

Project Report

On

HEALTHCARE APPLICATION

In partial fulfilment of the requirements for the degree

of

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE AND ENGINEERING

Submitted by:

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SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

DECLARATION

We here declare that work which is being presented in the project entitled “**HEALTHCARE APPLICATION**” in partial fulfillment of degree of **Bachelor of Technology in Computer Science & Engineering** is an authentic record of our work carried out under the supervision and guidance of **Dr. Sonika Shrivastava** Assoc. Professor of Computer Science & Engineering. The matter embodied in this project has not been submitted for the award of any other degree.

Date:

Student 1 Signature

Student 2 Signature

Student 3 Signature

Student 4 Signature

SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE
SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

PROJECT APPROVAL SHEET

Following team has done the appropriate work related to the “**HEALTHCARE APPLICATION**” in partial fulfillment for the award of **Bachelor of Technology in Computer Science & Engineering** of “SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY” and is being submitted to SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE.

Team:

- 1. ABHAY SONI**
- 2. DURGESH GUPTA**
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- 4. RAMAN GUPTA**

Internal Examiner

External Examiner

Date:

SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA INDORE
SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that **Mr. Abhay Soni, Mr. Durgesh Gupta, Ms. Kirti Bhagat** and **Mr. Raman Gupta** working in a team have satisfactorily completed the project entitled “**HEALTHCARE APPLICATION**” under the guidance of **Dr. Sonika Shrivastava** in the partial fulfillment of the degree of **Bachelor of Technology in Computer Science & Engineering** awarded by SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY affiliated to SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE during the academic year **Jan 2023-Jun 2023**.

Dr. Sonika Shrivastava
Project Guide

Prof. Anand Singh Rajawat
Prof. Chetan Chauhan
Project Coordinator

ACKNOWLEDGEMENT

We are grateful to a number of persons for their advice and support during the time of complete our project work. First and foremost, our thanks go to Dr. Anand Rajavat Head of the Department of Computer Science & Engineering and Dr. Sonika Shrivastava the mentor of our project for providing us valuable support and necessary help whenever required and also helping us explore new technologies by the help of their technical expertise. His direction, supervision and constructive criticism were indeed the source of inspiration for us.

We would also like to express our sincere gratitude towards our Director Dr. Anand Rajavat for providing us valuable support.

We are really indebted to Prof. Sonika Shrivastava, project coordinator for helping us in each aspect of our academic's activities. We also owe our sincere thanks to all the faculty members of Computer Science & Engineering Department who have always been helpful.

We forward our sincere thanks to all teaching and non-teaching staff of Information Technology department, SVVV Indore for providing necessary information and their kind co-operation.

We would like to thanks our parents and family members, our classmates and our friends for their motivation and their valuable suggestion during the project. Last, but not the least, we thank all those people, who have helped us directly or indirectly in accomplishing this work. It has been a privilege to study at SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE.

ABSTRACT

Smart phone has been widely used as an ideal assistant for health and fitness. In this project, we proposed a mobile application for health monitoring-Inside Me-which can help users to become more aware of their health. This application aims to track user's workout activities and monitor and analyze user's health condition. It also gives some instructions and suggestions to the user for maintaining and improving his or her health. Moreover, it provides an assessment of the risk that the user may have one of these two diseases: coronary disease and diabetes. Input data are collected from several sources such as questionnaire, medical check-up record, and wearable device. The risk assessment is carried out by machine learning algorithms.

This healthcare application is designed to improve patient care and outcomes by providing a comprehensive platform for healthcare providers to manage patient information, track treatments and medications, and communicate with other healthcare professionals. The application is designed to be user-friendly and accessible to both patients and healthcare providers.

The application includes features such as electronic health records, medication management, appointment scheduling, and secure messaging. Patients can access their health information and communicate with their healthcare providers through the application, while healthcare providers can use the platform to collaborate with other providers and ensure that patients receive the best possible care.

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Chapter 1-Introduction

1.1 Introduction

In the last instance by the performing physician who is guided by regulations and guidelines as well as experience and his conscience. The use of smart devices and apps for medical purposes does not allow for exceptions from this rule: although these technologies are rapidly being adopted in the medical field, their effects on health care processes and thus also on the outcome of the patients' treatment are still not fully understood: mobile devices as well as the software they run on are relatively new players in the field and in their enthusiasm for such exciting technologies, developers as well as users – medical professionals and laypersons alike – often do not acknowledge that while such devices certainly offer new opportunities.

1.2 Problem Statement

Now we are directly come on the points that what is the problem for that we have to build an app problem that the industry is currently dealing with. Let's take a look at some of them.

- **Global Accessibility to Medical Care**

Access to healthcare and the availability of medical care options vary significantly from country to country; that's no secret. And, in case there was any doubt, Covid has aptly shown that healthcare is not guaranteed for everyone. However, even before the pandemic, we already knew that more than half the world's population lacked access to essential health services. For instance, in developing countries, people living in rural areas have to travel great distances to access a healthcare facility. This phenomenon has exacerbated healthcare accessibility issues in some regions, as the United Nations' International Labour Organization (ILO) found. Their report concluded that 56% of the world's rural area dwellers remain devoid of access to critical medical care, with Africa reaching an overwhelming 83% of uncovered rural denizens.

In addition to those concerning figures above, global healthcare coverage barriers include lack of medical institutions and healthcare infrastructure, shortage of medical professionals, poor or no medical equipment, large geographic distances, extreme weather conditions, high commute costs, and lack of transportation options. These factors increase the risk of worsening medical emergencies. As a result, the onset and progression of chronic illnesses accelerate, ending up in poor outcomes and death, especially for those living in isolated rural communities. Furthermore, it reduces the chances of efficient follow-up care and limits treatment

success, thus increasing physical and emotional stress and reducing successful outcome rates.

- **Medical Staff Shortages**

In addition to the concerning figures mentioned above, low pay, overworking, and burnout among healthcare workers have resulted in a massive shortage in doctors and nurses that further underscores coverage issues. In fact, according to the World Health Organization (WHO), over 45 countries in the world have less than one doctor per 1,000 patients, with Tanzania and Jharkhand (India) having a concerning one physician per 2,500 and 8,900 patients, respectively. What these figures sadly show us is that healthcare services in these areas are basically non-existent. Nonetheless, the healthcare staff shortage issue is becoming more widespread, especially after the pandemic, with first-world countries suffering from understaffed hospitals and physician burnout. For instance, almost 20% of the country's hospitals have staffing issues in the US, with North Dakota reporting a 50% medical worker shortage. And those numbers could be even higher if we consider that not all hospitals report their daily staffing situation. Still, needless to say, the figures we do know are already highly concerning.

- **Managing Large Volumes of Patient-Related Data**

In the modern healthcare ecosystem, managing patient-related data, especially when it's all in digital form, can be one of the most overwhelming aspects of healthcare practices around the globe. It is estimated that today, one patient generates about 80 megabytes per year in imaging and electronic health record (EHR) data. If we factor in that, on average, a person visits the doctor 3.2 times per year; we can safely conclude that, with each new addition to the patient database, the pool of medical data will keep growing and, without the proper tools, it will eventually become unmanageable. Additionally, experts predict that big data from healthcare will experience a compound annual growth rate (CAGR) of 36% by 2025, making it the highest data growth sector in the world.

Besides, additional data demands impact patient data management, such as treatments, medications, vaccines, single-patient diagnoses, and treatments across multiple providers. The storage and retrieval of all this patient data are becoming a challenge for practices and physicians as the number of sick patients and illnesses grows. If this challenge isn't adequately addressed, data overload and mismanagement can start to become commonplace and will inevitably lead to misdiagnoses, data breaches, wrong treatments, lapsed appointments, and failure to monitor patients' conditions, to name a few. The implications of making these

mistakes can be catastrophic for stakeholders and can significantly impact the quality and availability of medical care delivery.

- **Rising Healthcare Costs**

Last but definitely not least, rising healthcare costs are one of the system's most concerning issues and one of the main reasons why vulnerable regions have such low medical care coverage rates. These rising costs are adding excessive pressure to the industry and affect medical professionals, caregivers, patients, healthcare companies, hospitals, governments, cities, and even entire countries. For instance, in the US, reports show that healthcare spending was at almost \$3.8 trillion, or \$11,582 per person, in 2019. By 2028 however, it will reach \$6.2 trillion—roughly \$18,000 per person. In Africa, healthcare costs rose from 8.5% in 2019 to 9.3% in 2020, while globally speaking, prices rose about 6.8%.

1.3 Need for proper system

Thus, in such situation we need a proper system that solve those problems. To make it easier, less time consuming, a system can be there to facilitate these requirements and provide well organized platform to its users. This project is basically an ideal platform between its users, especially service providers which best suits according to their requirements. On other hand service providers also got the same advantage.

1.4 Objective

Healthcare application is to develop a user-friendly, secure, and reliable platform that enables patients to access healthcare services, medical information, and resources conveniently. The project should aim to improve patient outcomes by providing accurate and timely diagnoses, personalized treatment plans, and ongoing monitoring and support. The healthcare application should also aim to enhance communication between patients and healthcare providers, facilitate administrative tasks, and promote healthy behaviours. The project should prioritize data privacy and security to protect patient information and comply with regulatory requirements. Ultimately, the objective of the healthcare application project is to improve the overall quality of healthcare services and outcomes for patients.

1.5 Modules of the system

Hospitals are a part of the healthcare industry/niche. Healthcare industry has a number of components including

Healthcare End-users: Healthcare beneficiaries such as patients and fitness seekers.

Healthcare Experts: Healthcare services providers including doctors, nurses, clinical assistants, help desk service providers, and cashiers/accountants.

Healthcare Infrastructure: Healthcare service is providing institutions including medical colleges, clinical research institutes, large to mid-size hospitals, mid to small size clinics, first aid treatment centres.

Healthcare Aids: Healthcare drug, equipment, emergency vehicles, and sanitary chemical providers such as pharmacists, surgical stores, and mobile units (Ambulances).

1.6 Scope

Smart Health Prediction and Consultation system allows users to get instant guidance on their health issues through an intelligent health care system online. Users can give in their various symptoms and the issues they are facing. The application then takes the user's symptoms as inputs to check for various illnesses that could be associated with it using a prediction algorithm. The system also provides the users with suggestions for doctors in their region whom they can consult for treatment of their predicted illness. Users can also opt for online consultation, by making an initial consultation fee payment online and can schedule an online appointment with the concerned doctor. The product will be available for use as a web application and is intended to be simple and easy to use.

CHAPTER 2- LITERATURE SURVEY

2.1 Existing System

In the existing health care system, there is a high chance of misinterpretation of data as well as occurrence of errors. Moreover, it is cumbersome and time consuming. With the increase in volume of patients in the health care institutes, traditional method of management has gone out of phase. As a result of this, an advanced Health Care Management System has been the demand of time.

2.2 Proposed System

Today's is era of internet and with Smartphones reaching to every nook and corner, people living in rural and far-flung areas can also expect to get best health services. The on-demand apps helps them to book appointment with doctors and buy medicines online without having to travel to the hospital.

The patients are the ones who receive the most benefits of the healthcare apps whether it is scheduling a quick appointment with the doctor, finding an appropriate specialist with hands on experience, viewing the medical test reports from labs online, purchase medicines and other products at affordable prices and so on.

Besides that they can also have a video chat with the doctor and discuss their health issues face to face after paying a reasonable fee. The users can maintain a healthy diet by consulting the dietitian and nutritionists online.

2.3 Feasibility Study

2.3.1 Technical Feasibility

This system is completely technically feasible as it deals with information interchanging and communication. This System is working as a Web Application which can be limited accessible by anyone and fully accessed by authorized users. Using this application customers can search for the services based on their preferences and owners are able to register their services on the system. Between these two ends system is providing searching, filtering mechanism which will provide and display services based on user preferences. This mechanism is applied on the information gathered from both the ends.

2.3.2 Economic Feasibility

Economy is the most important part of any project and organization. Keeping it in mind we have decided to develop this system because it fulfils all the economic needs. As it is a Web Application so hosting is required, some API's are used in the application these all things are mandatory for this project. These all needs are completely economical feasible. System will generate the revenue by service charge which will be charged on the

service providers for maintaining their services on the system. There are also many miscellaneous sources for generating revenue some of them are social marketing, promotional ads, third party tie-ups etc. These all provide sufficient revenue to maintain the system.

2.3.3 Operational Feasibility

For providing better services, operating a system in a better way is needed. Except operations done by system software, system is totally dependent on the data obtained from user. Entire system will live between these two ends i.e. Service Provider and Customer. These two ends are responsible for well operated system by providing data to the system. Administrative and organization team is responsible for maintaining system integrity.

CHAPTER 3- REQUIREMENTS ANALYSIS

3.1 Data Requirements

User must need valid login id and passwords for successful login into health care app.

For creating account user must need to fill their Email id, Mobile no., gender and user will have to create strong password.

For the developer, they have to provide secure environment to store the data of their user. We have to make such easy environment that help any age of users to access their data.

3.2 Functional Requirement

3.2.1 Regular Services

This is the main required feature of health care with high priority, with one can able to register themselves to health care services.

3.2.2 Search for Services

This feature issued by customer for searching nearby health centre, doctors or any nearby medical related 16organization.

3.2.3 Filtering and Sorting Results

This feature is used by user to filter their health tests data. They can filter their data according to their convenience which help them for searching their test data according to their preferences.

3.2.4 Show Information and description about services

This feature help user to understand the services provided by the application. It has medium priority.

3.2.5 Book the services

This feature is used by user to book the services. It has medium priority.

3.2.6 Confirm Booking

This feature helps the user to confirm the booking of services. It has highest the priority.

3.2.7 Perform Payment

This feature is used by user to make payment for the services booking. It has highest priority.

3.3 Non- Functional Requirements

3.3.1 Light, fast Application

Requirement specifies that system which is hosted as mobile application must have smooth and faster browsing i.e. the page in mobile application does not reload more frequently for their action.

