NEW HORIZON
COLLEGE OF ENGINEERING

Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade, Accredited by NBA

A LAB BASED PROJECT REPORT

for

MOBILE APP DEVELOPMENT LAB(21CSL551)

on

MEDIMATE

Submitted by

CHRIS JORDAN J, 1NH21CS062, SEM-SEC: 5-A

Academic Year: 2023-2024

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CERTIFICATE

This is to certify that the lab based project work titled

MEDIMATE

PERSONAL HEALTH ASSISTANT

Submitted by

CHRIS JORDAN J, 1NH21CS062, SEM-SEC: 5-A

ODD SEMESTER 2023-2024

For

COURSE: MOBILE APP DEVELOPMENT LAB(21CSL551)

Signature of Reviewer

Signature of HOD

ABSTRACT

Medimate is a state-of-the-art smartphone app that aims to transform how people handle their medical needs. In response to the growing need for quick and easy access to a variety of vital medical services, Medimate provides a smooth platform for users to establish and maintain their accounts. Because of the app's easy-to-use layout, users can establish personalised accounts and have safe, anytime, anywhere access to their medical records. Users of the Medimate portal may easily make appointments with physicians and laboratory specialists, among other healthcare professionals, cutting down on wait times and guaranteeing prompt access to vital medical services.

By including tools for laboratory test appointments, Medimate goes above and beyond standard appointment scheduling, giving customers an easy way to plan and coordinate diagnostic testing from reliable healthcare providers. The programme also allows users to immediately order prescription drugs, which expedites the ordering and delivery of medications. Medimate's sophisticated algorithm for suggesting healing foods suited to particular ailments is one of its most notable features. Medimate creates customised food suggestions to promote healing and general well-being based on user-provided health information and medical history.

In summary, Medimate provides a full solution for people looking for individualised and effective healthcare management. Medimate gives consumers the ability to take charge of their health by integrating appointment scheduling, lab test scheduling, prescription procurement, and customized dietary advice into a single, user-friendly application.

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be impossible without the mention of the people who made it possible, whose constant guidance and encouragement crowned our efforts with success.

I have great pleasure in expressing gratitude to **Dr. Mohan Manghnani**, Chairman, New Horizon Educational Institutions, for providing necessary infrastructure and creating good environment.

I take this opportunity to express my profound gratitude to **Dr. Manjunatha,** Principal, New Horizon College of Engineering, for his constant support and encouragement.

I would like to thank **Dr. R J Anandi**, Professor and Dean-Academics, NHCE, for her valuable guidance.

I would also like to thank **Dr. Rajalakshmi.B**, Professor and Head, Department of Computer Science and Engineering, for her constant support.

I also express my gratitude to **Ms. Lakshmi S Hanne,** Assistant Professor, Department of Computer Science and Engineering, for constantly monitoring the development of the project and setting up precise deadlines. His valuable suggestions were the motivating factors in completing the work.

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CHAPTER 1

1. INTRODUCTION

In an era characterized by the rapid advancement of technology, healthcare management has evolved to embrace digital solutions that offer convenience, accessibility, and personalized care. The introduction of mobile applications has revolutionized the way individuals engage with their health, empowering them to take control of their well-being like never before. In this context, Medimate emerges as a groundbreaking solution, poised to redefine healthcare management for users around the globe.

Medimate is a comprehensive mobile application designed to streamline and enhance various aspects of healthcare management, ranging from scheduling doctor appointments and booking laboratory tests to ordering prescription medications and receiving personalized dietary recommendations. By leveraging the power of mobile technology, Medimate aims to address the diverse needs of users, offering a user-friendly platform that facilitates seamless access to essential healthcare services.

At its core, Medimate prioritizes user-centric design, ensuring that every feature and functionality is tailored to meet the unique preferences and requirements of its users. Through intuitive interfaces and robust backend services, Medimate enables users to navigate complex healthcare processes with ease, empowering them to make informed decisions about their health and well-being.

In this comprehensive guide, we will delve into the development, implementation, and features of Medimate, exploring how this innovative app is poised to revolutionize healthcare management and improve outcomes for users worldwide. From the initial stages of design and development to the deployment and maintenance of the app, we will uncover the intricate workings of Medimate and its potential to transform the healthcare landscape. Join us on this journey as we explore the future of healthcare management with Medimate at the forefront.

