

DOCTOR CORNER: AN ANDROID-BASED SOLUTION TO FIND DOCTOR

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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

MAY 2018

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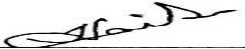
This project titled “**DOCTOR CORNER: An android-based solution to find doctor**”, submitted by **Tanvir Ahmed, ID No: 142-15-4068** and **Mostofa Zaman, ID No: 142-15-3547** to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of BSc in CSE and approved as to its style and contents. The presentation has been held on 7 May 2018.

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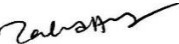
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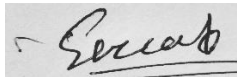
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DECLARATION

We hereby declare that this project has been done by under the supervision of **Md. Sazzadur Ahamed, 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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ACKNOWLEDGMENT

First, we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project successfully.

We fell grateful to and wish our profound our indebtedness to **Md. Sazzadur Ahamed, Senior Lecturer**, Department of CSE, Daffodil International University, Dhaka. Deep knowledge & keen interest of our supervisor in the field of web development influenced us to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Dr. Syed Akhter Hossain, Professor and Head**, Department of Computer Science and Engineering, for his kind help to finish our project and also to other faculty member and the staff of Computer Science and Engineering department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

Abstract

Doctor corner is an android based application. Its makes for those people who need doctors help badly but that time they can't. Using this application patient will talk specialized doctor as they need. Here we provide some hospital's location, rout map and specialized doctor's contact number, people who enable to going hospital they can search doctor or hospital and our apps recommended them some good result then they can choose anyone. Sometimes we see doctors took their appointment 7 days before and it's tough to the rural area people, here we also do somethings for those people, using our application people make sure their appointment. People who don't know the specific location of hospital they can also use our app because we provide the hospital location rout so they and following the rout map they will safely reached their exact location.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This app is for searching doctor. It will help people to easily find out doctor or hospital. Those people who don't have proper information about hospital location or specialized doctor, this app will be very helpful for them. It will Reduce people's harassment and give proper guideline to getting proper treatment. It will also reduce time to find doctor for saving life and also save money.

1.2 Motivation

When someone asks somebody about doctor's information many people give wrong information about doctor or hospital because they don't know the exact doctor which is searched by the person who need the doctor that's why people go wrong person and they don't get proper treatment. For this reason, we want to make this application so that people easily contact exact doctor as they needed.

1.3 Objectives

Objectives of our android app are mentioned below:

- ❖ The main objective of this project is to connect people with doctors who have to find a doctor in an emergency situation.
- ❖ Save time to find doctor.
- ❖ Reduce time wastage for searching doctor.

1.4 Expected Outcome

- ❖ Digitalized health sector.
- ❖ Save time & money.
- ❖ Meet doctor easily.
- ❖ Save life.

CHAPTER 2

BACKGROUND

2.1: Introduction

Our project will be an android application that can be operated by smartphones, tablet etc. In necessity of urgent treatment, sometimes we can't contact with doctor these kind of situation people face big trouble. Our application will help people in this trouble situation and its reduce their problem by searching specialized doctor in the nearest place. Our application will help people with showing the all details of a doctor so they can choose a better one.

2.2: Related Works

We research plenty of application related with doctor search. We have monitored the functionalities of some doctor search application. we complete our application with highly decorated tools. They are equipped with many technical features. Some applications are following:

