

Project Name : Gopalganj Doctors Appointment
(Gopalganj Doctors)

The project titled “Gopalganj Doctors” is a android application. The project based on Java programming language. Gopalganj Doctors is an application programmed to run in the mobile operating system Android, which helps seeking patients to find their desired doctor about any doctor available in Gopalganj and also can give serial to them for appointments. This application has a separate authorized access to the database for the admin and for the patient to see their activity.

1.1. Purpose

This document provides a base to all the functionalities which should be carried out by the application, how that works the outputs available to the end users.

1.2. Scope of the Project

This project intends to maintain a record of all the necessary information of a doctor and patient. It also facilitates alteration of such data, to add, update or delete data from the database, with specific authorization. This will ensure the database stays up-to-date and common users can get information on doctors with specific specialization for different purposes. Users can also book appointments and navigate to the chamber location.

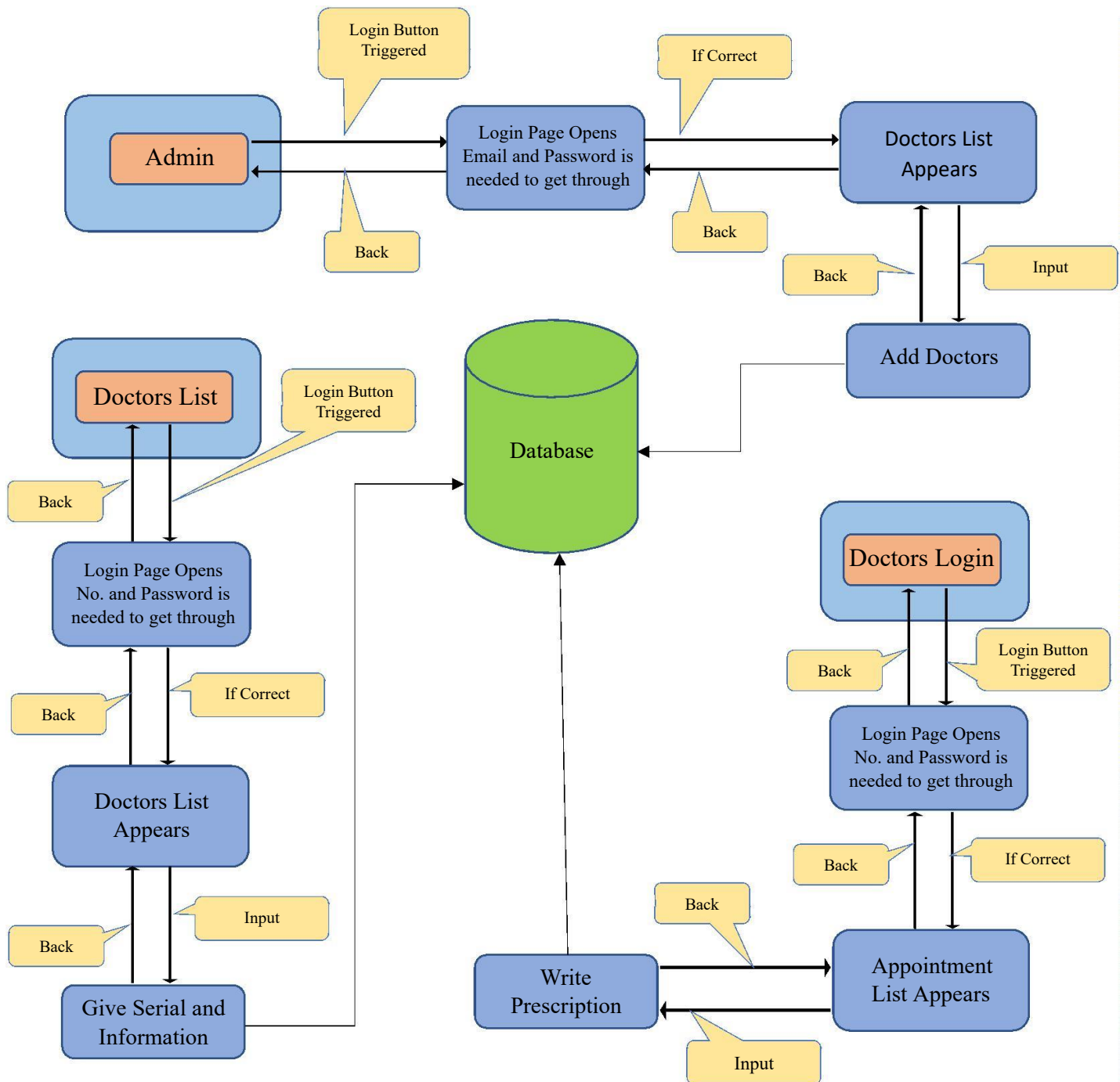
1.3. Overview

Overall, this project serves as an application which keeps information on doctors and shows information to the users and books appointments without much hassle. This document specifies all kinds of methods used in coding and the objects used for designing, using Android Studio.

Our modern age of technology is greatly dependent on internet. As the world is going so faster so there is always a desire to communicate faster and effectively. There are no such things that comes out without any limitations, but we focused to overcome the best we could do. Our main focus was to determine the features for the patients. They are the large community of this system and they deserve to get the most out of this system. By using this system both doctors and patients become beneficial. A lot of patient's daily visit to healthcare clinic or hospital and facing problem regarding have no knowledge about doctor specialty, wait for a long time to get doctor appointment. There are several ways to booking an appointment. A person can either go to the hospital directly for consultation or make an appointment from home through internet by using the application. To solve this problem, we have developed an appointment system which improve the patient's satisfaction like patient can get reliable and timely access. So that we wish to offer such a system which will help them a lot. Our system will provide best result and save their valuable time too.