3.3.2 Responsive Page

This mobile application design must be responsive to all types of devices.

3.3.3 Interactive Map View

Mobile application must provide interactive Map Services, search results so that user able to get the direction and other navigation facilities.

3.4 Software Specification

For the development of Health care application, we used:

- For the development of Healthcare Application we use Android Studio Software, which is used to develop android application.
- A laptop which has i3 processor having 8 GB ram, reason behind this Android studio works in 8 GB ram or more.
- For running the application, we need android mobile, in which developer option should be on.

CHAPTER 4 – DESIGN

4.1 Software Requirement Specification

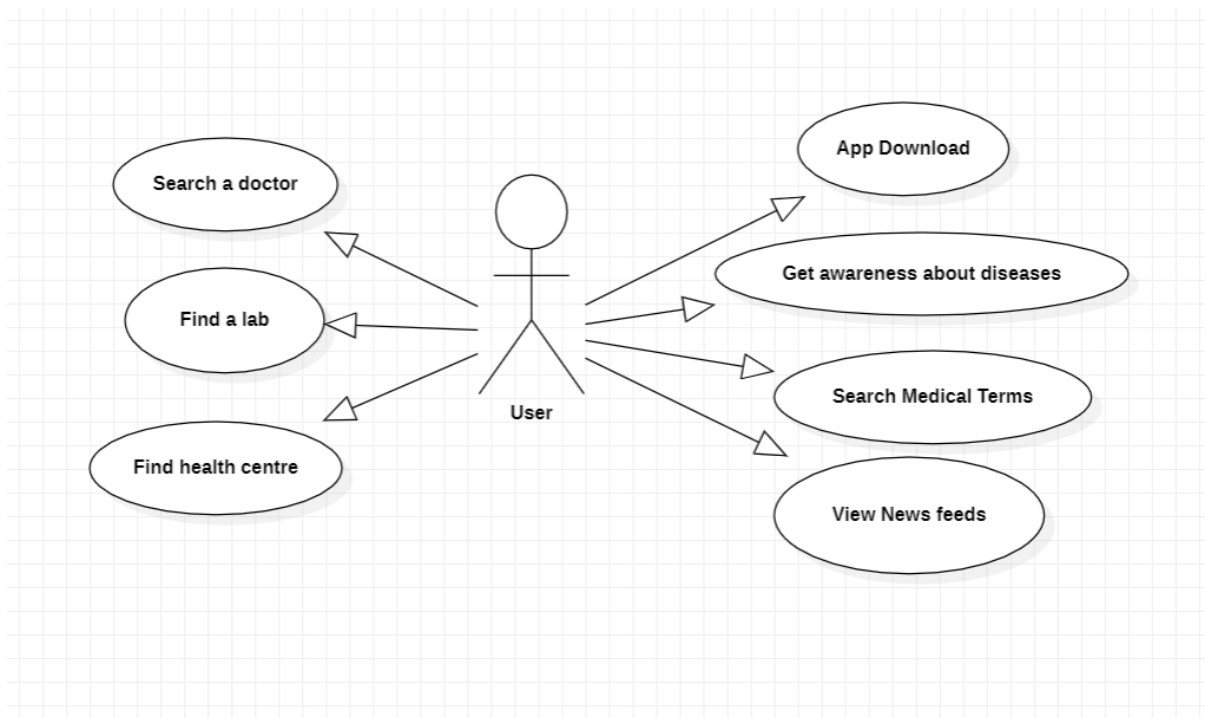
4.1.1 Glossary

Services- Services provided by Health care department (doctor, medicine and health centers)

User- System user (customer or health care department)

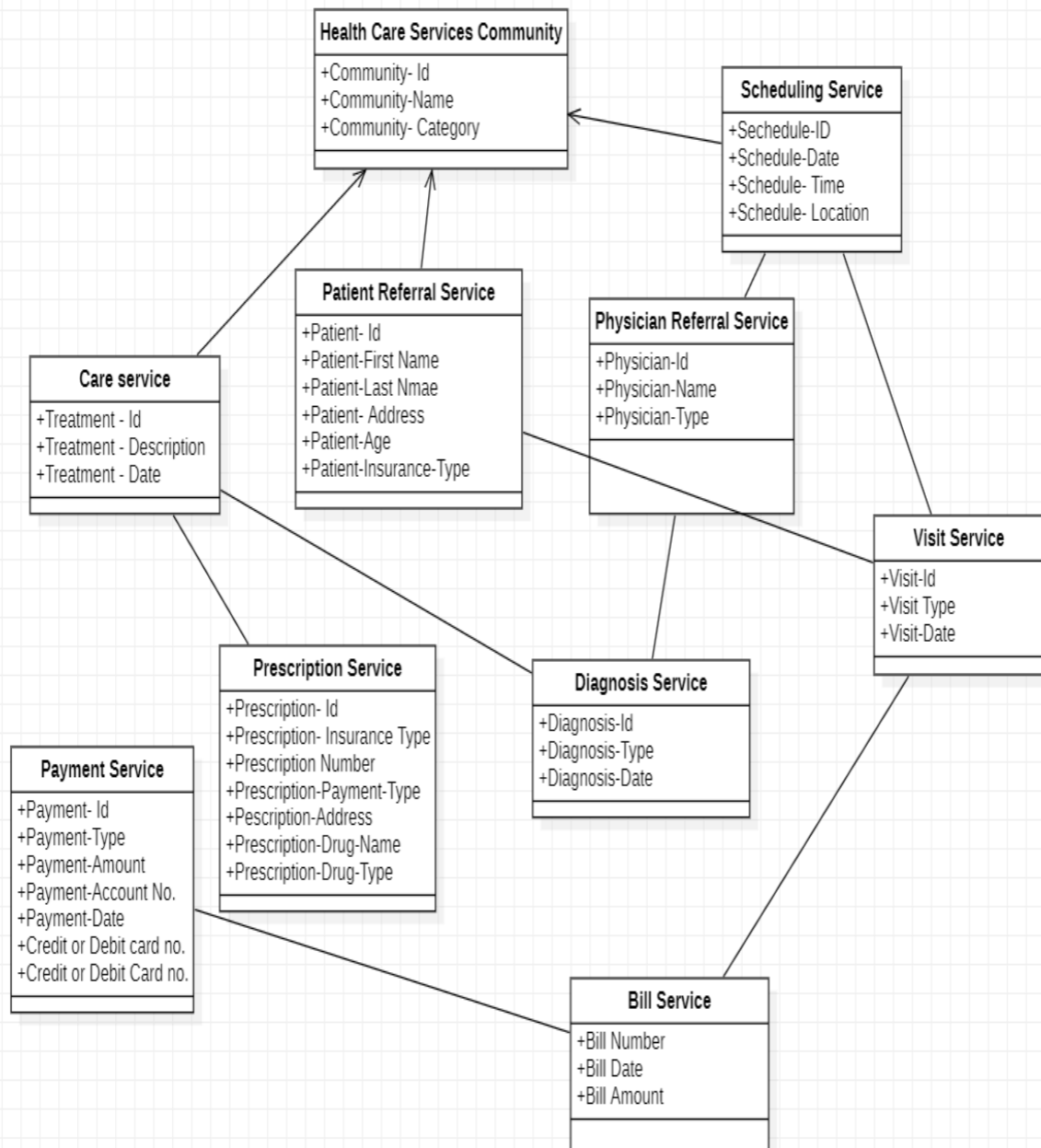
4.1.2 Use Case Model

Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors. The use cases and actors in use-case diagrams describe what the system does and how the actors use it, but not how the system operates internally.



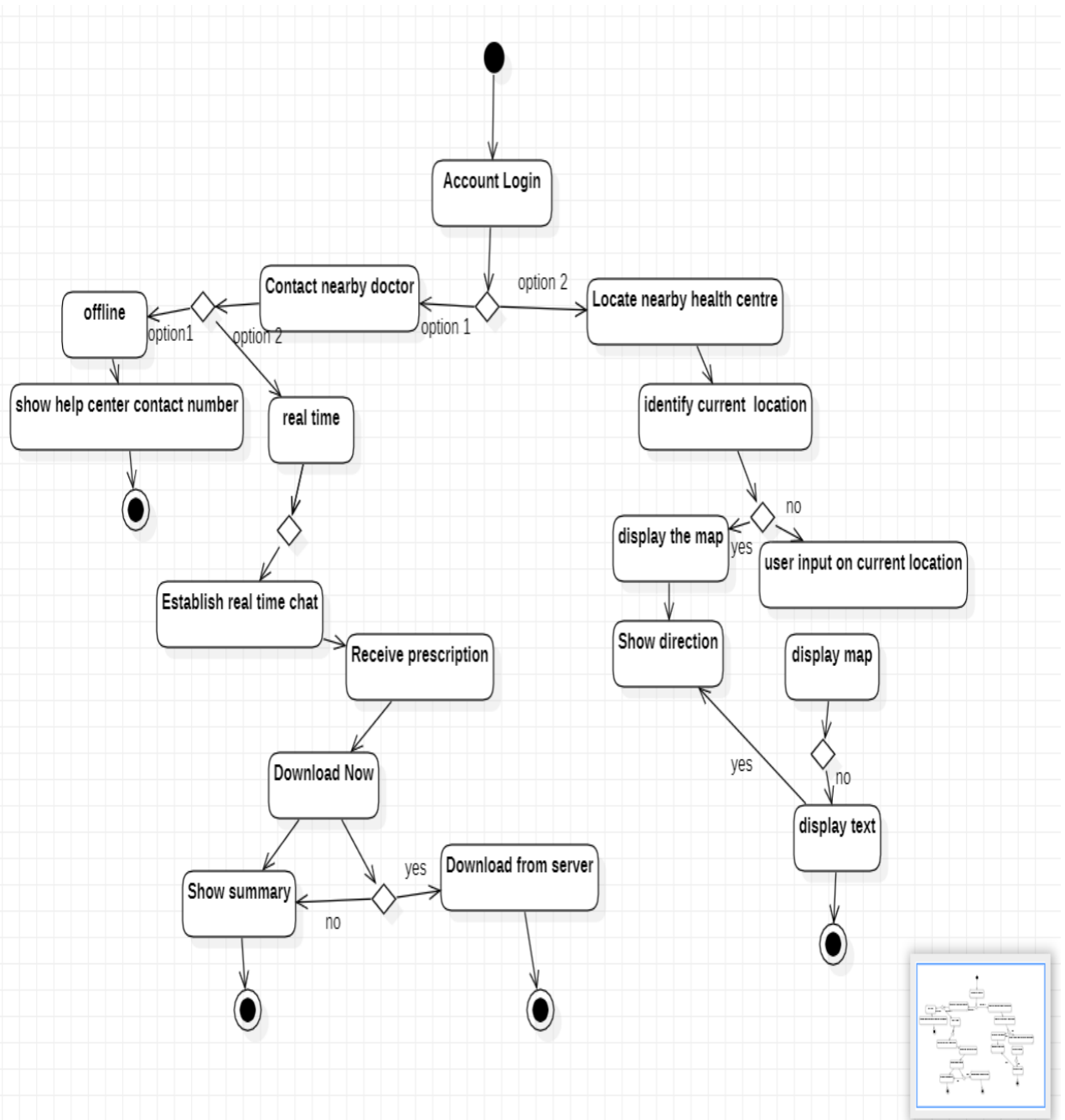
4.2 Conceptual Level Class Diagram

A conceptual class diagram is used to understand and analyze a problem domain. A detailed class diagram is a design artifact, where many things may have been optimized away. For example, every dog might bark, but a dog-salon application doesn't care, so it can optimize away that fact.



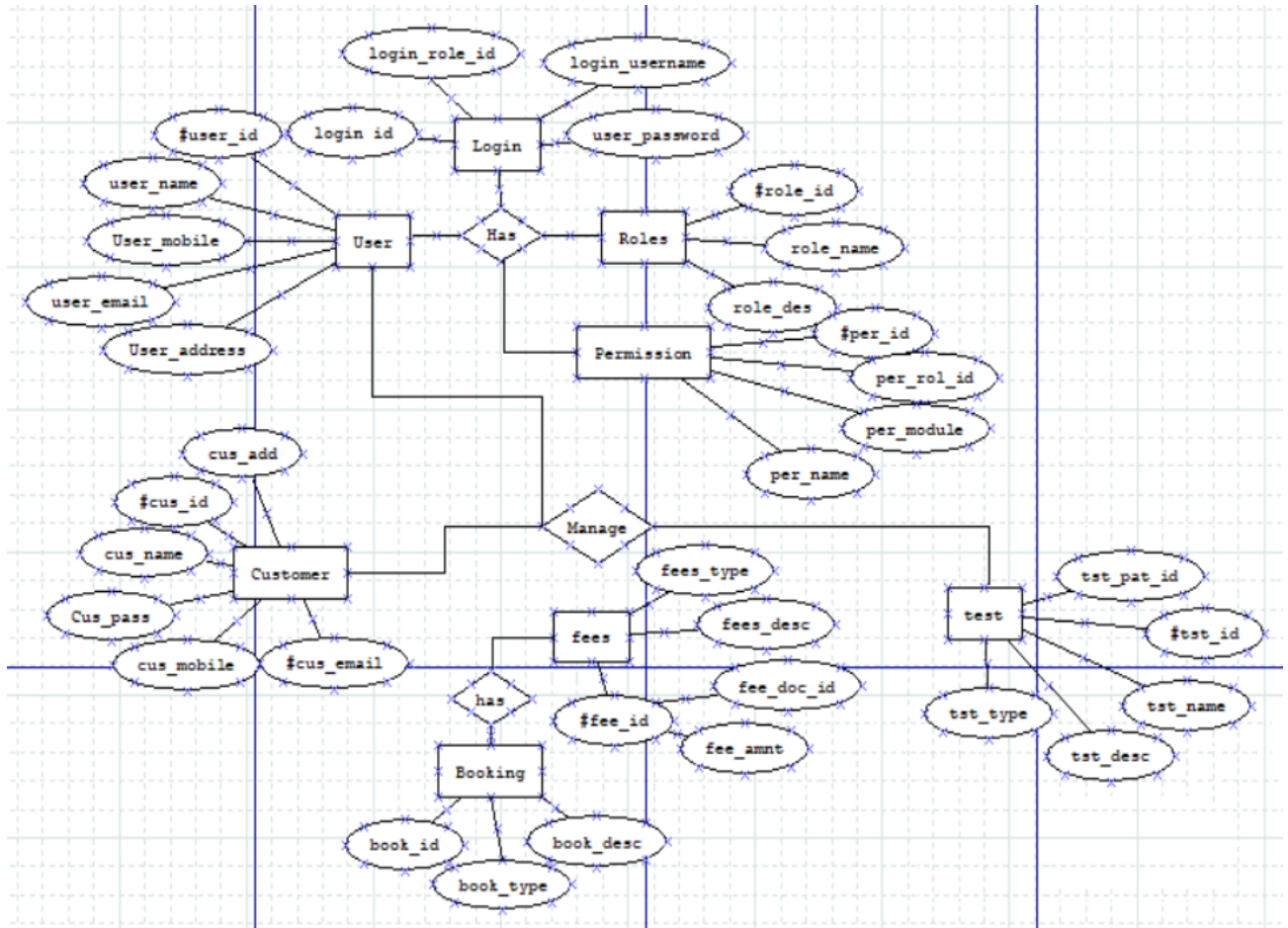
4.3 Conceptual level activity diagram

At a conceptual level, an activity diagram shows a detailed view of the model, focusing on the operations that are passed among activities. The transitions are triggered by the completion of the operations.