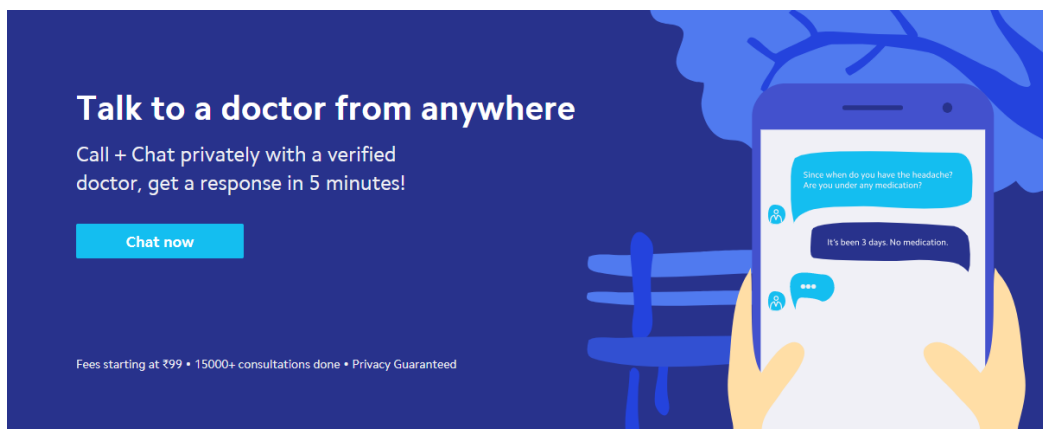


Figure 2.2: Similar work

2.2.1 Common features of these application are:

- Register as patient
- Search Doctor
- Appointment request

2.2.1.1 Registration

The registration process is maintained with a data processing system. It's open for all so anyone can register in this system. The login of register information requires that each user enters the defined usernames and passwords.

The following data is entered into the register, as applicable:

1. Name
2. Email Address
3. Password

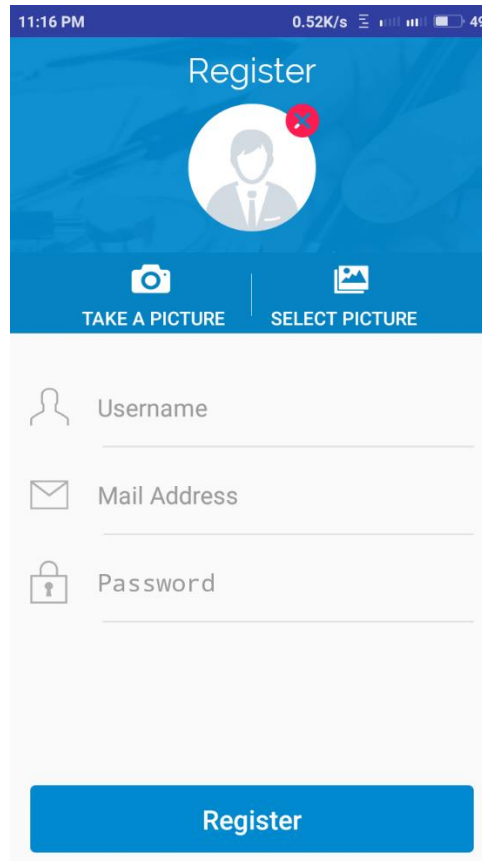
A screenshot of a mobile application's registration screen. The screen has a blue header with the word "Register" in white. Below the header is a circular profile picture placeholder with a red 'X' icon. Underneath the profile picture are two buttons: "TAKE A PICTURE" with a camera icon and "SELECT PICTURE" with a photo gallery icon. The main body of the screen is white and contains three input fields: "Username" with a person icon, "Mail Address" with an envelope icon, and "Password" with a lock icon. At the bottom of the screen is a large blue button labeled "Register". The status bar at the top shows the time as 11:16 PM, a data speed of 0.52K/s, and a battery level of 49%.

Fig 2.2.1.1: User registration

2.2.1.2 Search Doctor

The search results are intended for quick searching of multiple entity types. When a person need urgent treatment then user search the doctor in this application system.

