a back end in android application development. Firebase is cloud hosted and real time database of Google's mobile platform. Firebase scales automatically and gives us functionality like analytics and crashed report. Firebase authentication gives us easy way to implement secure authentication. It is a NoSQL real time database that enables data to store and synchronized in real time with the user.

## **CHAPTER 05**

### **Implementation and Design**

#### **5.1 Implementation of Database**

As we have discussed before we used firebase as our database. As we know the firebase is a real time database that's why we don't need any direct SQL query to perform an action. Firebase gives us the functionality and ability like crash reporting, hosting and authentication. The real time database is like a big JSON object so that we can manage in real time. A single API gives us the ability to fetch current value and updates to the data. Firebase allows us to build the app without the need of servers. Firebase authentication gives us an easy way to authenticate users. Normally it would take long time to setup the authentication in our own way.

#### **5.2 Implementation of Front End Design**

The popularity of our app and how many users will use it and like it depends on the use ability and easy beautiful of our app. When user will open our app they will only see the front end design. There are so many android operating system and device, some device comes with heavy hardware, various kinds of screen size and old operating system. And google updates their operating system regularly. For this reason we have to make our application in a such way so that it fit in every screen and compatible with every android operating system. So we have tried our best to keep the design unique and user friendly as much as possible. We have used a very unique logo and app icon, by clicking on it user can open the application and they will understand the features and use it.

### **5.3 Implementation of Interaction**

Interaction makes an application very popular and attractive to the user if it is user friendly. We can see the interaction in every app but not every app is popular. That's why we have tried to make our app very interactive. We have also develop many features so that user can interact with our application easily. The UI of our application is responsive for better support and different kind of device. We have designed very unique icon, list, button, different kind of special view etc. We have successfully implemented the UI and UX so that user can interact easily and feel comfortable.

### **5.4 Testing Implementation**

Testing implementation is a process where system architect is tested by the tester and implement the testing to see various cases and specification. We have to find if our app is implementable or it has some errors or limitation. We have tested different kind of functionality where user will interact with the system. We have checked if our app working properly and user friendly or not. We have checked different kind of perimeters, if the navigation and layout working properly and the activity meet our expectation.

Each part of our application is tested many time and checked the details of design so that we can ensure our app is implemented correctly. We have ensured that every part of our application satisfy our requirements. We have also perform usability test by users. This verify that our application is working properly and we can deploy it.

Table 5.1: Testing Implementation

Test Case	Test Input	Expected output	Actual Output	Result	Tested On
1.Install application	Tested on various android version 6.0,7.0,8.0	Successfully installed on all those version	Installed successful	passed	29/10/19
2.Registration	Registration field empty	Access denied to the features	Imposed the restriction	passed	29/10/19
3.Email	Blank or Incorrect	Showing warning	Showed warning	passed	29/10/19
4.Password	Blank or Incorrect	Showing warning	Showing warning	passed	29/10/19
5.Verification	Blank or Incorrect	Showing warning and send email again	Resend code	passed	29/10/19
6.Homepage	Click on the log in and provide email and password	To show the homepage	Showed the home page	passed	29/10/19
7.Search	Click on category	Show the doctor list	Doctor list showed	passed	29/10/19



8.Posting	Text field empty	Showing worming and post button disable	Showing worming and post button disable	passed	29/10/19
9.Favourite Button	Click the button	Show favorite list	Showed favorite list	passed	29/10/19
10.Patient Profile	Click navigation patient profile	Show user information	Showed user information	passed	29/10/19
11.Update profile	Edit details	Show update information	Showed updated information	passed	29/10/19
12.Doctor profile	Click navigation Doctor profile	Show Doctor information	Showed Doctor information	passed	29/10/19
13.Message	Blank input	Shows warning	Showed warning	passed	29/10/19
14.Menu	Click on menu button	Showing hospital, medicine, Ambulance, Search	Showed hospital, medicine, Ambulance, Search	passed	29/10/19
15.Sign out	Click the sign out button	Log out from the account	Logged out successfully	passed	29/10/19

## **5.5 Test Results and Reports**

Test report represent the outcome and testing field in a formal way. It contains which functionality we have tested in a professional way. Report also showed which condition we have applied and test results.

## **CHAPTER 06**

### **Conclusion and Future Scope**

#### **6.1 Discussion and Conclusion**

This project focus on providing details and solution of their problem from the doctor. It also give the user different kind of features by using them they can find hospital, medicine details and ambulance phone number. Patient and Doctor both can post medical related problem and comment on that. The patient can also chat with doctor and send media like image to express himself clearly. We are focusing to bring patient and doctor in a such way so that they can communicate and help each other easily. Patient can find doctor easily nearest his location and get details of doctor. Not only this project can help the patient but it will increase the reputation and popularity of the doctor.

#### **6.2 Limitations**

Every app has its own limitation and we had also a number of challenges and limitation.

- There is no direct appointment system.
- Need internet 24/7 hour
- Need access to GPS
- No verifying system for doctor
- No offline support

#### **6.3 Scope for Further Development**

We can improve our app in the following way:

- Adding direct appointment system
- Adding offline support
- Adding location of ambulance
- Adding medicine selling system
- Adding payment system for doctor

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