4.4 ER Diagram

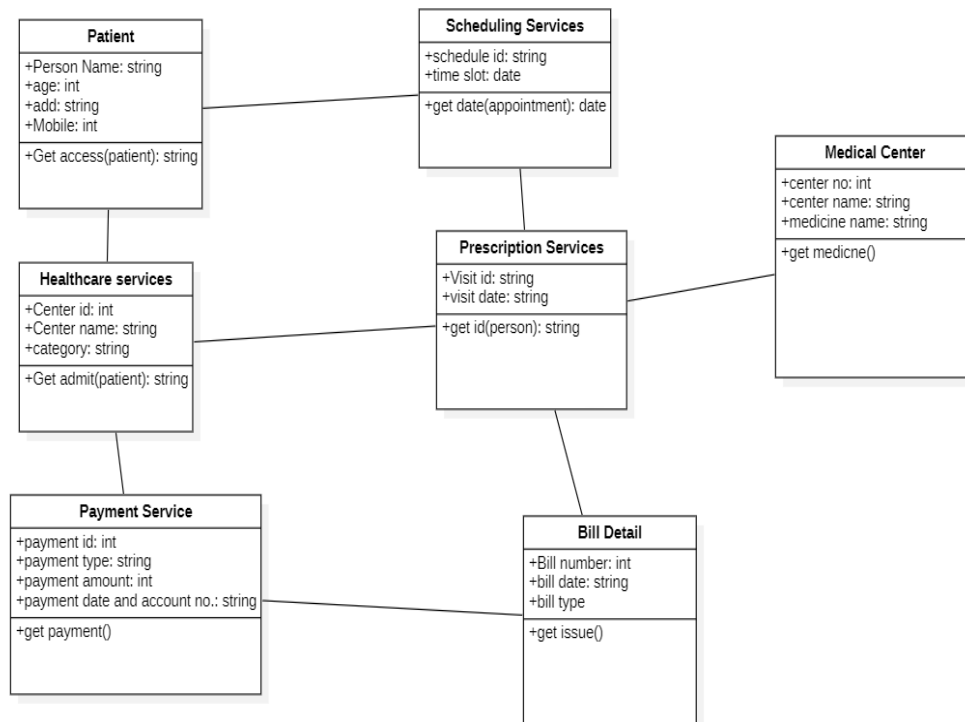
An entity relationship diagram (ERD), also known as an entity relationship model, is a graphical representation that depicts relationships among people, objects, places, concepts or events within an information technology (IT) system.



CHAPTER 5 – SYSTEM MODELING

5.1 Detailed Class Diagram

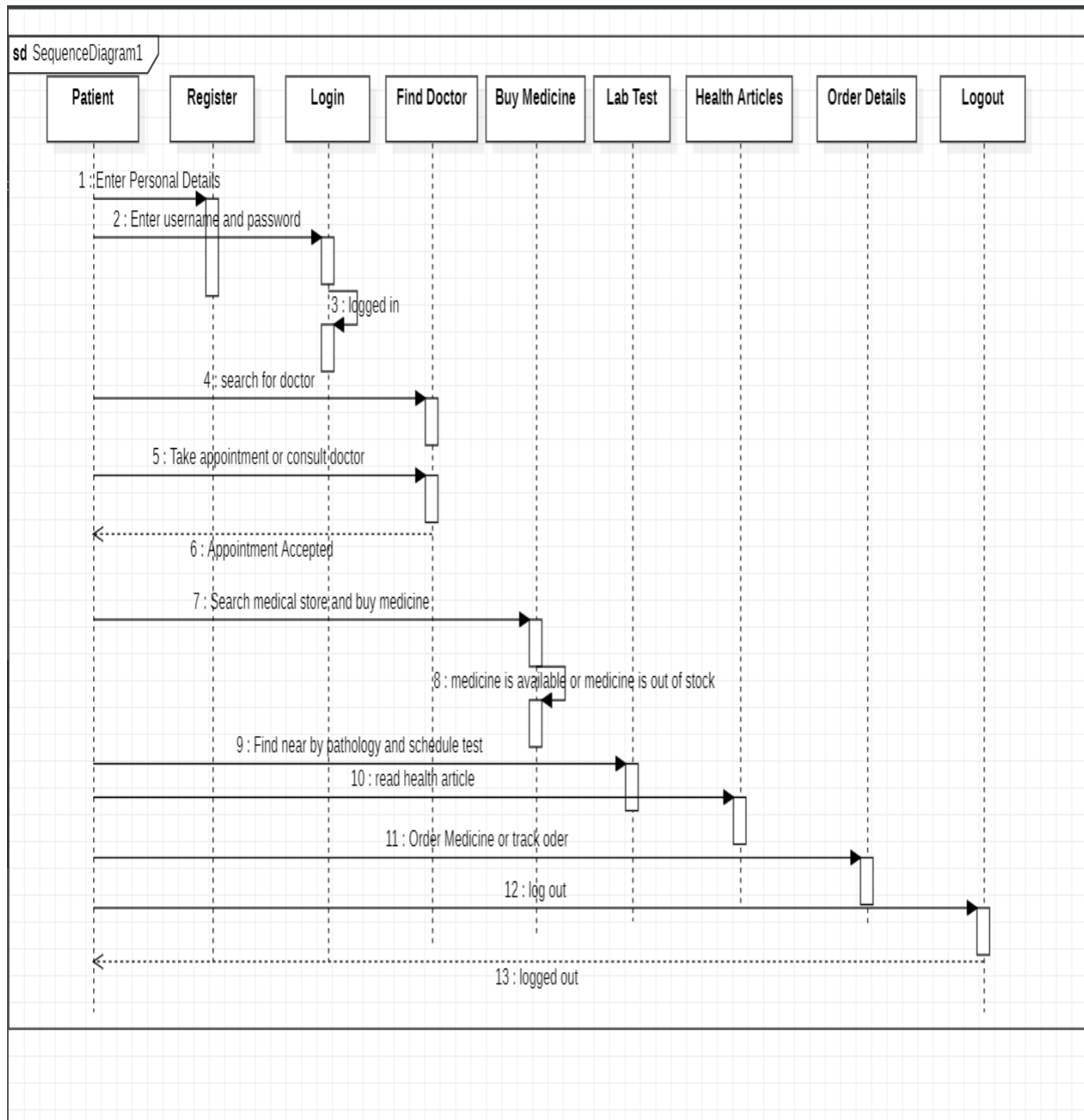
Class diagrams are the blueprints of your system or subsystem. You can use class diagrams to model the objects that make up the system, to display the relationships between the objects, and to describe what those objects do and the services that they provide.



5.2 Interaction Diagram

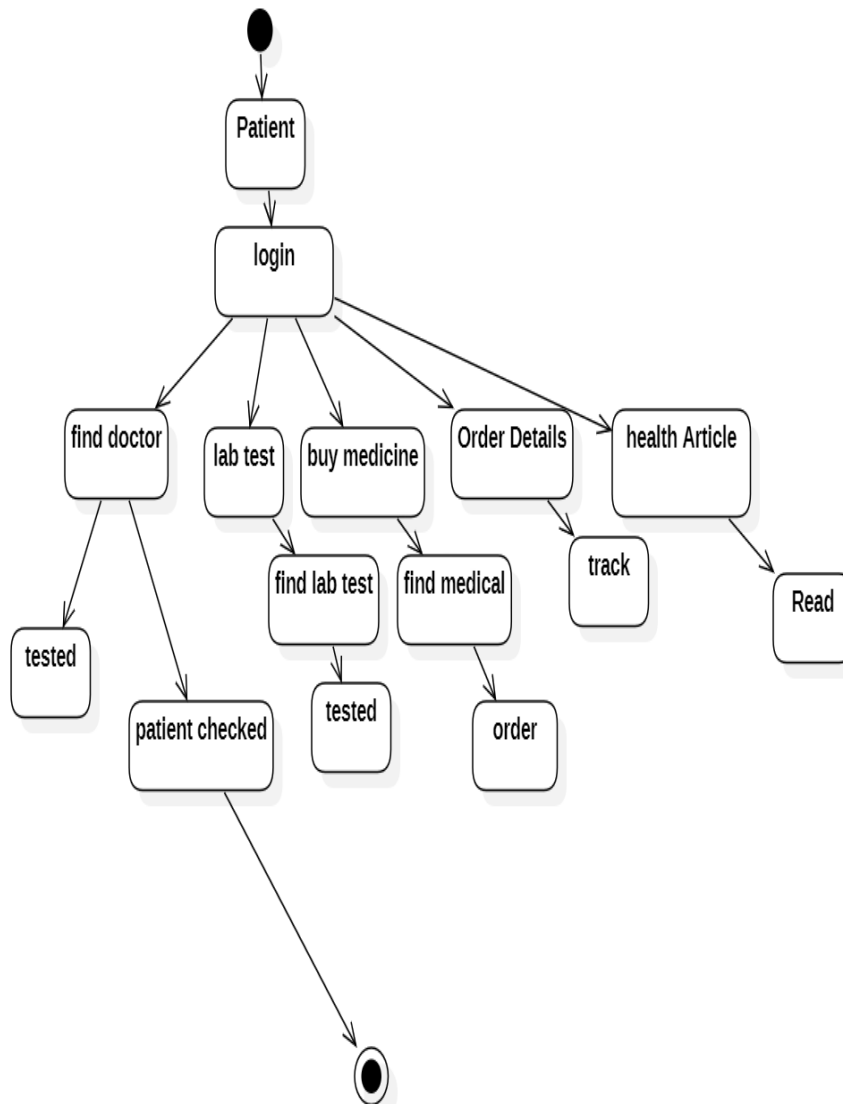
5.2.1 Sequence Diagram

A sequence diagram is a type of interaction diagram because it describes how—and in what order—a group of objects works together. These diagrams are used by software developers and business professionals to understand requirements for a new system or to document an existing process.



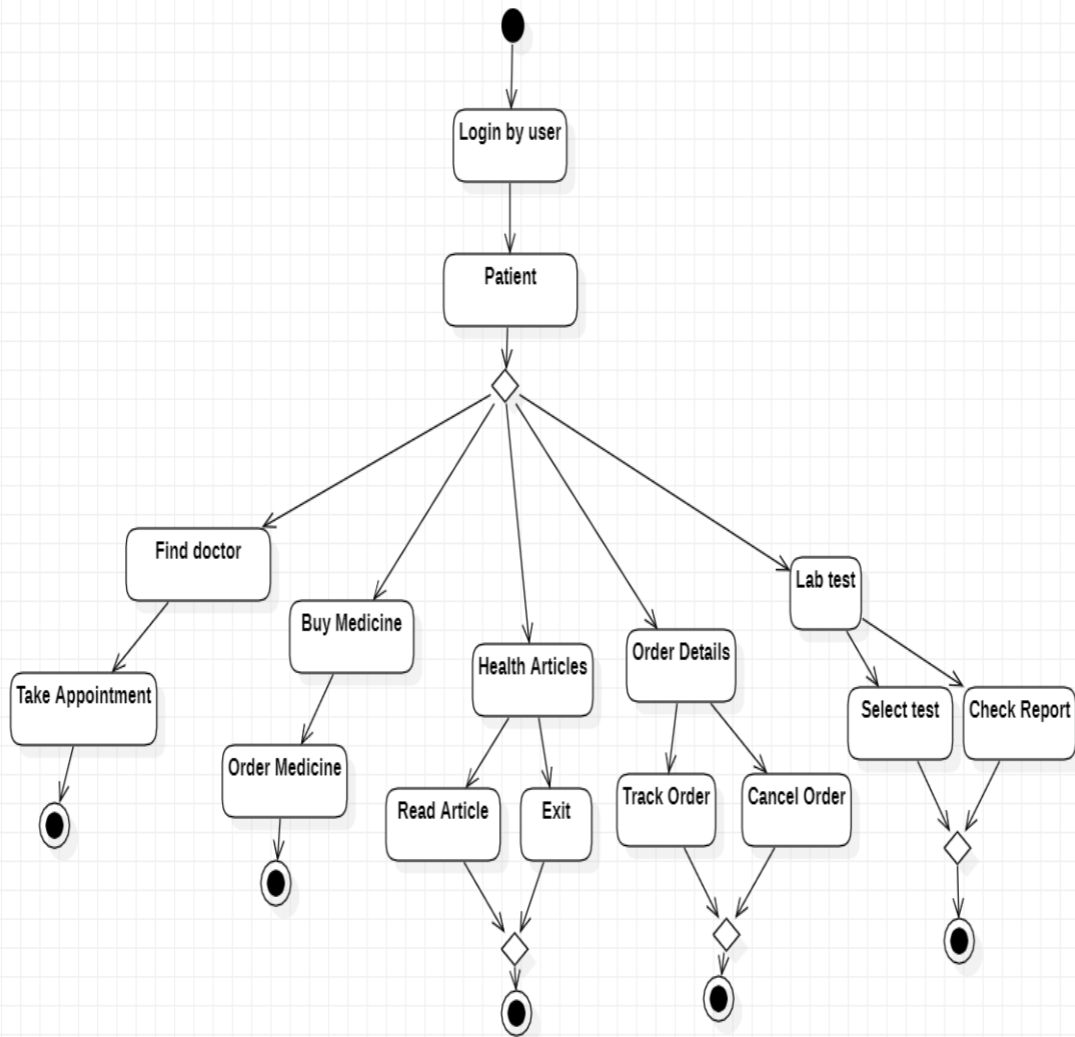
5.3 State Diagram

A state diagram is a type of diagram used in computer science and related fields to describe the behavior of systems. State diagrams require that the system described is composed of a finite number of states; sometimes, this is indeed the case, while at other times this is a reasonable abstraction.