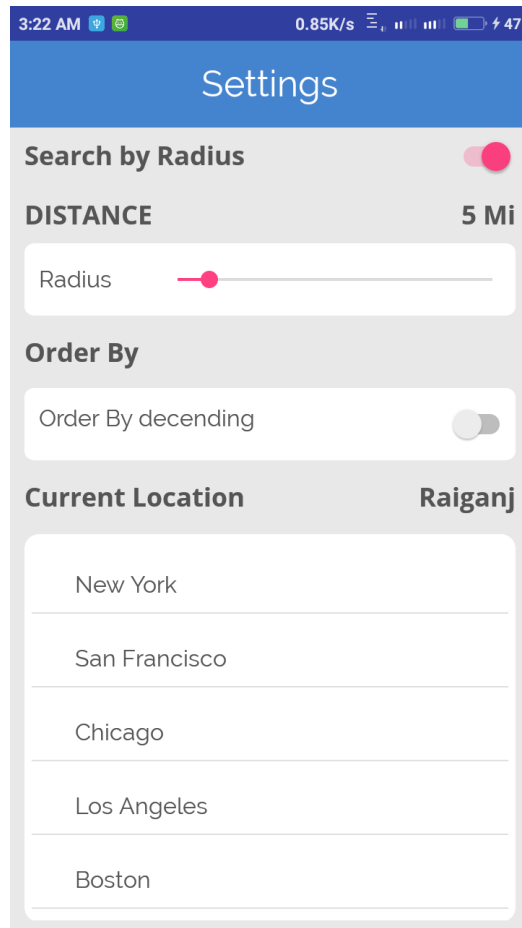


Fig 2.2.1.2: Doctor Search

2.2.1.3 Appointment Request

In urgent situation when people badly need treatment that time they search for doctor and complete their appointment by sending appointment request. There has been doctor field are matched and the request will send with essential details.

4:35 AM 0.00K/s 46

Appointment

 tanvir
 tanveer_ny@yahoo.com

 11/5/2018

 16:30

 01831004546

I have an emergency situation. I need to consult with you.

Notes:

1. Appointment time may change if already allotted.
2. This form is to request appointment, if your appointment confirmed you will get mail from doctor.
3. For Emergency direct visit is advisable.

BOOK APPOINTMENT

Figure 2.2.1.3: Appointment request

2.3 Comparative Studies

Our application is different from these existing applications. Without registration user can find out the specialized doctor as they need. All authenticated registered members will get the opportunity to share their request through this application.

2.4 Challenge

- User profile update
- Online appointment confirmation
- Doctor response while people need
- Must complete registration to confirm online appointment
- Record patient data