Related Work: There some related systems are available right now but not a large number and no one is totally similar. Many of the system has some limitations. From the study of this similar project we got interested to develop our system. Some of the related systems of our project are mentioned below. We have explored many applications which are related to medical health consciousness, like, DocTime, Sebaghar, Life Plus.

3.1. Perspective



3.2. Functions of the Application

- Displaying Doctor's information like name, contact number, available dates, timings etc to common users.
- Take Bookings for Doctors.
- Adding new doctors.
- Updating a doctor's existing information from database.
- Deleting a doctor's information from database.
- Showing all appointments/bookings.
- Deleting Appointments from database.
- Adding prescription for the patient.

3.3. User Characteristics

There are 2 user levels in this application for accessing doctor's information

a. Patients

b. Admin

a. Patients

Patients can access only the needed and limited information of any respective doctor. They can book an appointment.

b. Administrator

This includes the internal users like a manager or staff. This type of user has a login page with a login email and password. This user has full access to all the information of any doctor's entry present in the database.

3.4. Constraints

Some basic constraints present are,

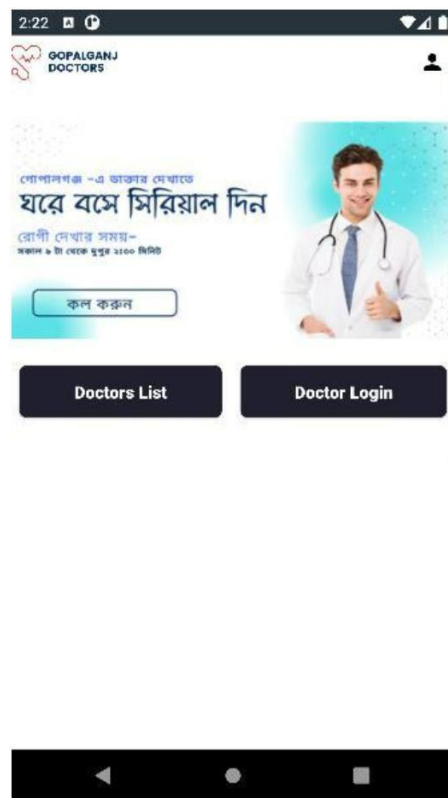
- i. The software must be in English.
- ii. The android version in the phone should be Android Lollipop 5.0 or higher for proper functioning.

3.5. Expected Results

It is expected that the application will work properly in almost every Android OS installed device without any glitch and the application will be bug free. In case of any changes, this document will be flexible to reflect every one of them

Main Screen:

The main screen has 3 main elements. Three buttons, one for User's access to doctor's information and booking appointments, the other one for Doctor's to give prescription and one for admin to add Doctors in database. A 'ImageView' is present above the buttons which displays like this,



Admin: Here admin can login and add doctors in the list.