5.4 Activity Diagram

Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. The control flow is drawn from one operation to another. This flow can be sequential, branched, or concurrent.

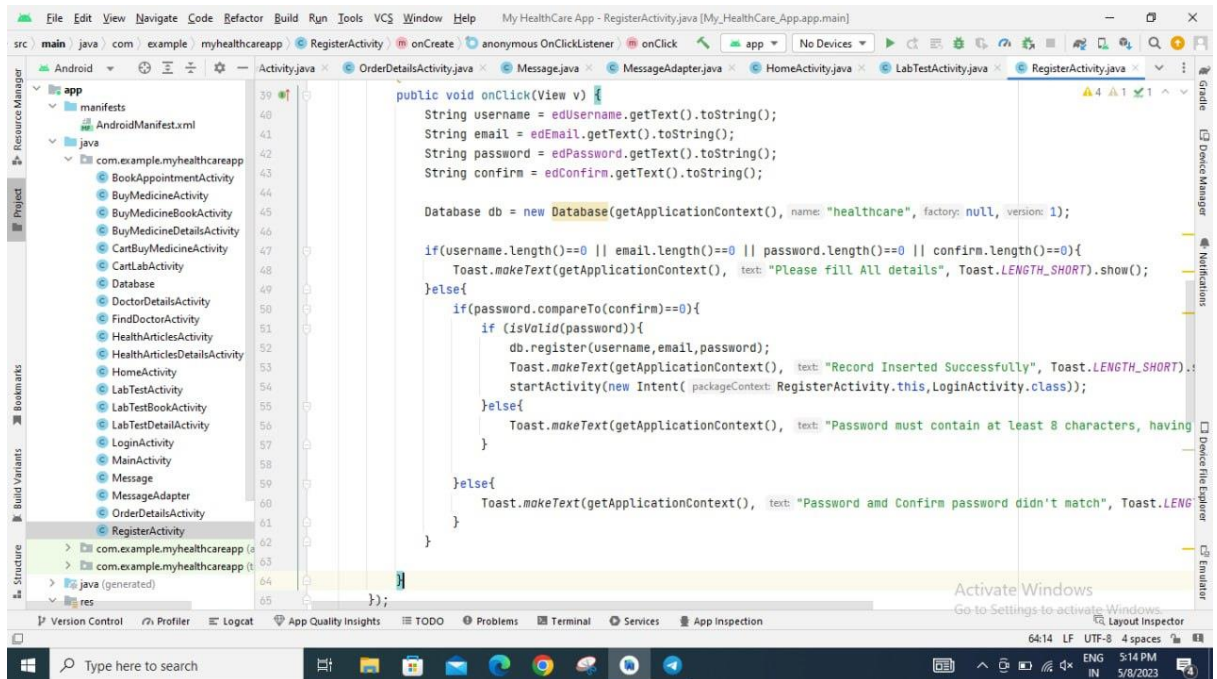


5.5 Limitation of Project

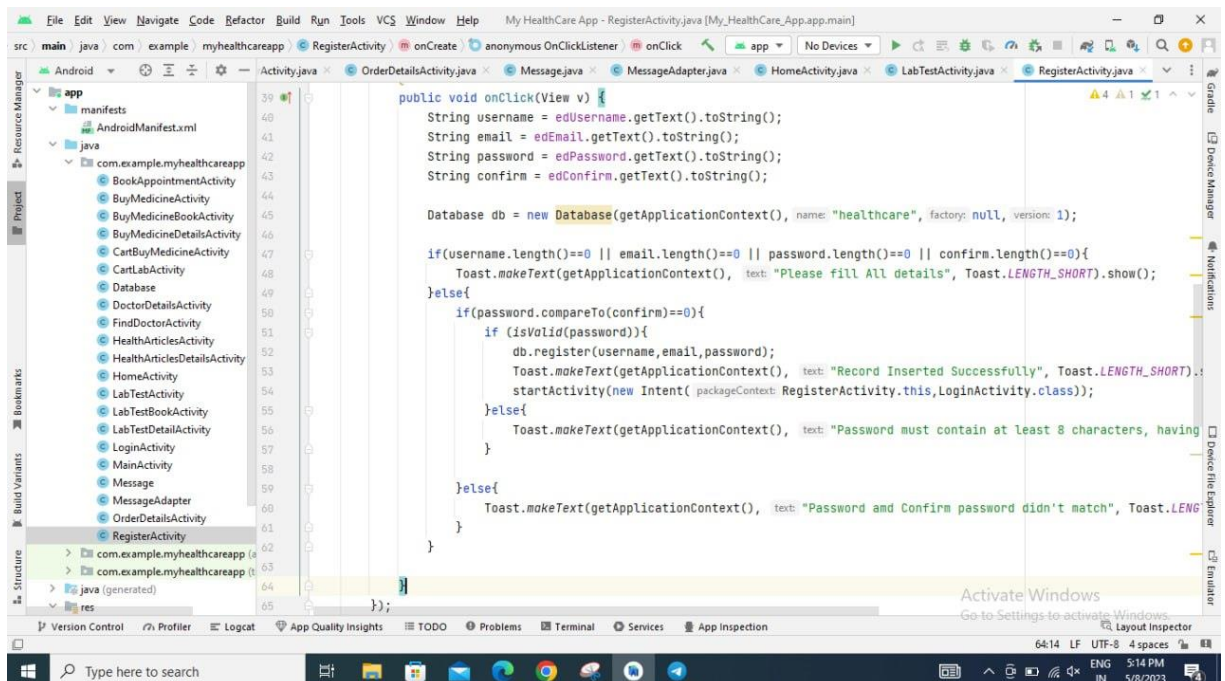
- **Limited access to healthcare data:** The project may be limited by the availability and quality of healthcare data that can be integrated into the app. If data sources are limited or incomplete, the app may not be able to provide comprehensive or accurate information to users.
- **Limited testing:** Due to time and resource constraints, the app may not have been tested extensively with a large user base, which may limit the ability to identify and resolve potential issues or bugs.
- **Limited accessibility:** The app may not be accessible to all users, especially those with disabilities or those who do not have access to reliable internet connections or mobile devices.
- **Language barriers:** The app is only available in one language; it may be difficult for users who speak other languages to use the app effectively.
- **Limited geographic coverage:** The app may only be available in certain geographic areas, which could limit its usefulness and adoption in other areas.
- **Limited functionality:** The app may have limited functionality, making it challenging to provide comprehensive healthcare services.
- **Dependence on internet connectivity:** The app requires an internet connection to function, which could limit its accessibility in areas with poor connectivity.
- **Limited user base:** The app may only be useful for a specific demographic or health condition, limiting its potential user base.

5.6 Implementation

Login Page:



Registration Page:



HEALTHCARE APPLICATION

```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help My HealthCare App - RegisterActivity.java [My_HealthCare_App.app.main]
src main java com example myhealthcareapp RegisterActivity onCreate anonymous OnClickListener onClick app No Devices
Resource Manager Project Structure Build Variants Version Control Profiler Logcat App Quality Insights TODO Problems Terminal Services App Inspection
64:14 LF UTF-8 4 spaces
Type here to search
```

```
public void onClick(View v) {
    String username = edUsername.getText().toString();
    String email = edEmail.getText().toString();
    String password = edPassword.getText().toString();
    String confirm = edConfirm.getText().toString();

    Database db = new Database(getApplicationContext(), name: "healthcare", factory: null, version: 1);

    if(username.length()==0 || email.length()==0 || password.length()==0 || confirm.length()==0){
        Toast.makeText(getApplicationContext(), text: "Please fill ALL details", Toast.LENGTH_SHORT).show();
    }else{
        if(password.compareTo(confirm)==0){
            if (isValid(password)){
                db.register(username,email,password);
                Toast.makeText(getApplicationContext(), text: "Record Inserted Successfully", Toast.LENGTH_SHORT).show();
                startActivity(new Intent( packageContext: RegisterActivity.this, LoginActivity.class));
            }else{
                Toast.makeText(getApplicationContext(), text: "Password must contain at least 8 characters, having"
            }
        }else{
            Toast.makeText(getApplicationContext(), text: "Password amd Confirm password didn't match", Toast.LENGTH_SHORT).show();
        }
    }
}
```