2.5 Project Schedule / Grantt Chart

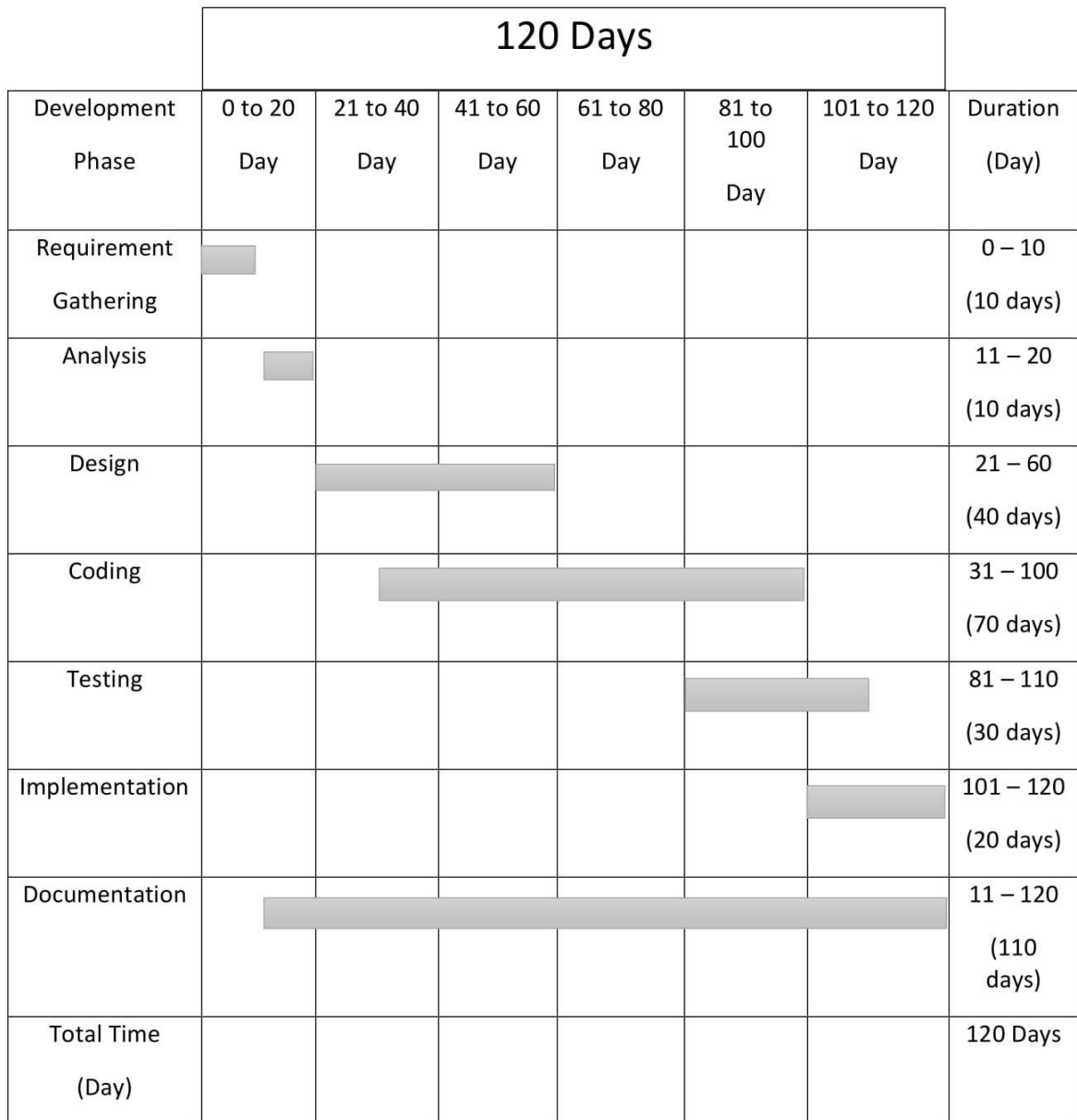


Figure 2.5: Grantt chart of our project

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Business process modeling (BPM) is an engineering system and the mobility of the representing method of an enterprise, and the running process explore and raised. It emblematically accomplished by the business analysts, who provide the expertise modeling system. Other was it process model may be grow directly from event's log by using process mining tools.

3.2 Requirement Collection & Analysis

Here some requirements are given bellow:

1. Receiving patient information and suggest them best one.
2. Must need user information, without information its unable to work.
3. Users have the access permission to edit their profile.
4. Needed registration to using this application.
5. Must be needed a valid email address to complete the registration.
6. Need proper route map
7. Need personal review of the user, that will help to update in future.

3.3 Requirements

We using these tools to complete our project:

1. Used programing languages such as Java, xml etc.
2. Firebase server and android studio.

We used Firebase database connection, and android studio for raw coding.

3.3 Use Case Diagram

Figure 3.3: User use case diagram

Chapter 4

DESIGN SPECIFICATION

4.1 Front-end design:

Front-end design is important for a website/application, because it attracted the user so we focus on front-end design. We built an android application, for better user service front-end design is essential for our application and we focus on it.

Here some front-end design of our software

4.1.1 Home page

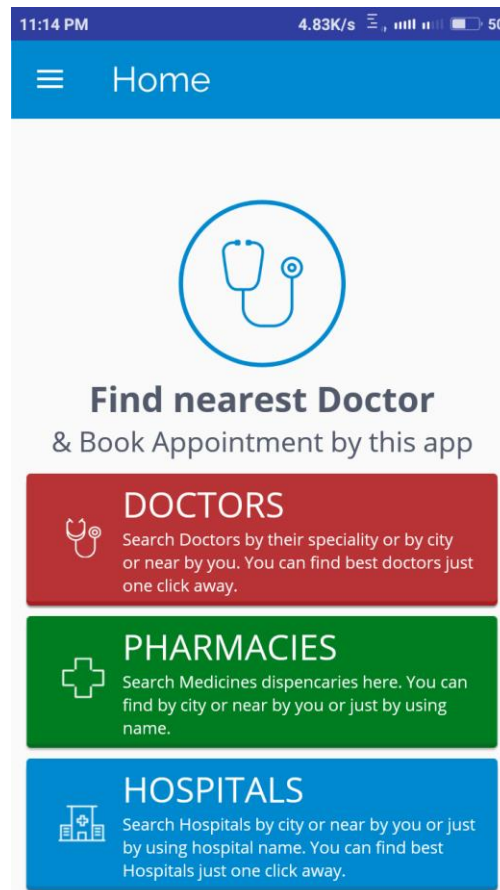
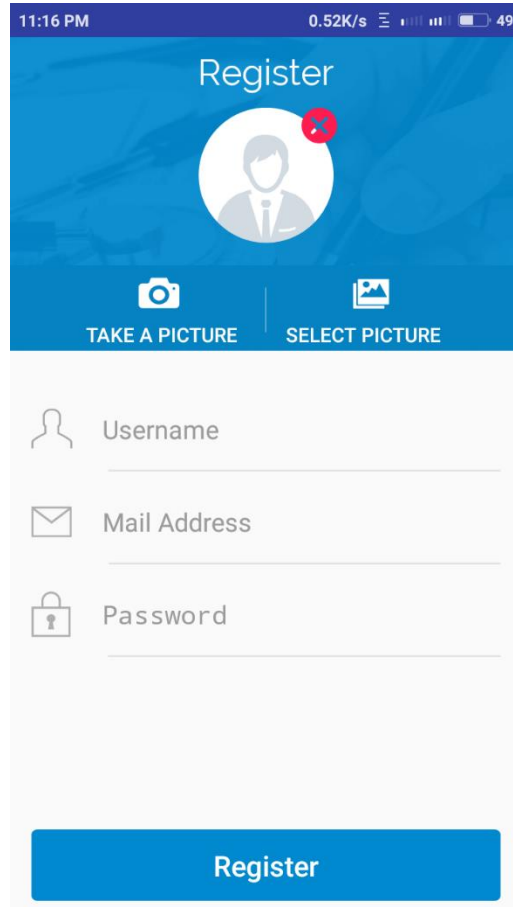