The image shows two side-by-side mobile app screens. The left screen is the 'ADMIN LOGIN' page, featuring input fields for 'Email' and 'Password', and an orange 'ADMIN LOGIN' button. Below these are input fields for 'Name', 'Designation', 'Phone', and 'password', followed by an orange 'ADD' button. The right screen is the 'Doctors List' page, displaying a list of five doctors with their names, designations, and phone numbers. At the bottom right of this list is an orange button with a plus sign and the text '+ DOCTORS'.

ADMIN LOGIN

Email
Password
ADMIN LOGIN

Name
Designation
Phone
password
ADD

Doctors List

- ডাঃ মোঃ জাকির হোসেন
অধ্যাপক
Phone: 01711308023
- অধ্যাপক ডা. মাহবুবা
অধ্যাপক, শাইবী এন্ড অক্স
Phone: 01711468692
- অধ্যাপক ডা. রাফি উদ্দিন আহমদ
অধ্যাপক, মাইক্রোবায়োলজি বিভাগ
Phone: 01711389583
- অধ্যাপক ডা. মোঃ গোলাম মোর্শেদ মোল্লা
অধ্যাপক, ব্যাচেলরিং
Phone: 01817574626
- ডাঃ সামস-ই-ভাত্রীজ
সহযোগী অধ্যাপক, এ্যানাটমী বিভাগ
Phone: 01711322777

+ DOCTORS

Doctors List: Here patient can see doctors list and can fix an appointment with doctors.

The image shows three side-by-side mobile app screens. The first screen displays a list of five doctors with their names, designations, and phone numbers, each with a green call icon. The second screen is the 'Serial' entry page, with input fields for 'Serial' (25) and 'Disease' (Fever), and an orange 'SUBMIT' button. The third screen shows the 'Patient List' table with one entry for Shihab Islam.

Doctors List

- ডাঃ মোঃ জাকির হোসেন
অধ্যাপক
Phone: 01711308023
- অধ্যাপক ডা. মাহবুবা
অধ্যাপক, শাইবী এন্ড অক্স
Phone: 01711468692
- অধ্যাপক ডা. রাফি উদ্দিন আহমদ
অধ্যাপক, মাইক্রোবায়োলজি বিভাগ
Phone: 01711389583
- অধ্যাপক ডা. মোঃ গোলাম মোর্শেদ মোল্লা
অধ্যাপক, ব্যাচেলরিং
Phone: 01817574626
- ডাঃ সামস-ই-ভাত্রীজ
সহযোগী অধ্যাপক, এ্যানাটমী বিভাগ
Phone: 01711322777

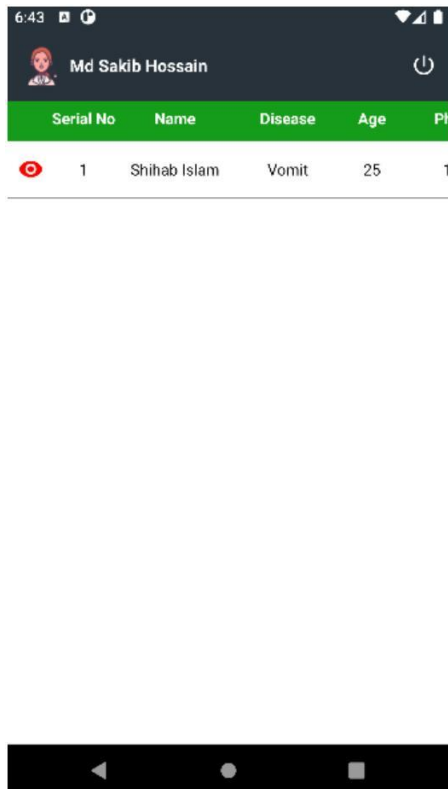
Serial

Serial: 25
Disease: Fever
SUBMIT


Patient List

Serial No	Name	Disease	Age	Ph
1	Shihab Islam	Fever	25	1

Doctors Login: Here doctors can see the patient who fix appointment with him and give them prescriptions.