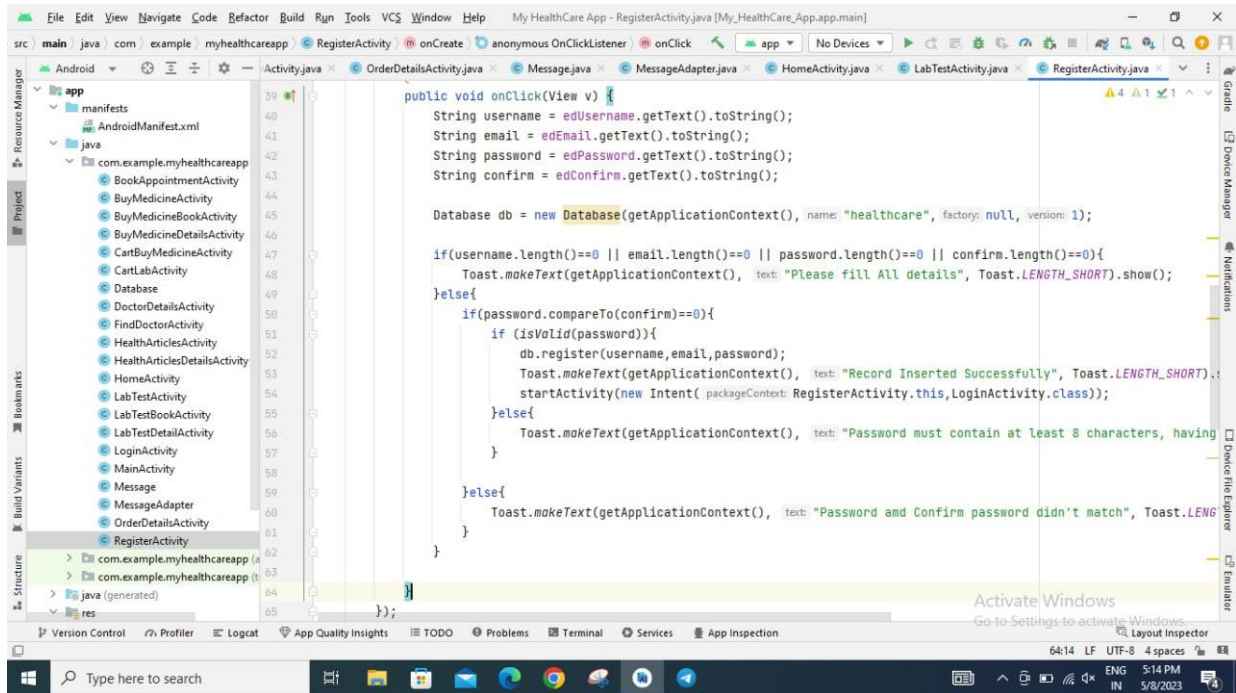
```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help My HealthCare App - RegisterActivity.java [My_HealthCare_App.app.main]
src main java com example myhealthcareapp RegisterActivity onCreate anonymous OnClickListener onClick app No Devices
Resource Manager Project Structure Build Variants Version Control Profiler Logcat App Quality Insights TODO Problems Terminal Services App Inspection
64:14 LF UTF-8 4 spaces
Type here to search
```

```
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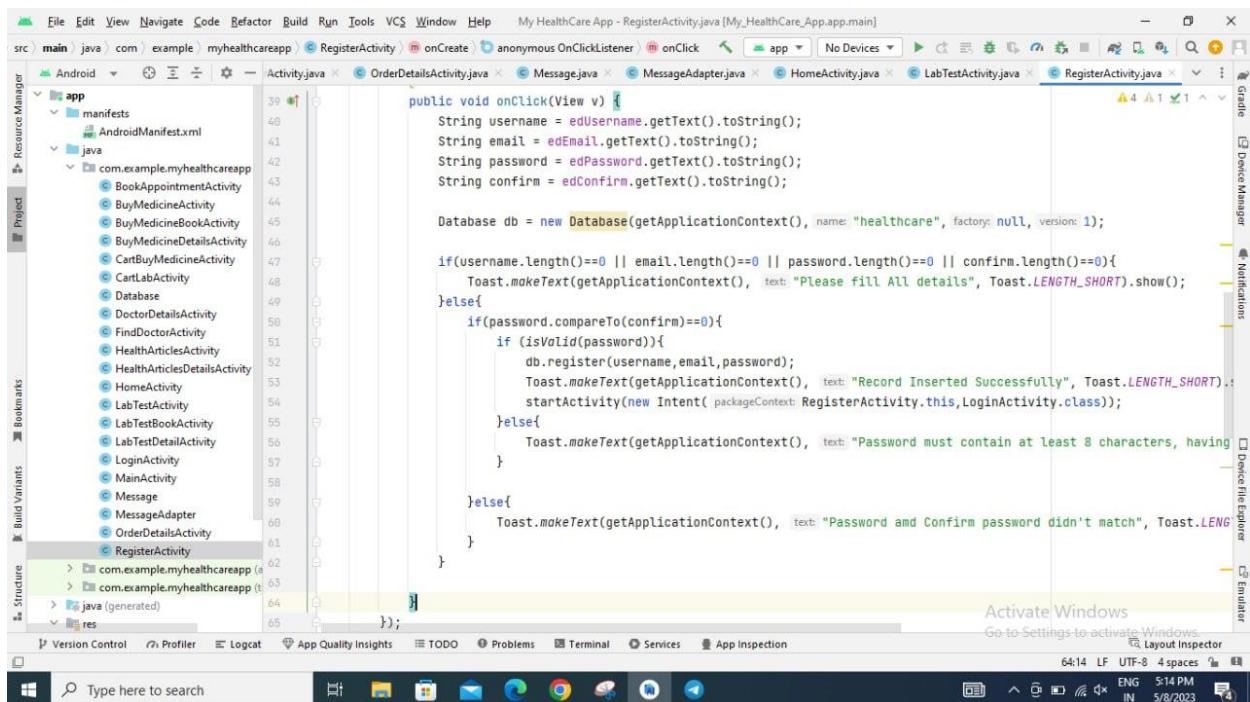
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        }
    }
}
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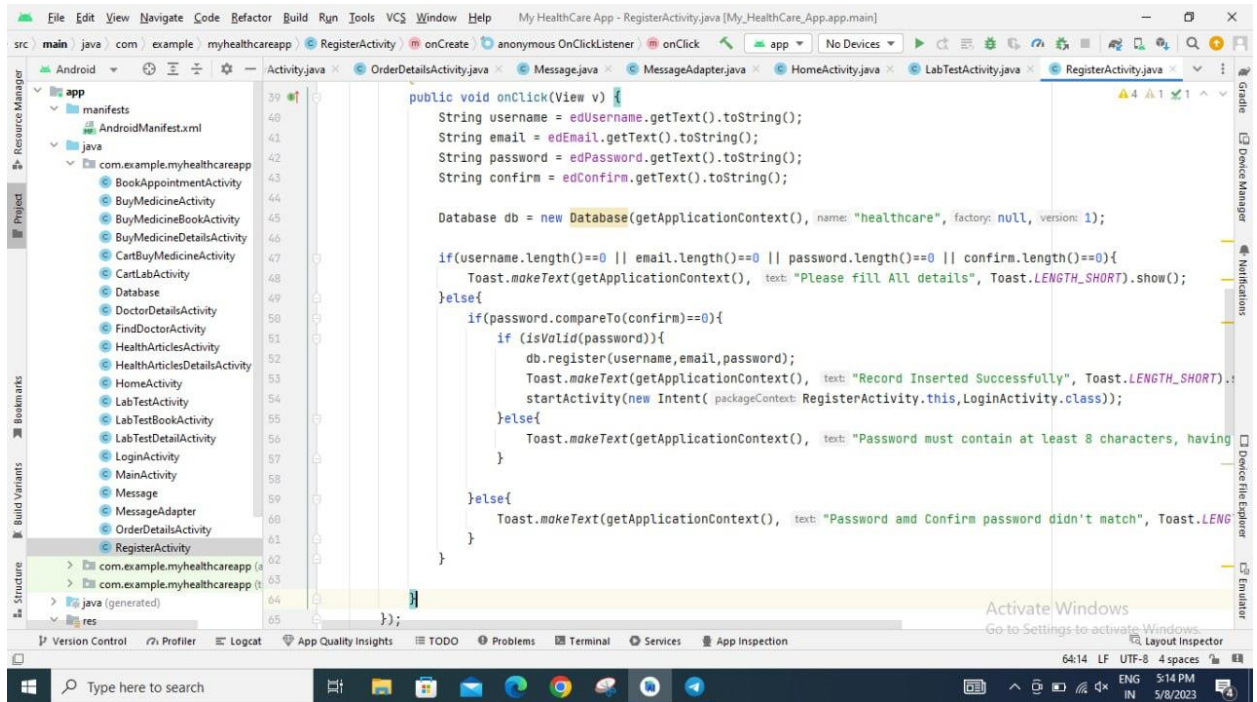

HEALTHCARE APPLICATION



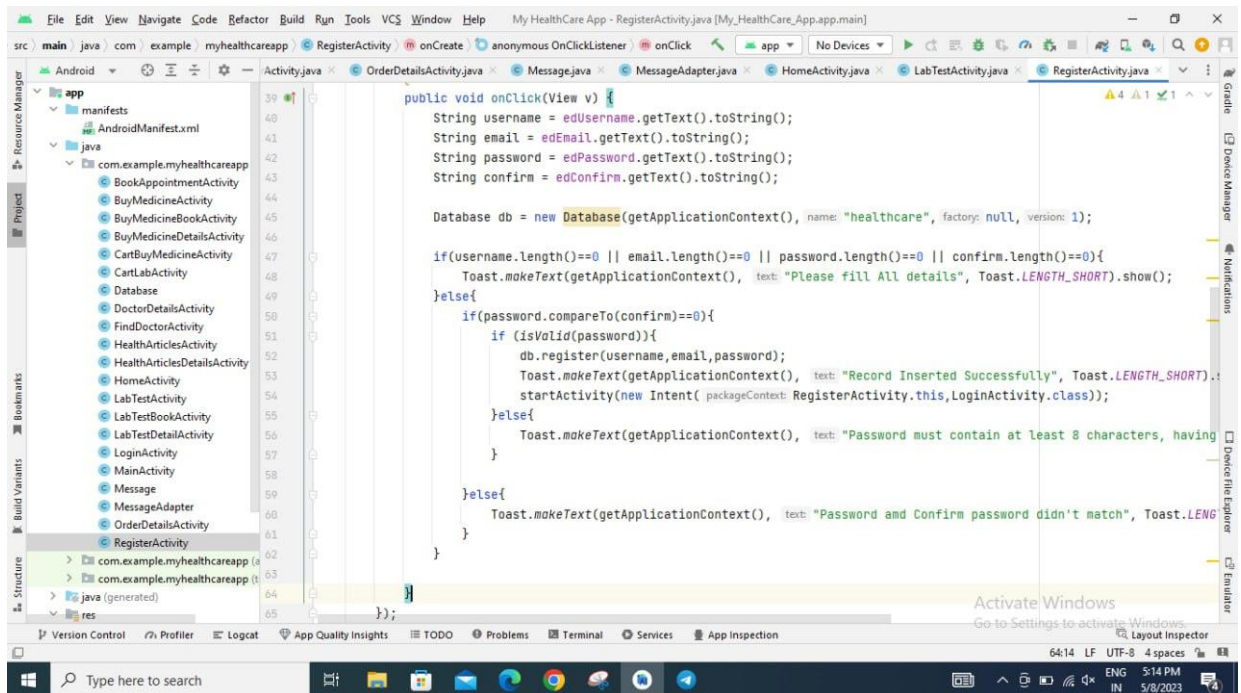
Home Page:



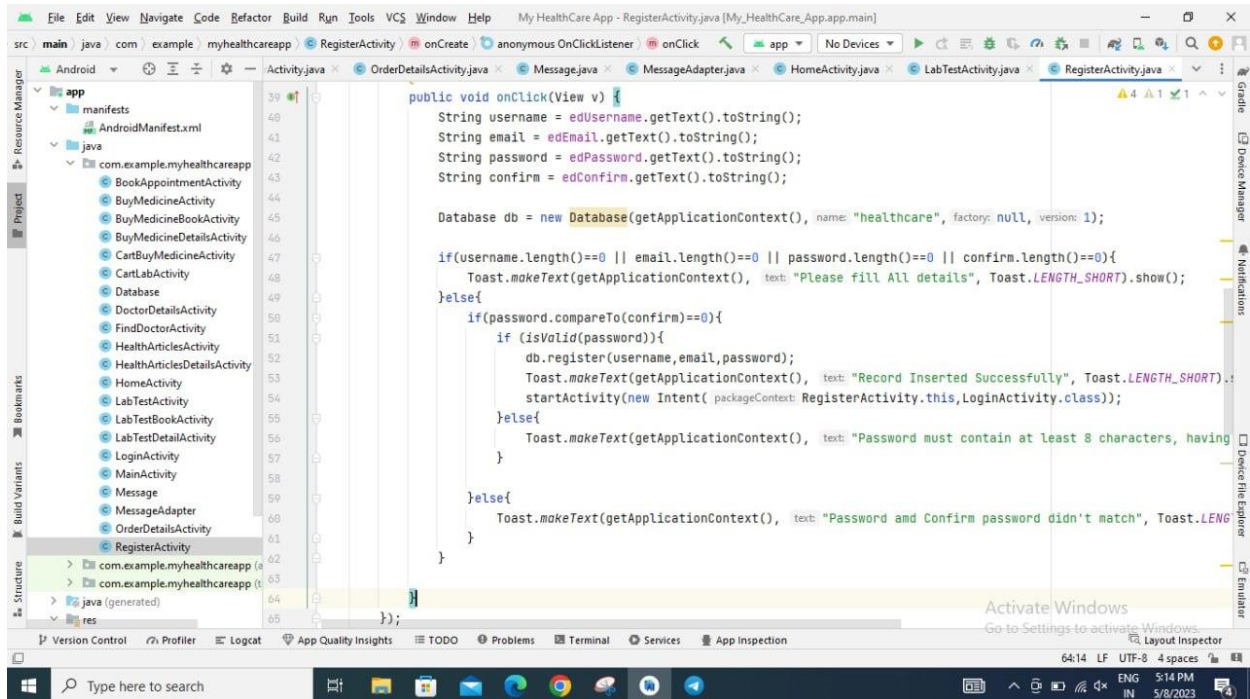
Lab Test Page:



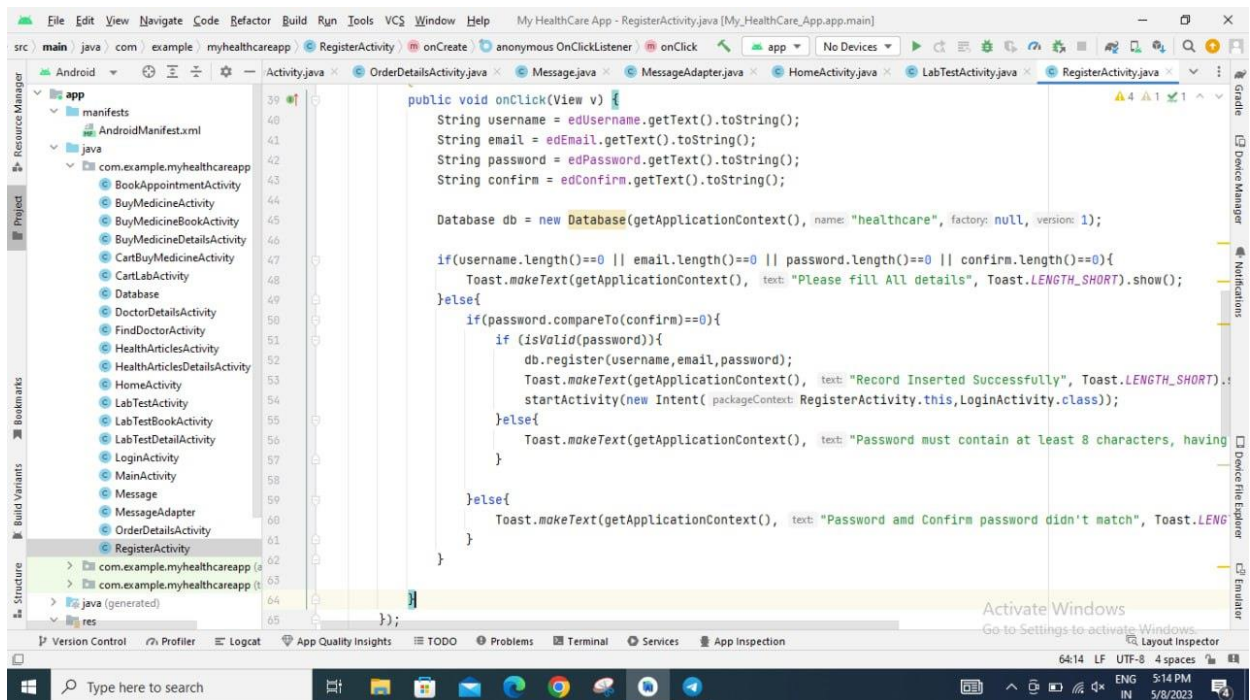
Order Details Page:



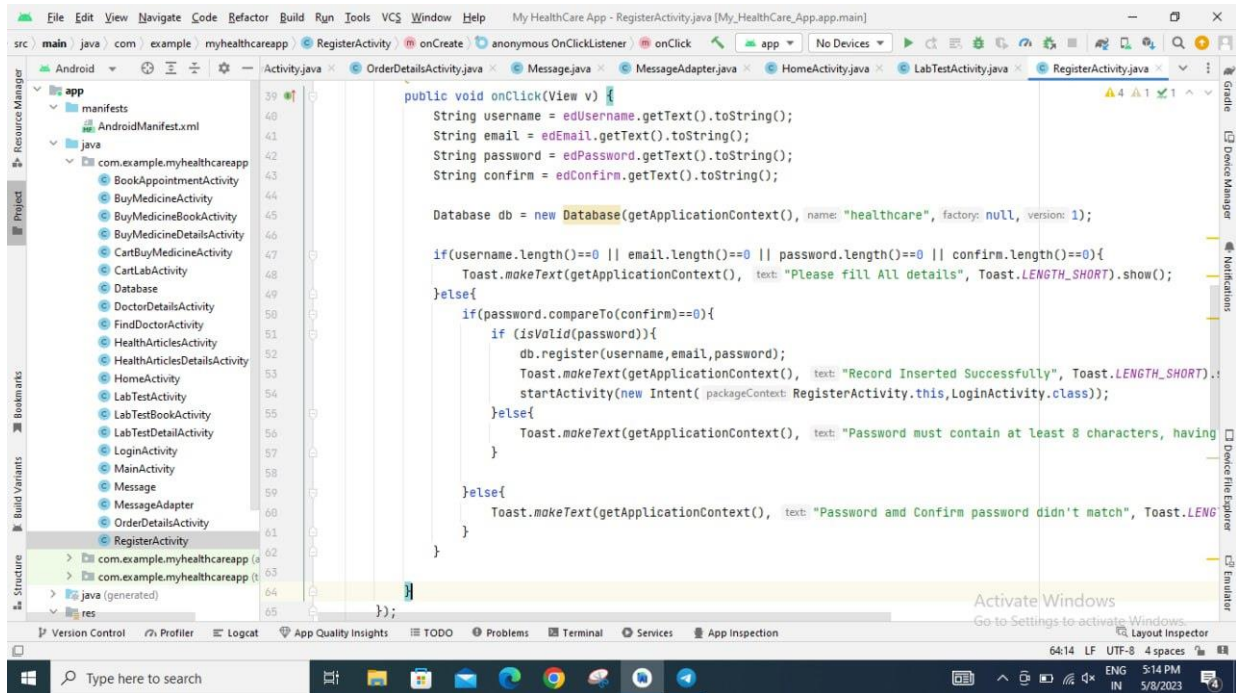
HEALTHCARE APPLICATION



Database:

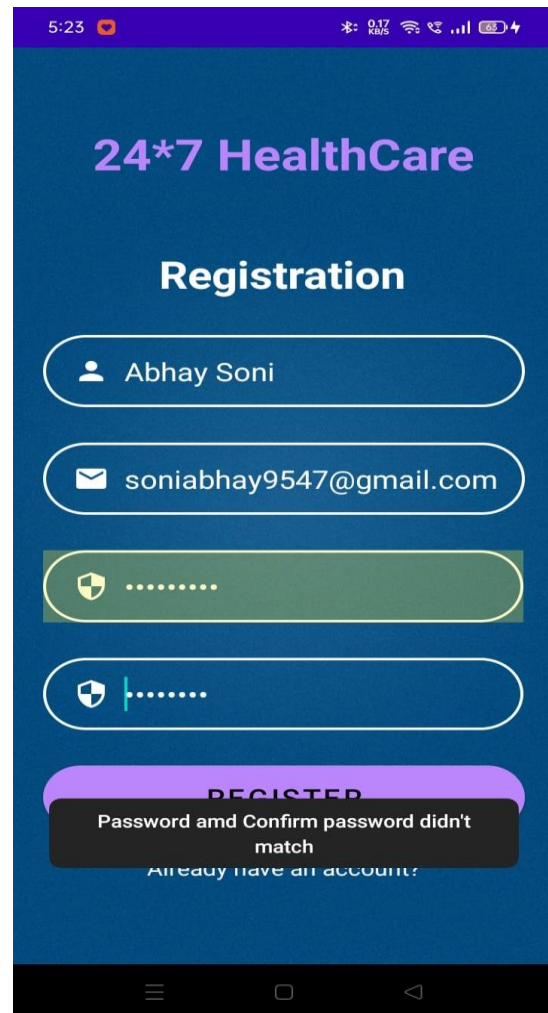
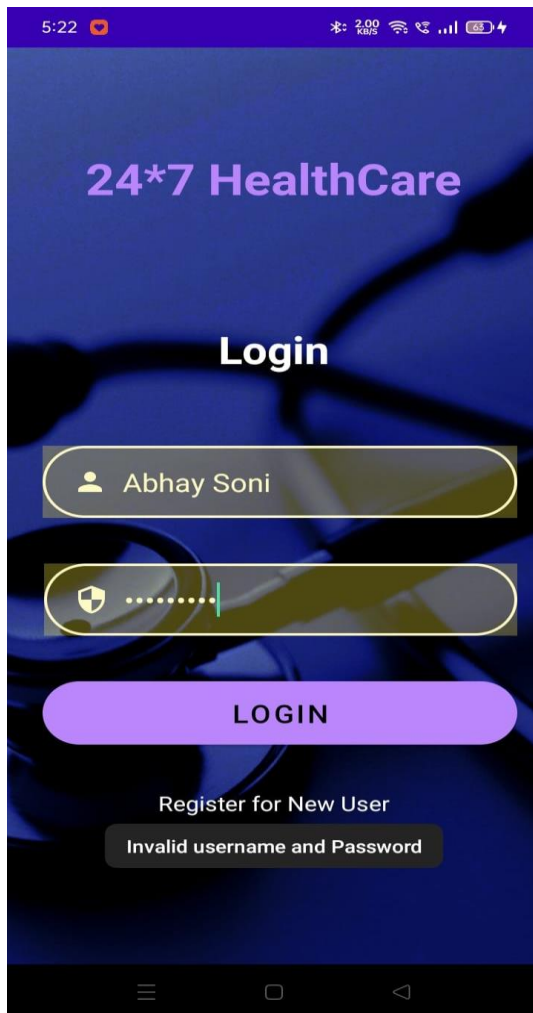


HEALTHCARE APPLICATION

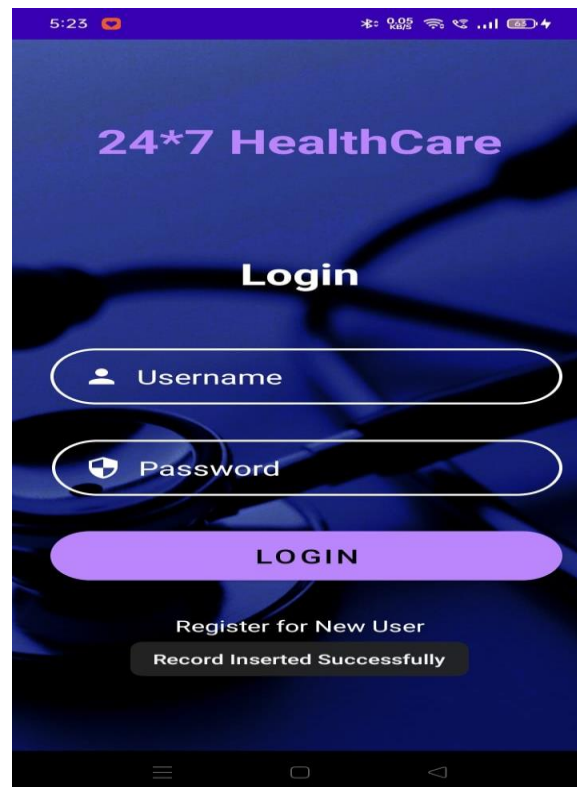


5.7 Testing

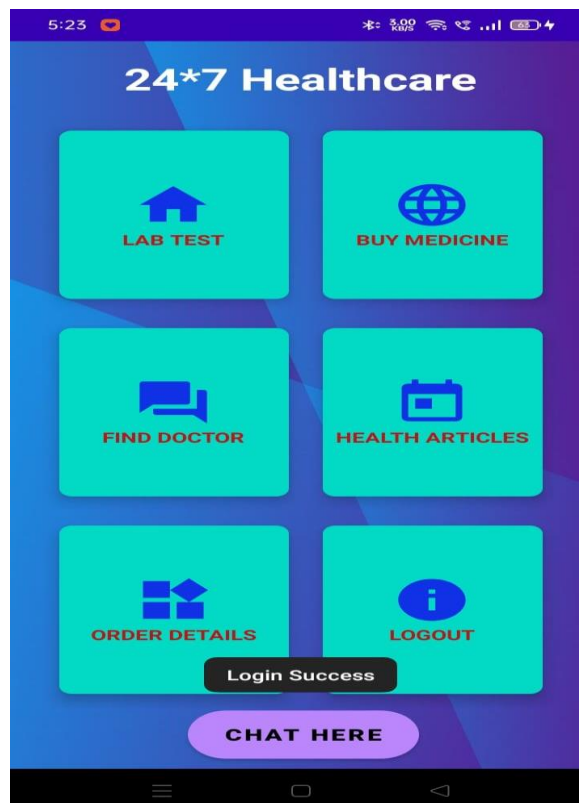
1. When username or password is wrong or account is not created then it doesn't login.



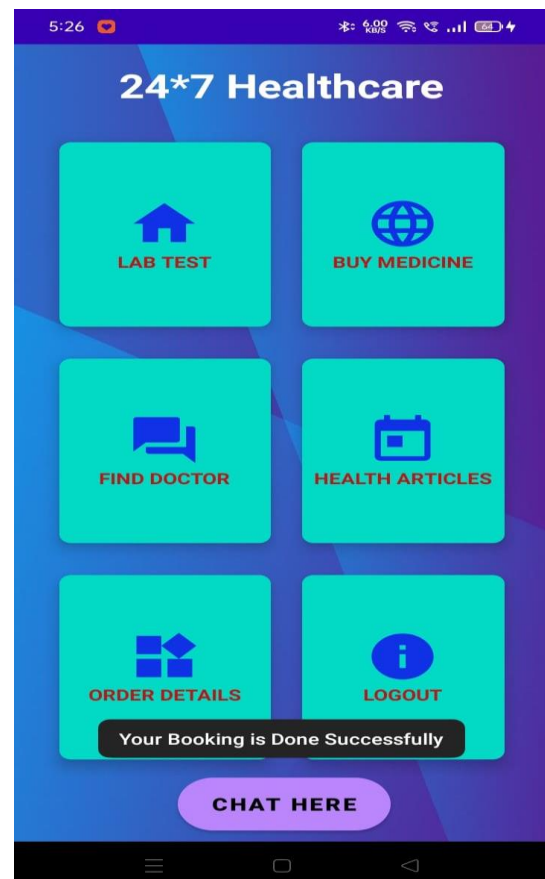
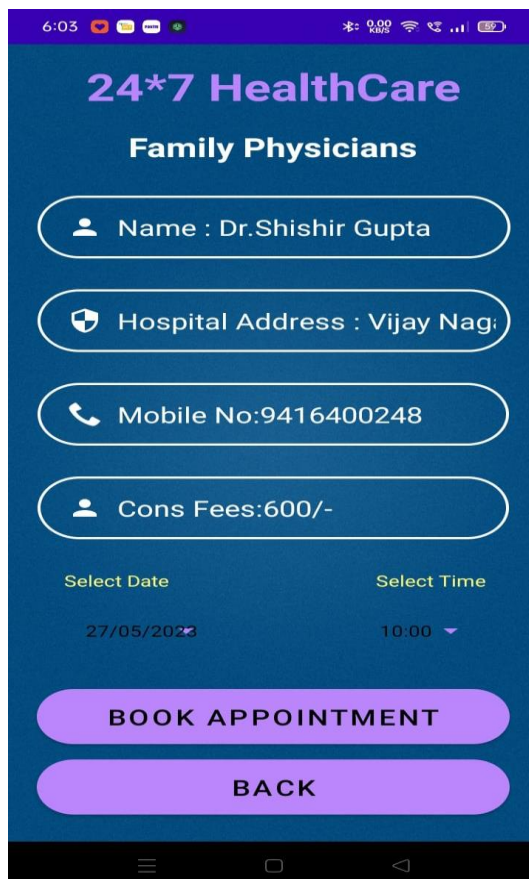
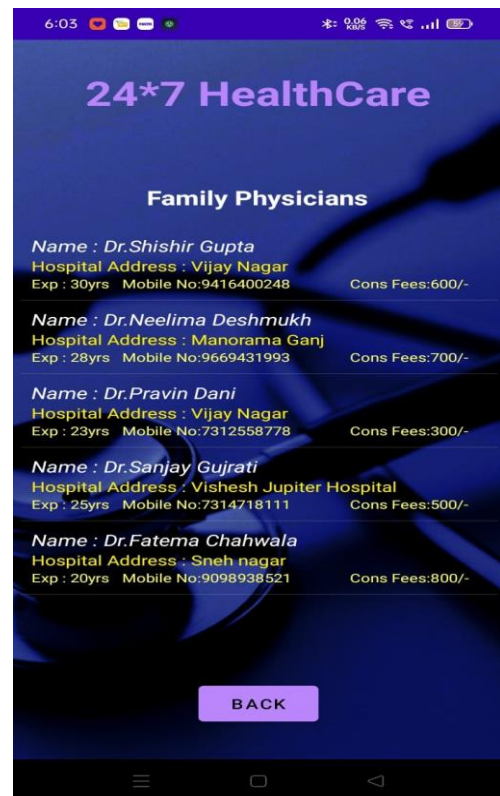
2. When account is successfully created, user's data is stored in database.



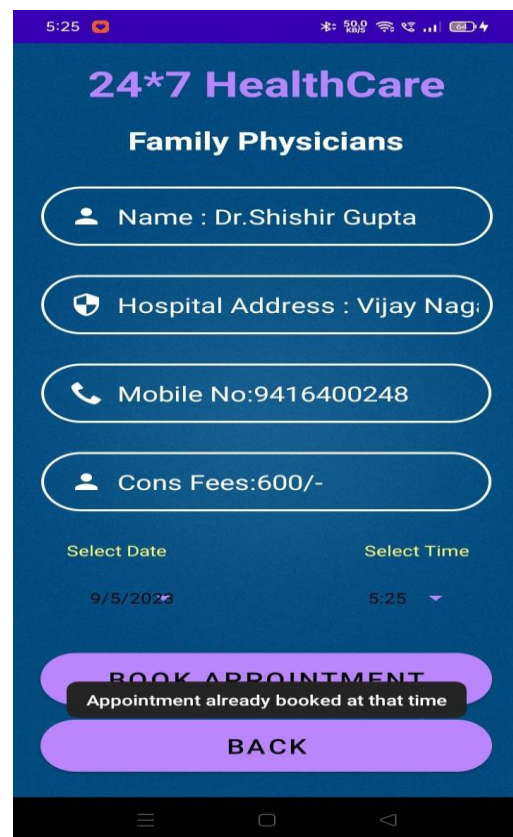
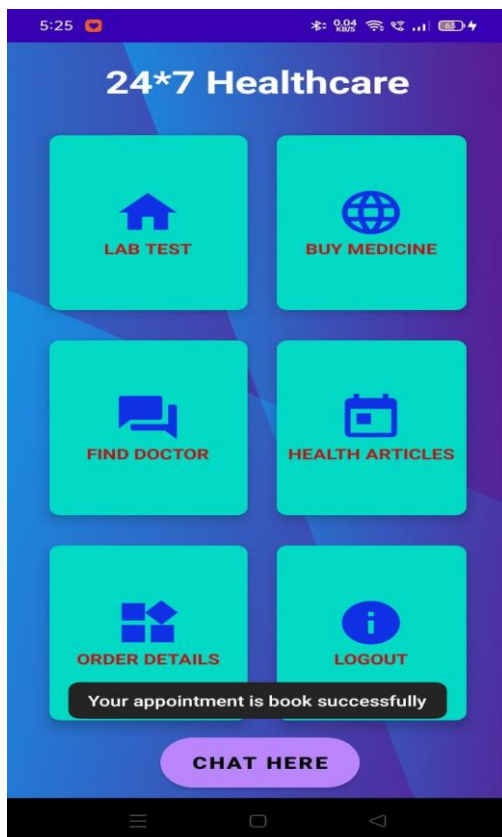
3. After successful login of account, given interface will open and we can access the facility we need.



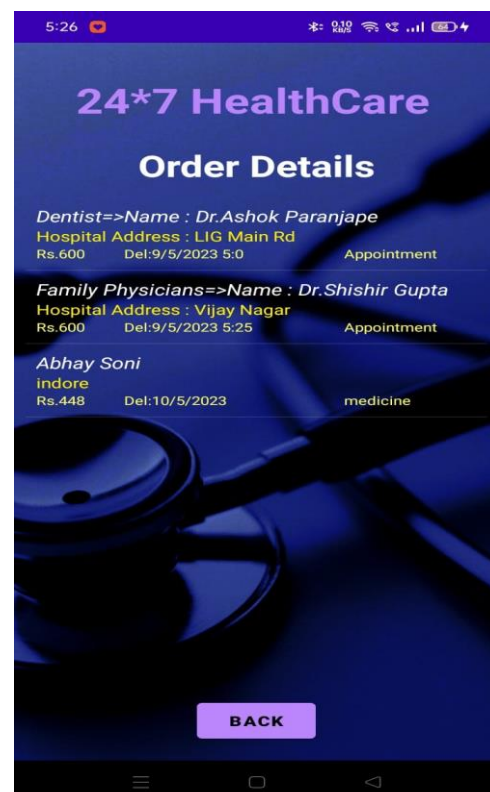
4. For book appointment list will show.



5. After booking of appointment.



6. For ordering medicine online.



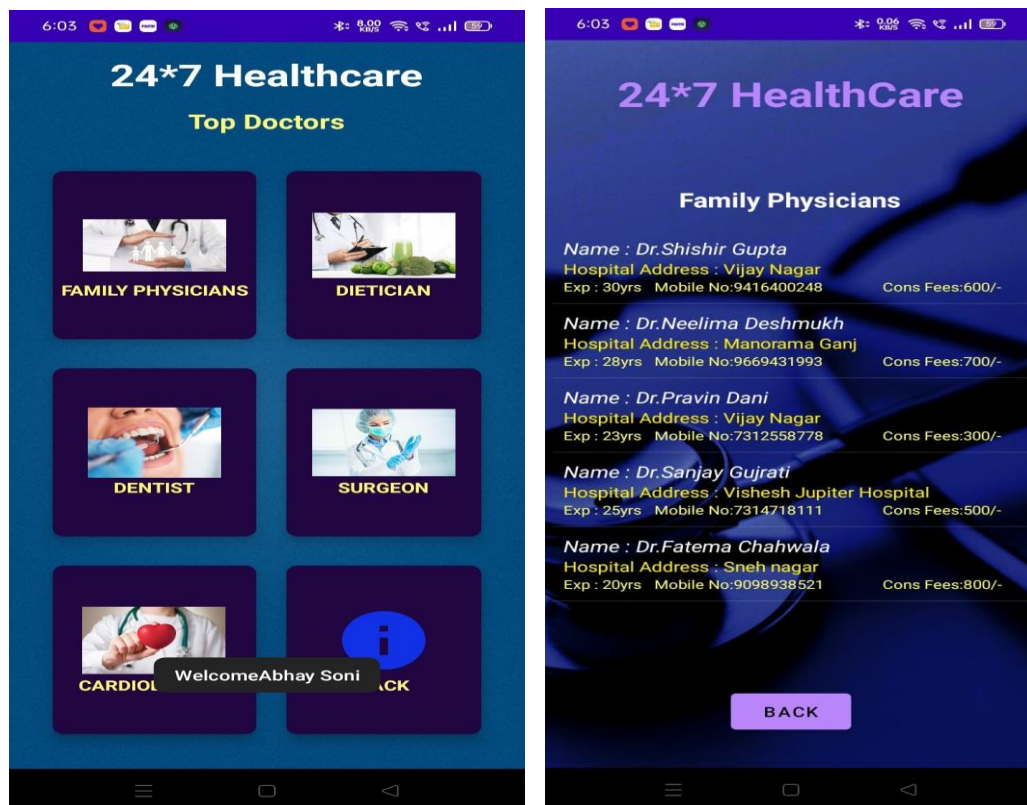
5.8 Result Analysis:

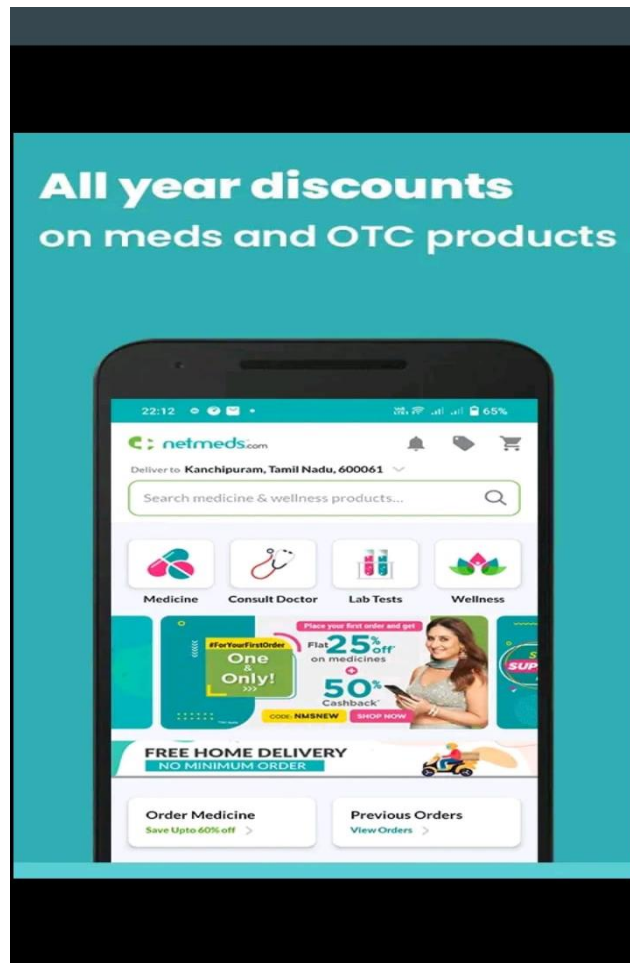
On Comparing with Netmeds Application:

On comparing with netmeds we find we can buy and consult with doctor online, same thing we can do in Healthcare Application also we can appoint lab test.

But in Netmeds we can't book appointment with doctor to consult physically and there will be no details of doctor.