Figure 4.1.1: Home Page

4.1.2 Registration

1. User must provide full name
2. User must provide valid email address
3. Provide password

A screenshot of a mobile application's registration page. The page has a blue header with the word "Register" in white. Below the header is a circular profile picture placeholder with a red 'X' icon. Underneath the placeholder are two buttons: "TAKE A PICTURE" with a camera icon and "SELECT PICTURE" with a photo gallery icon. The main body of the page is white and contains three input fields: "Username" with a person icon, "Mail Address" with an envelope icon, and "Password" with a lock icon. At the bottom of the page is a large blue button labeled "Register". The status bar at the top shows the time as 11:16 PM, data usage as 0.52K/s, and battery level as 49%.

11:16 PM 0.52K/s 49

Register

TAKE A PICTURE SELECT PICTURE

Username

Mail Address

Password

Register

Figure 4.1.2: Registration page

4.1.3 Log-in

1. Provide username
2. Provide valid password

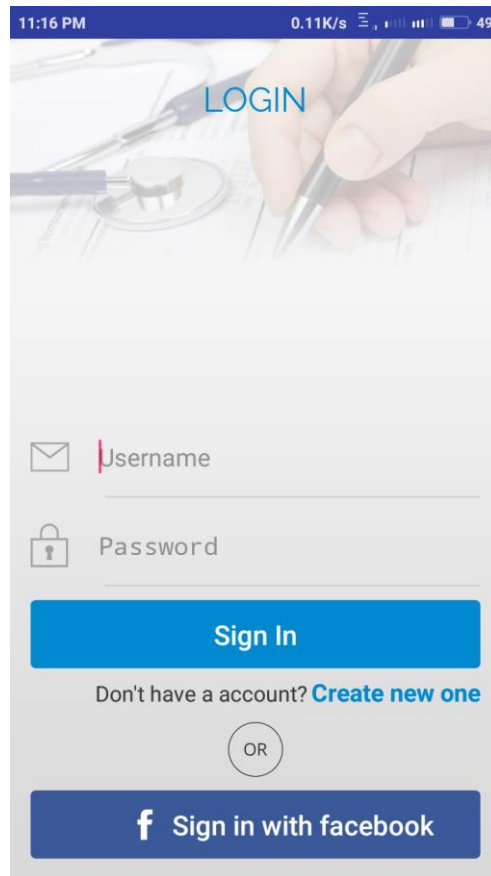


Figure 4.1.3: Login page

4.1.4 Appointment request

1. By clicking appointment bar user send request for appointment
2. Only doctor will response on it.

The image shows a mobile application interface for requesting an appointment. At the top, the status bar displays '4:35 AM', signal strength, and battery level at 46%. The app's title bar is blue with the word 'Appointment' in white. Below the title bar, the user's profile is shown with a circular icon, the name 'tanvir', and the email 'tanveer_ny@yahoo.com'. The form consists of several input fields: a date field with a calendar icon showing '11/5/2018', a time field with a clock icon showing '16:30', and a phone number field with a phone icon showing '01831004546'. Below these fields is a text area containing the message 'I have an emergency situation. I need to consult with you.' At the bottom, there is a 'Notes' section with three numbered instructions: 1. Appointment time may change if already allotted. 2. This form is to request appointment, if your appointment confirmed you will get mail from doctor. 3. For Emergency direct visit is advisable. A large blue button labeled 'BOOK APPOINTMENT' is positioned at the very bottom of the form.