Add Medicine

2022-05-19 

Medicine Name

Days

Rules

ADD MEDICINE

Prescription

Patient's info
Shihab Islam
Phone: 111
Age: 25

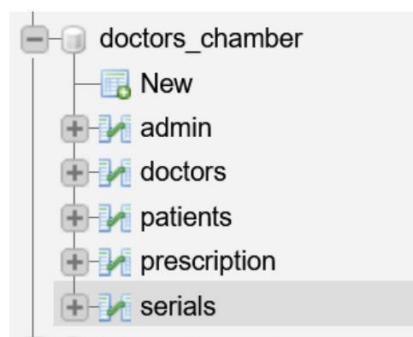
Doctor's info
Md Sakib Hossain
Medicine
123456

Disease Name: Vomit

Rx

5 days **Avomin**
1+0+1

Database: Database for the project.



☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

adminID email password
☐ Edit Copy Delete 1 admin@gmail.com 123456

☐ Check all With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table

☐ Show all | Number of rows: 25 | Filter rows: Search this table Sort by key: None

+ Options

doctorID doctor_name doctor_designation doctor_phone password
☐ Edit Copy Delete 1 ডাঃ মোঃ জাকির হোসেন অধ্যাপক 01711308023 123456
☐ Edit Copy Delete 2 অধ্যাপক ডা. মাহবুবা অধ্যাপক, গাইনী এন্ড অবস্ 01711468692 123456
☐ Edit Copy Delete 3 অধ্যাপক ডা. রাফি উদ্দিন আহমদ অধ্যাপক, মাইক্রোবায়োলজি বিভাগ 01711389583 123456
☐ Edit Copy Delete 4 অধ্যাপক ডা. মোঃ গোলাম মোশেদ মোল্লা অধ্যাপক, বায়োকেমিস্ট্রি 01817574626 123456
☐ Edit Copy Delete 5 ডাঃ সামস-ই-অবীজ সহযোগী অধ্যাপক, এ্যানাটমী বিভাগ 01711322777 123456
☐ Edit Copy Delete 6 ডাঃ আশরাফ উদ্দিন খান সহযোগী অধ্যাপক, রেডিওলজি বিভাগ 01778190026 123456
☐ Edit Copy Delete 7 ডাঃ সুভাষ চন্দ্র ভাদুরী সহযোগী অধ্যাপক, মেডিসিন বিভাগ 01716753914 123456
☐ Edit Copy Delete 8 Md Sakib Hossain Medicine 123456 123456

☐ Check all With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table Sort by key: None

☐ Show all | Number of rows: 25 | Filter rows: Search this table Sort by key: None

+ Options

patientID patient_name patient_phone patient_password
☐ Edit Copy Delete 1 Shihab Islam 111 123456
☐ Edit Copy Delete 2 Tonmoy 222 123456
☐ Edit Copy Delete 3 Rabbi Hasan 333 123456
☐ Edit Copy Delete 4 Shobuj 444 123456

☐ Check all With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table Sort by key: None

☐ Show all | Number of rows: 25 | Filter rows: Search this table Sort by key: None ☐ Show all | Number of rows: 25 | Filter rows: Search this table Sort by key: None