In Health care Application we have created the facility to consult the doctor physically and there is details of doctor.





On Comparing with Apollo 24 x 7 Application:

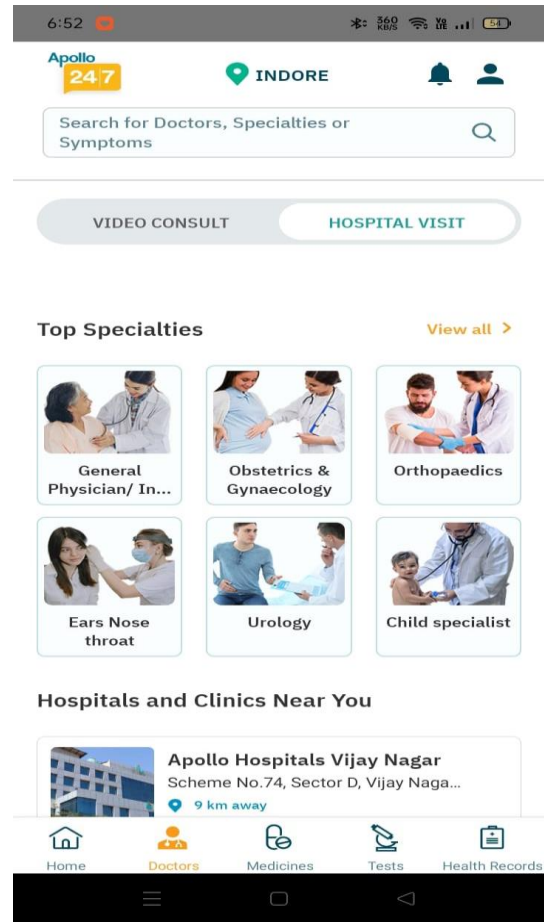
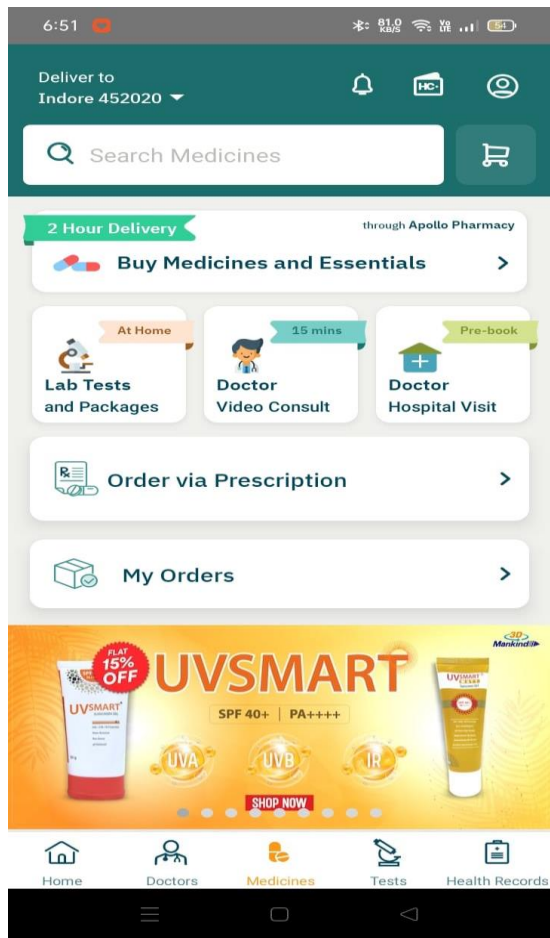
It is hospital-based application only works for hospital whereas our application works for a city where we provide doctors of our city.

In this application we consult doctor online as well as physically which are only available in hospital whereas we can consult top doctors of Indore in our application.

We can also appoint lab test online and they collect sample from home in Apollo 24 x 7.

Both the application provides health articles which are controlled by admin.

HEALTHCARE APPLICATION



CHAPTER 6- CONCLUSION & FUTURE WORK

6.1 Conclusion

Creating a healthcare app can greatly benefit patients, healthcare professionals and the healthcare industry as a whole. It provides a convenient platform for patients to schedule appointments with their doctors, view their medical records, monitor their health, and receive medical advice, all from the comfort of their homes. For healthcare professionals, the app provides a centralized platform to manage patient records, schedule appointments, and communicate with patients. Furthermore, a healthcare app can improve patient engagement and education, which can lead to better health outcomes and compliance with treatment plans. The app can also improve data accuracy, reduce medical errors, and enhance patient privacy and security by using blockchain or other secure technologies.

- A healthcare app is a convenient platform for patients to access healthcare services and communicate with their healthcare providers.
- It provides a centralized platform for healthcare professionals to manage patient records, schedule appointments, and communicate with patients.
- A healthcare app can improve patient engagement and education, leading to better health outcomes and compliance with treatment plans.
- It has the potential to improve data accuracy, reduce medical errors, and enhance patient privacy and security.
- A healthcare app can revolutionize the healthcare industry by making healthcare services more accessible, efficient, and effective for both patients and healthcare professionals.