Appointment

tanvir
tanveer_ny@yahoo.com

11/5/2018

16:30

01831004546

I have an emergency situation. I need to consult with you.

Notes:
1. Appointment time may change if already allotted.
2. This form is to request appointment, if your appointment confirmed you will get mail from doctor.
3. For Emergency direct visit is advisable.

BOOK APPOINTMENT

Figure 4.1.4: Appointment request

4.2 Back-end design

Application must need back-end design for storing data or information. As usual we also create back-end design for our application. We create database diagram for our application. Here we connect all database table and show the primary key and foreign key. We also use some programming language for storing value.

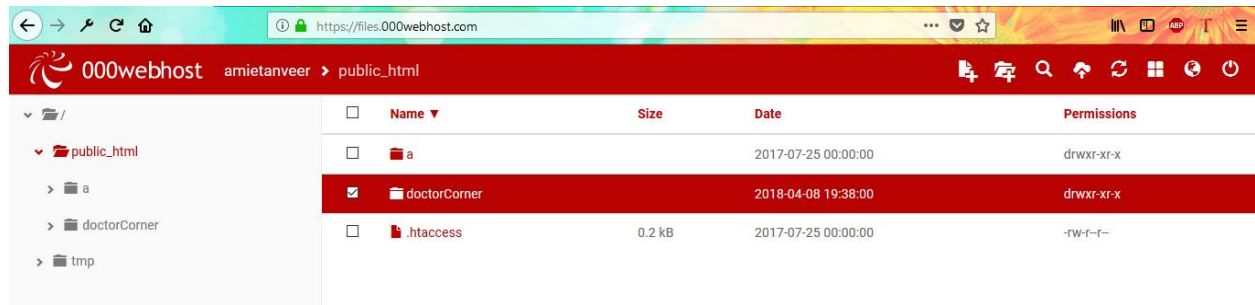


Figure 4.2: Back-end work

4.3 Implementation requirement

Every software need an implementation requirement for implement the software. We also fixed some implementation requirement for our application.

Requirement

1. Programming language like Java.
2. Here we use Sql management server and android studio. Sql server for database storing and android studio for raw coding.
3. Valid email address, getting the email address we will confirm the registration verification.
4. Need internet connection for browsing the software or sending request. Here internet is mandatory, without internet connection application doesn't work.

CHAPTER 5

Implementation and Testing

5.1 Implementation of database

The implementation of database is for storing information of user into the system. To implement database is a process of installing database application. First of all, we need to install database application and then we need to create database where we can store user's data. Then we need to connect the database with our own making software. Thus, we can create/read/update/delete the data from the database through our own making system.

5.2 Implementation of front-end design

We have tried to better front-end design in this project and implementation. We used xml, Photoshop that's makes the better user interface. We want to make the user-friendly design in our project. So that all user can easily use it.

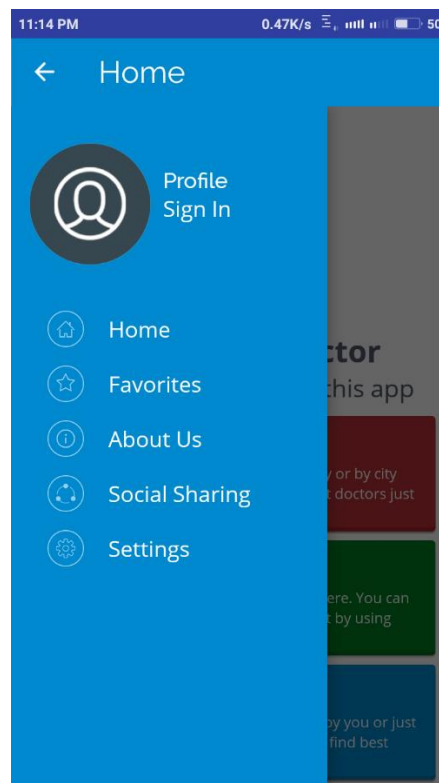


Figure 5.2: Navigation drawer of the app

The navigation drawer is for quick access for user profile, see user's favourite doctors, share the app through social and sharable apps and the setting.