+ Options

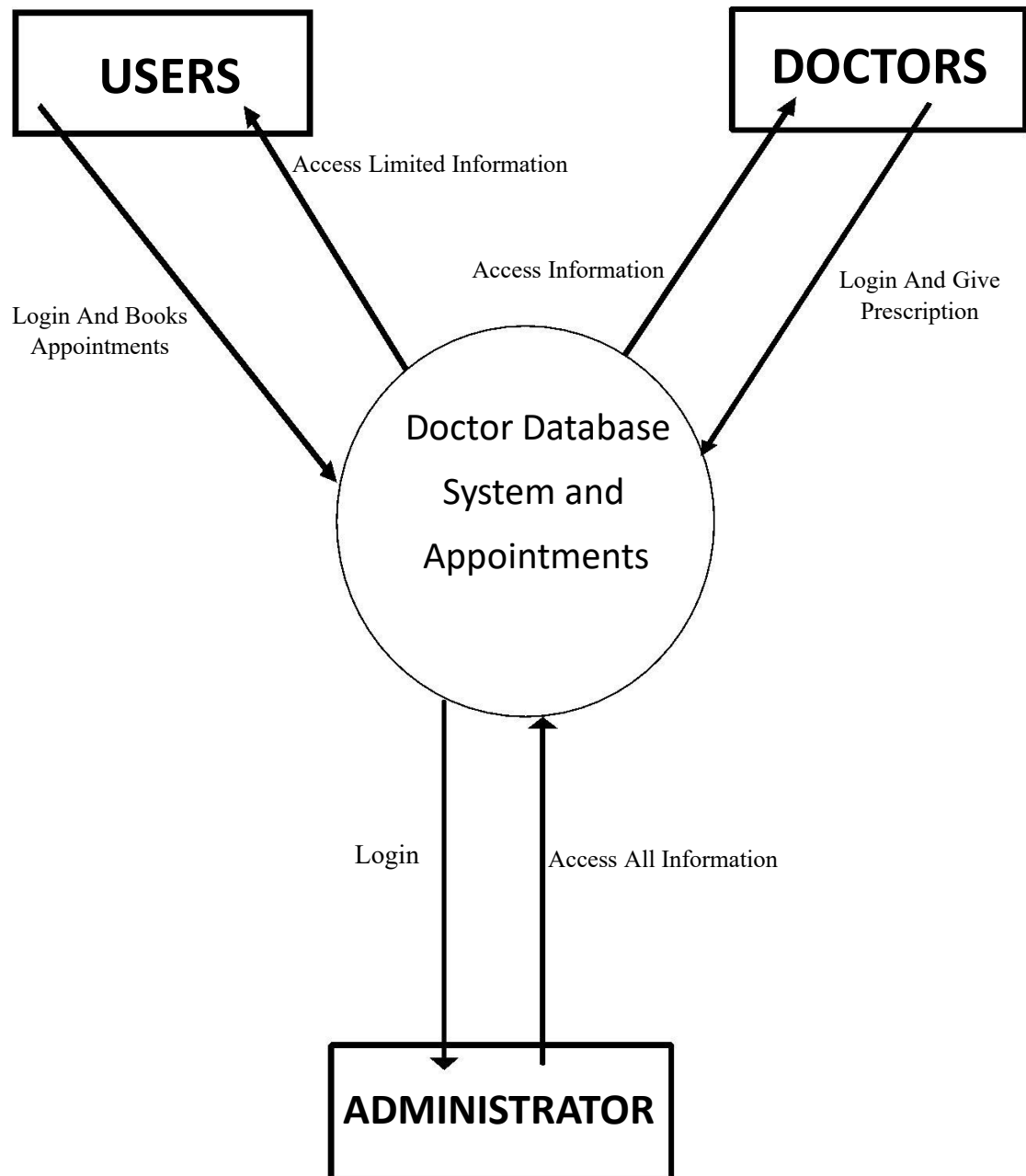
prescriptionID serialID doctorID patientID medicine days rules
☐ Edit Copy Delete 1 3 1 1 Napa 7 সকল: ১ টি, রাতে ১ টি
☐ Edit Copy Delete 2 3 1 1 Dextrin 5 সকল: 5 ml
☐ Edit Copy Delete 3 4 1 1 Napa 45 সকলে ১টা রাতে ১টা
☐ Edit Copy Delete 4 4 1 1 Dyclofane 70 সকলে ১টা রাতে ১টা
☐ Edit Copy Delete 5 7 1 3 Ace Plus 3 রাতে ১টা
☐ Edit Copy Delete 6 1 2 1 Avomin 2 রাতে ১টা
☐ Edit Copy Delete 7 5 2 3 Revotril 10 সকলে ১টা, রাতে ১টা
☐ Edit Copy Delete 8 7 1 3 Alatroil 7 রাতে ১টা
☐ Edit Copy Delete 9 3 1 1 Glucose 7 প্রতিদিন ১ গ্রাম
☐ Edit Copy Delete 10 8 6 4 napa 2 1+1+1
☐ Edit Copy Delete 11 8 6 4 seclo 2 1+1+1
☐ Edit Copy Delete 12 9 1 4 Bexadil 10 Morning 1, Night 1
☐ Edit Copy Delete 13 12 8 1 Avomin 5 1+0+1