Overall, a healthcare app has the potential to revolutionize the healthcare industry by making healthcare services more accessible, efficient and effective for both patients and healthcare professionals. However, it is important to ensure that the app is designed and implemented securely, with proper privacy and security protocols to protect sensitive patient information.

6.2 Future Enhancement

- **Personalized recommendations:** The app can provide personalized recommendations based on the user's health data, including exercise routines, diet plans, and medication reminders.
- **Telemedicine capabilities:** Users can have virtual consultations with healthcare providers through the app, including video consultations, messaging, and voice calls.
- **Medication management:** Users can track their medication schedules, receive reminders to take their medication, and refill their prescriptions through the app.
- **Advanced analytics:** The app can include advanced analytics capabilities to analyze and visualize health data to provide more meaningful insights to users.
- **AI-powered diagnosis:** The app can use machine learning algorithms to provide users with preliminary diagnosis based on their symptoms and health data.
- **Family sharing:** Users can connect with their family members or caregivers to share health data and receive support.
- **Emergency support:** The app can provide emergency support, including ambulance services, medical consultations, and hospital recommendations.
- **Health education:** The app can offer educational resources on various health topics such as nutrition, exercise, and disease prevention.
- **Geo-fencing:** The app can use geo-fencing technology to provide location-based reminders and recommendations for healthcare services.

- **Integration with electronic health records (EHR):** The app can integrate with EHR systems to provide healthcare providers with a comprehensive view of the user's health data.
- **Health coaching:** The app can offer health coaching services to help users achieve their health goals and make lifestyle changes.
- **Augmented reality:** The app can use augmented reality technology to provide users with immersive experiences to learn about their health conditions and treatments.