5.3 Testing Implementation

Testing implementation is the process of an action for the formulated plan. We are testing multiple parts in this system. That's requirement is installation, configuration, customization, running and user training necessary are implementation of testing.

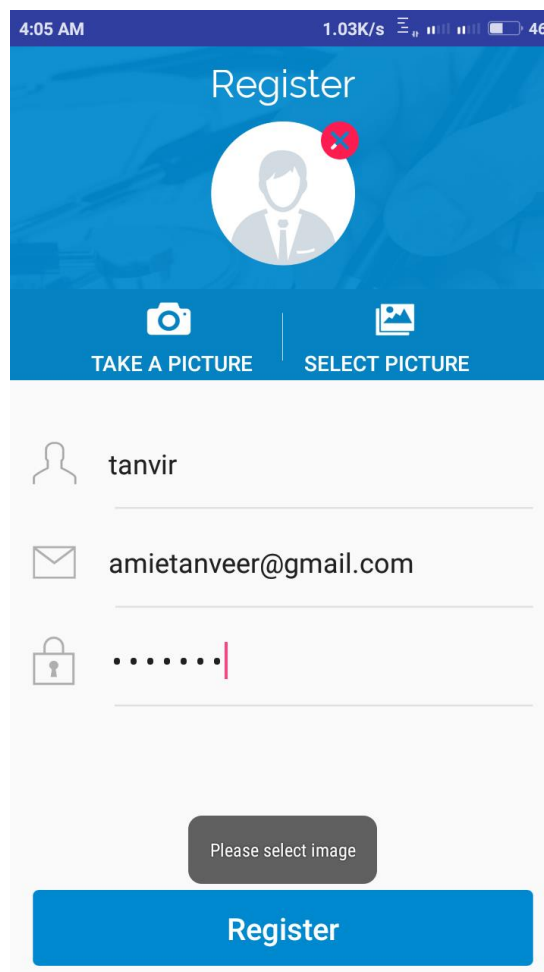


Figure 5.3: Required image for registration

If any user doesn't upload his/her image during registration the registration process will not be complete.

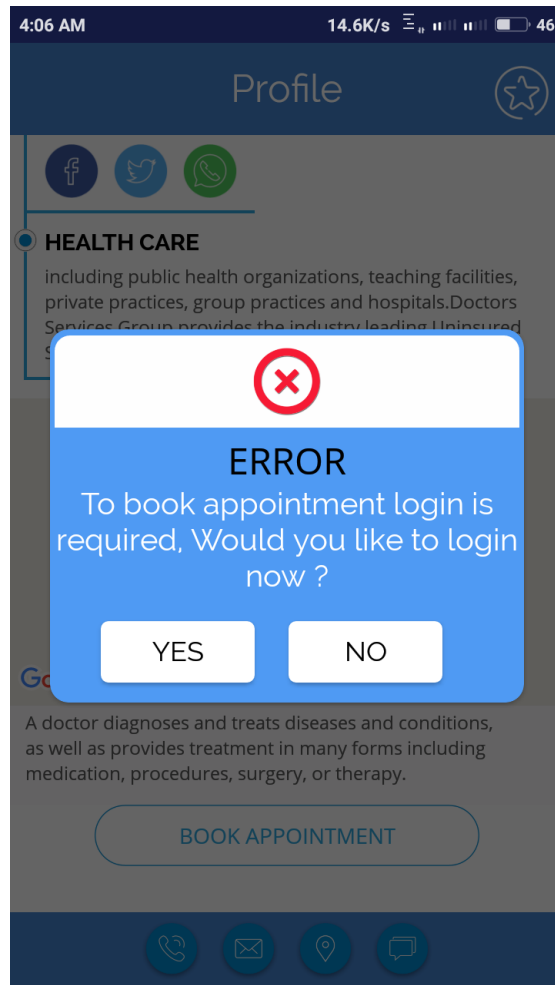


Figure 5.4: Required login for appointment

If any user wants to book appointment to a doctor he/she must have to login for this.

Chapter 6

Conclusion and future scope

6.1 Discussion and conclusion

We successfully implemented our application. After connecting the SQL server all functions and key work correctly. We trying to make easy and user friendly thus people take it easily and get proper hospitality when they want. Here we provide all the information of process and functions that were followed by developing this application. Here in this document we specially mention's the working process, how we built it, the primary features and functions, object and other procedure.