☐ Check all With selected: Edit Copy Delete Export

+ Options

serialID doctorID patientID age disease date
☐ Edit Copy Delete 1 2 1 25 বমি
☐ Edit Copy Delete 2 2 1 28 আমাশয়
☐ Edit Copy Delete 3 1 1 21 Fever 2022-05-18
☐ Edit Copy Delete 4 1 1 20 Broken Hand
☐ Edit Copy Delete 5 2 3 35 নিম্নাধীনতা
☐ Edit Copy Delete 6 2 3 30 উচ্চরক্তচাপ
☐ Edit Copy Delete 7 1 3 35 একাডিজি 2022-05-18
☐ Edit Copy Delete 8 6 4 28 pain 2022-05-19
☐ Edit Copy Delete 9 1 4 28 pain 2022-05-19
☐ Edit Copy Delete 10 1 4 28 pain
☐ Edit Copy Delete 11 4 1 25 Fever
☐ Edit Copy Delete 12 8 1 25 Vomit 2022-05-19

☐ Check all With selected: Edit Copy Delete Export



1. Smartphone with Android OS version 5.0 (Lollipop) or higher
2. Minimum 512 MB of RAM
3. A processor with speeds above 1.2 GHz (any make)
4. 16 MB of storage for the app and extra for the data stored, the size of the app increases as the number of entries are increased
5. Android API version 12 or above
6. Permission to install applications over USB and installation from unknown sources from 'Developer Options'

Chapter 7: Applications and Technology Used

Android Application Development is possible with a couple of software and development kits to support the software and execution, they are as follows,

1. **Android Studio:** Android studio is the official Integrated Development Environment (IDE) for designing, coding, debugging and executing applications for Google's smartphone operating system, Android. It has all keywords inbuilt for ease in back-end programming and also design statements, for ease in designing as well. The version of Android Studio used to design the application is 2021.1.1.
2. **Java Development Kit (JDK):** Since, Android applications require Java programming for its backend programming; it needs a JAVA environment to support its functions, executions and syntax.
3. **MySql :** The tables in the database for storing doctor's information and patient information for appointments has been create from Sql statements.
4. **Xml:** The front-end design of the application involves xml statements for the layouts, image buttons, buttons, text boxes and text views.

Chapter 8:

Id and Passwords for Login

Admin:

- 1) Email: admin@gmail.com Password: 123456

Doctors:

- 1) Number: 01711308023 Password: 123456
- 2) Number: 01711468692 Password: 123456
- 3) Number: 01711389583 Password: 123456

Patients:

- 1) Number: 111 Password: 123456
- 2) Number: 222 Password: 123456
- 3) Number: 333 Password: 123456

- i. If the name of the doctor is wrong, it cannot be changed, the entry has to be deleted and added again. This is due to the fact that doctor information are searched as per the doctor's name, so if it's changed, the process will fail to locate the entity in the table. Better searching method is planned in the application, if feasible.
- ii. Doctors and patients registration data can be added only, no scope for editing, so in case of mistakes, it has to be deleted and added again, which only an administrator can do.
- iii. Appointments can be added only, no scope for editing, so in case of mistakes, it has to be deleted and added again, which only an administrator can do.
- iv. There isn't any video call system in the application.
- v. There is no location system in the application.

By upgrading these features in future this application will provide more options to the user.

So, we come up to the conclusion that, this app will help normal users to access limited doctor's information and take appointments. The administrator can login using the in-built id and password and access all information, delete and update them. Administrator can view appointments too. Common users who don't know the password can only get access to limited and relevant information on any doctor. Due to time constraints, many drawbacks are present as mentioned which are planned to be fixed if possible.

From this project we learnt about android studio and it has also enhanced our knowledge of the programming methods since. This application serves the basic purpose of accessing doctor's information, booking appointments and modifying information.

- <https://www.merriam-webster.com/words-at-play/is-it-doctors-appointment-or-doctor-appointment>
- <https://www.nia.nih.gov/health/how-prepare-doctors-appointment>
- <https://plushcare.com/online-doctor/>
- <https://www.englishforums.com/blog/doctor-appointment-doctors-appointment/>
- <https://www.zocdoc.com/>