- **Collaborative care:** The app can facilitate collaborative care between healthcare providers, patients, and caregivers to improve care coordination and communication.

CHAPTER 7 – BIBLIOGRAPHY AND REFERENCES

1.1 References

For application - <https://youtu.be/9CkpMm-n5iA>

For chatbot - https://youtu.be/ahhze_u5ZUs

1.2 Other document and references

<https://developer.android.com/studio>

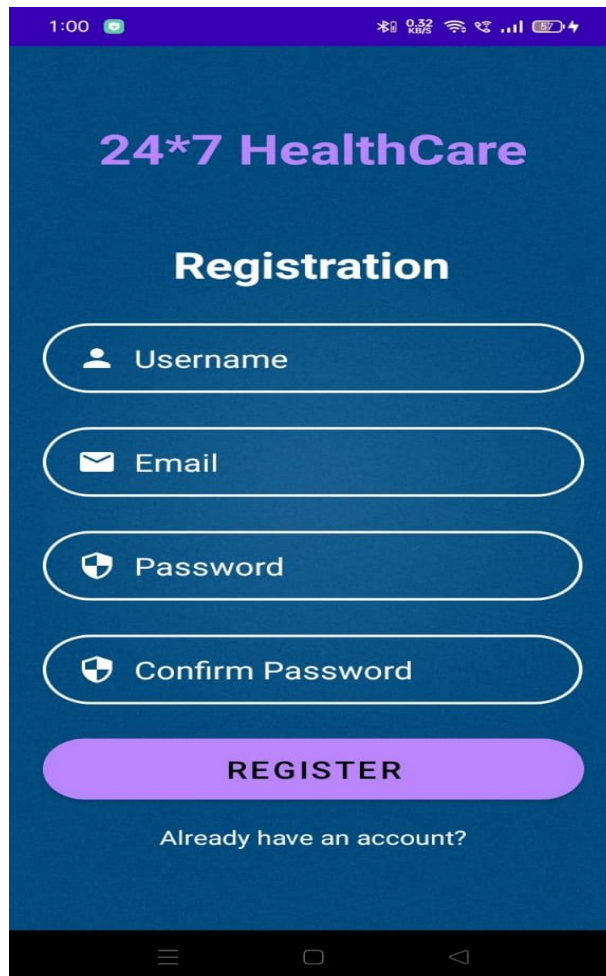
<https://www.geeksforgeeks.org/>

<https://www.javatpoint.com/java-tutorial>

<https://www.wikipedia.org/>

1.3 Snapshot

Step1: First we have to create or register the account.



1:00

24*7 HealthCare

Registration

Username

Email

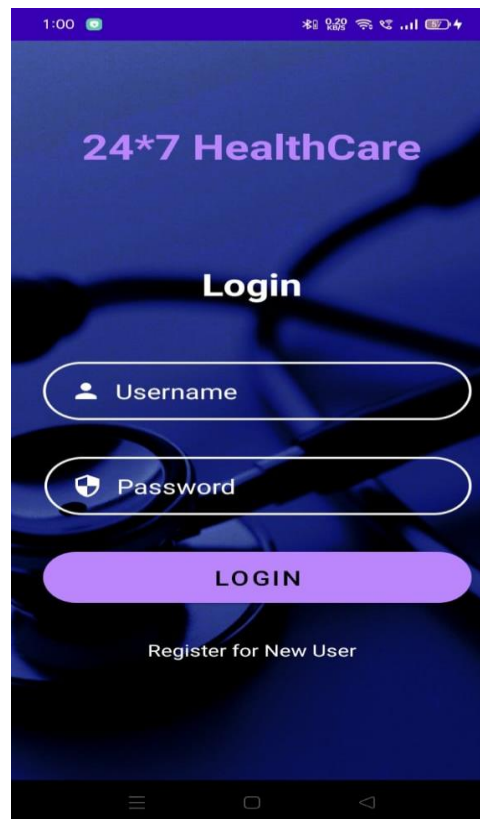
Password

Confirm Password

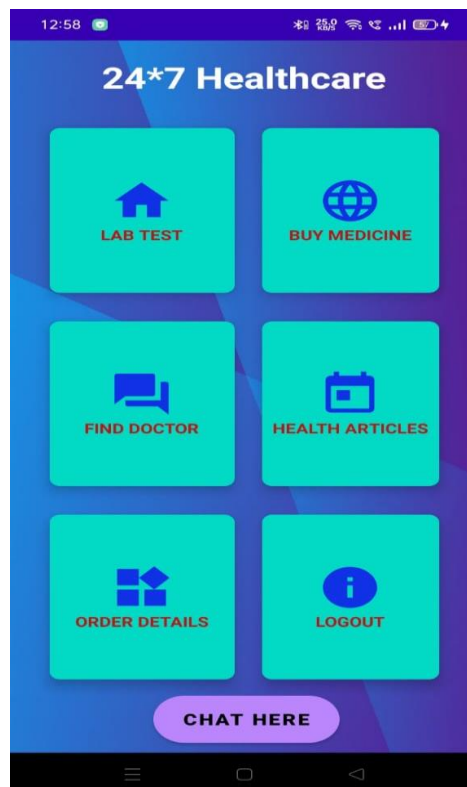
REGISTER

Already have an account?

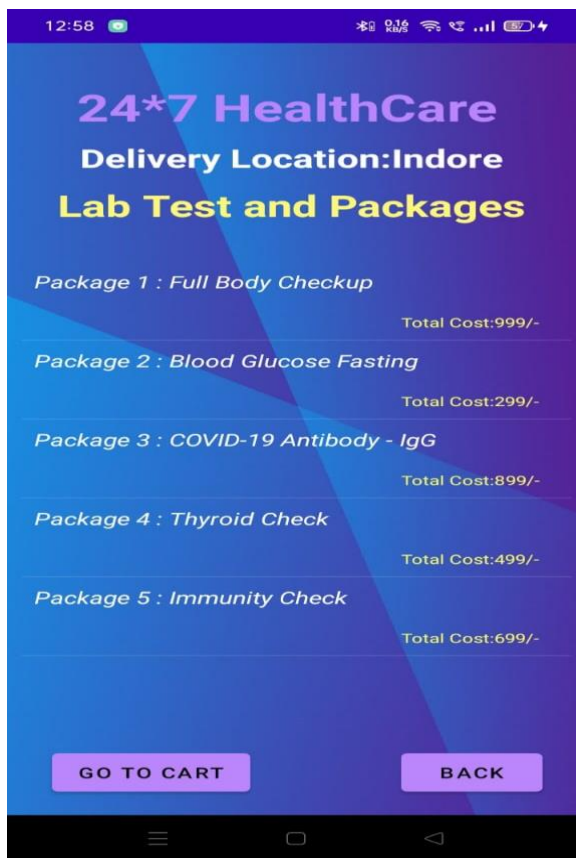
Step 2: Now, we can login to our account use its functions.



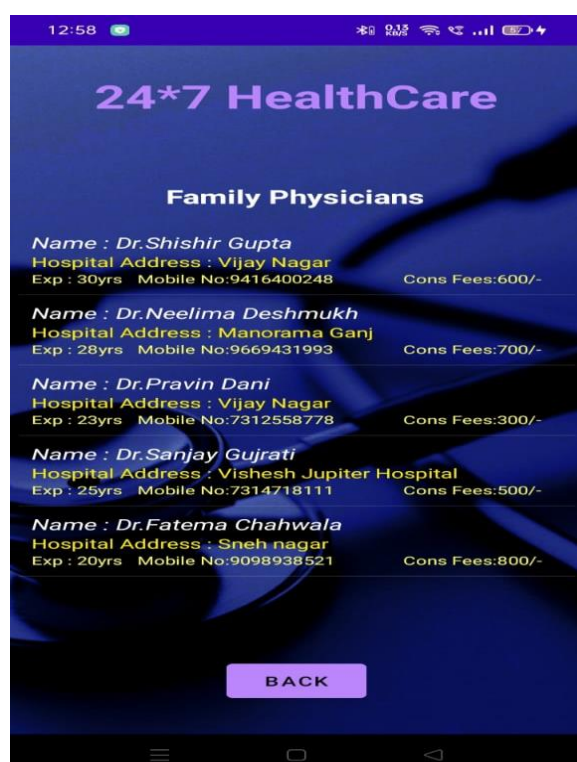
Step 3: After successful login, we can find doctor, buy medicine, find lab and can trac order and even direct chat with doctor.



Step 4: In lab test section, we can see following tests are available.



Step 5: Find doctors have information about doctor and their address and we can take appointment and consult with doctor also.



1:00

24*7 HealthCare

please Fill All Details for Booking

BOOK

12:57

hello

Hi there! How can I help you?

Step 6: We can also ready here some health articles.

12:59

24*7 HealthCare

Health Articles

Walking Daily [Click for More Details](#)

Home care of COVID-19 [Click for More Details](#)

Stop Smoking [Click for More Details](#)

Menstrual Cramps [Click for More Details](#)

Healthy Gut [Click for More Details](#)

BACK

12:59

24*7 HealthCare

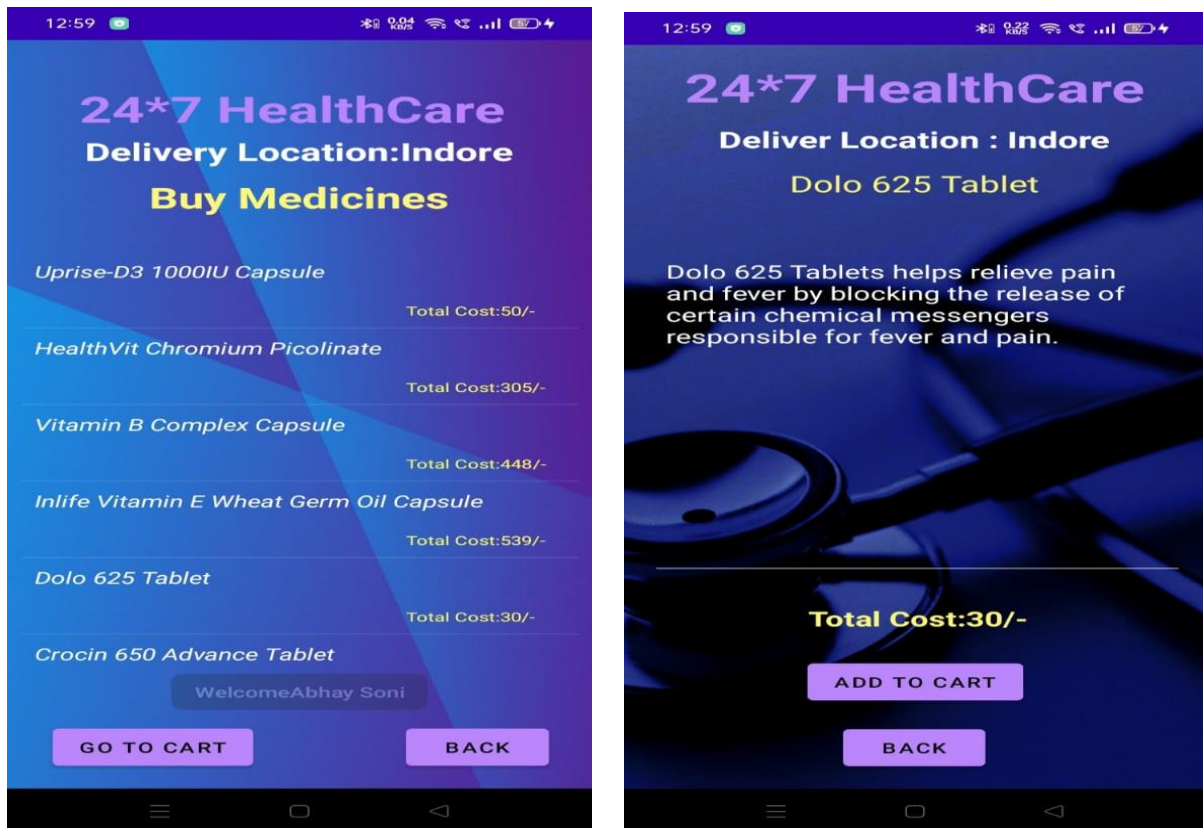
Walking Daily

HEALTH BENEFITS OF WALKING DAILY

- Helps in weight loss
- Increases lung capacity
- Improves heart health
- Sugar cravings are lowered
- Reduces chronic diseases
- Improves mood
- Prevents cancer
- Prevents disability in old age
- Delays ageing
- Improves varicose veins
- Lowers blood pressure
- Boosts immunity
- Reduces stroke risk in women
- Speeds up digestion
- Decreases diabetes risk
- Reduces dementia risk

BACK

Step 7: We can find medical stores and order here our medicines and can order from here.



Step 8: We can see our order details from here.