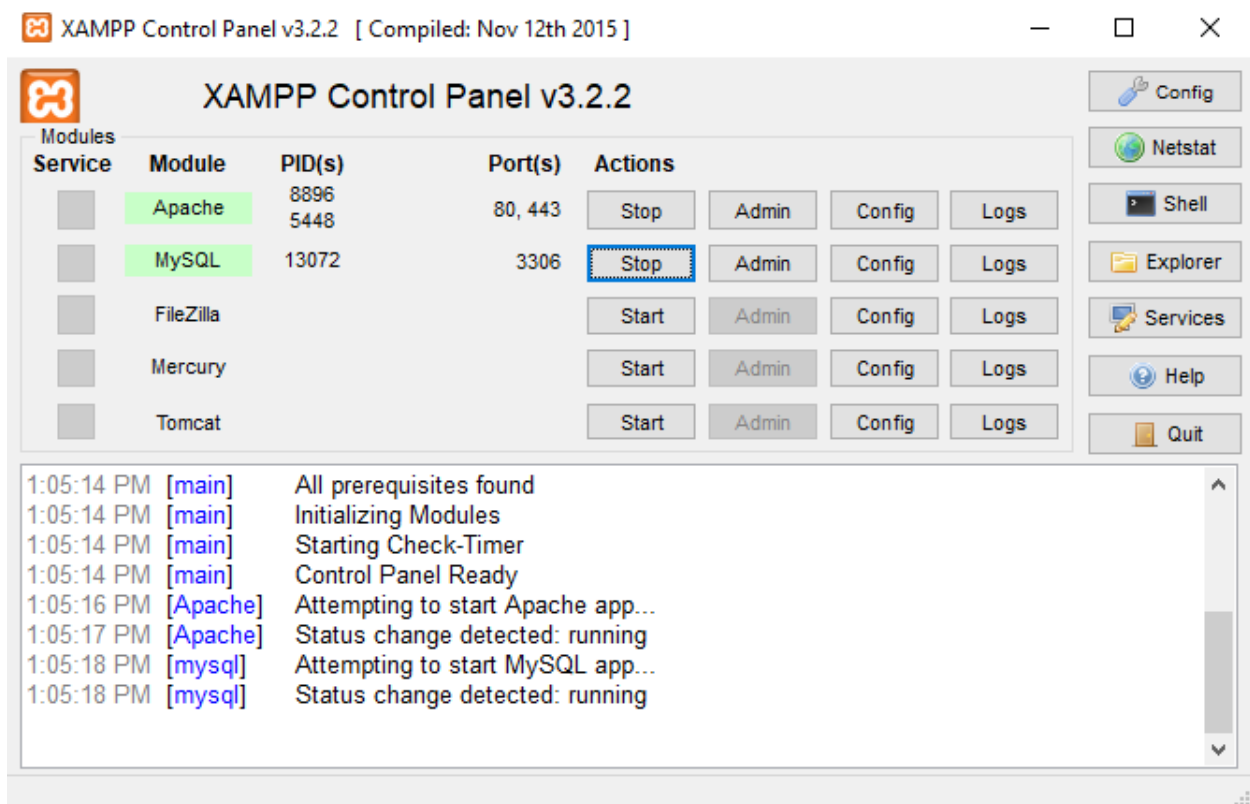
6.2 Scope and future developments

1. Now it only works on android platform, our mission is to make this application of all possible platform like windows, IOS.
2. For people help we will update it regularly, because its need a huge database so without updating it will unable to work. For a larger database storage further, we will add oracle database.
3. In future we will add more advanced dynamic features to satisfy the larger organization.

APPENDIX

For connecting database, we use xamp web server which is a MySQL database.

1. First, we start the Apache and MySQL for connecting port.
2. Then go to a browser and enter <http://localhost/phpmyadmin/> to make the database.
3. Then make database, make table under the database and then entry the data under the category of data insertation.
4. Then we insert data and connect it with android studio for showing data to our app.



REFERENCES

[1] Get concept about similarity check or compare, Access Date 09-12-17 at 09:00pm, Available at

<https://playstore.google.com>

[2] Get concept about coding problem, Access Date 20-12-17 at 09:00pm, Available at

<http://github.com/mehedi111>

[3] Get Concept about using firebase database, Access Date 19-02-18 at 09:00pm, Available at

<https://firebase.google.com/docs/database/>

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