1.1. OBJECTIVES

1. Provide users with a convenient platform to create and manage their healthcare accounts.

2. Facilitate seamless scheduling of doctor appointments, reducing wait times and improving access to medical care.

3. Enable users to book laboratory test appointments easily, streamlining the diagnostic process.

4. Simplify the process of purchasing prescription medicines through the app, ensuring timely delivery.

5. Offer a secure and user-friendly interface for browsing, selecting, and purchasing medications.

6. Utilize advanced algorithms to offer personalized dietary recommendations tailored to individual health conditions.

7. Enhance user engagement and satisfaction by offering intuitive features and timely notifications.

8. Promote proactive healthcare management by empowering users to take control of their health and well-being.

1.2. METHODOLOGY

1. Market Research: Conduct thorough market research to understand the current landscape of healthcare apps, identify user needs, and analyze competitors' features and functionalities.

2. User Requirement Analysis: Engage with potential users, healthcare professionals, and stakeholders to gather requirements and prioritize features based on user needs and preferences.

3. Prototype Development: Develop initial prototypes of the app's user interface (UI) and user experience (UX) design to visualize the app's flow, features, and functionalities.

4. Iterative Development: Adopt an iterative development approach to incrementally build and refine the app's features based on user feedback, testing, and continuous improvement.

5. Backend Development: Develop the backend infrastructure, including databases, servers, and APIs, to support user account management, appointment scheduling, medication ordering, and dietary recommendation algorithms.

6. Frontend Development: Implement the frontend components of the app, focusing on creating an intuitive and user-friendly interface for seamless navigation and interaction.

7. Integration of Features: Integrate key features such as account creation, appointment scheduling, laboratory test booking, medication ordering, and dietary recommendation algorithms into the app.

8. Quality Assurance (QA): Conduct rigorous testing, including functional testing, usability testing, and performance testing, to identify and address any bugs, errors, or usability issues.

9. Security and Compliance: Implement robust security measures to safeguard user data and ensure compliance with healthcare regulations and data protection laws, such as HIPAA compliance.

10. User Training and Support: Provide user training materials and resources to help users navigate the app effectively and offer ongoing customer support to address any questions or concerns.

1.3. EXPECTED OUTCOMES

1. Improved Access to Healthcare: Users will experience reduced wait times for doctor appointments and laboratory tests, leading to improved access to essential healthcare services.

2. Enhanced Convenience: Users will benefit from the convenience of booking appointments, ordering medications, and accessing dietary recommendations all within a single, user-friendly app interface.

3. Better Medication Management: The ability to purchase prescription medications through the app will lead to improved medication adherence and better management of chronic conditions.

4. Personalized Healthcare Guidance: Users will receive personalized dietary recommendations tailored to their specific health conditions, promoting healthier lifestyles and supporting overall well-being.

5. Increased User Engagement: Medimate's intuitive features and functionalities will enhance user engagement and satisfaction, leading to higher app usage and retention rates.

6. Empowerment for Users: By providing tools and resources for proactive healthcare management, Medimate will empower users to take control of their health and make informed decisions about their healthcare needs.

7. Positive Health Outcomes: Through improved access to healthcare services, better medication management, and personalized healthcare guidance, Medimate aims to contribute to positive health outcomes and overall wellness for its users.

8. Compliance and Security: Medimate will ensure compliance with healthcare regulations and data protection laws, providing users with confidence in the security and privacy of their healthcare information.

9. Market Recognition: With its comprehensive features and user-centric approach, Medimate aims to gain recognition and adoption in the competitive healthcare app market, establishing itself as a trusted and valuable resource for users.

10. Continuous Improvement: Through ongoing feedback collection and iteration, Medimate will continuously evolve to meet the changing needs and preferences of its users, ensuring its relevance and effectiveness in the long term.

11. Cost Savings: Users may experience cost savings by avoiding unnecessary clinic visits through better management of appointments and medications, thus reducing healthcare expenses.

12. Improved Patient-Doctor Communication: Medimate facilitates better communication between patients and healthcare providers, leading to more productive and informed consultations, ultimately improving treatment outcomes.

1.4. HARDWARE AND SOFTWARE REQUIREMENTS

Hardware Requirements:

1. Computer: A desktop or laptop computer is required for development.
2. Processor: A multi-core processor (dual-core or higher) for efficient compilation and running of the Android Studio IDE.
3. RAM: A minimum of 4 GB RAM to handle the resource-intensive nature.
4. Storage: Adequate free storage space for the Android Studio IDE.

Software Requirements:

1. Operating System: The computer should run a supported operating system. Android Studio is compatible with Windows, macOS, and Linux
2. Java Development Kit (JDK): Android Studio requires a JDK to be installed
3. Android Studio: The latest version of Android Studio, available from the official Android developer website, should be installed on the development machine.
4. Internet Connection: An internet connection is needed to download Android Studio and necessary dependencies, as well as for accessing documentation and updates.

CHAPTER 2

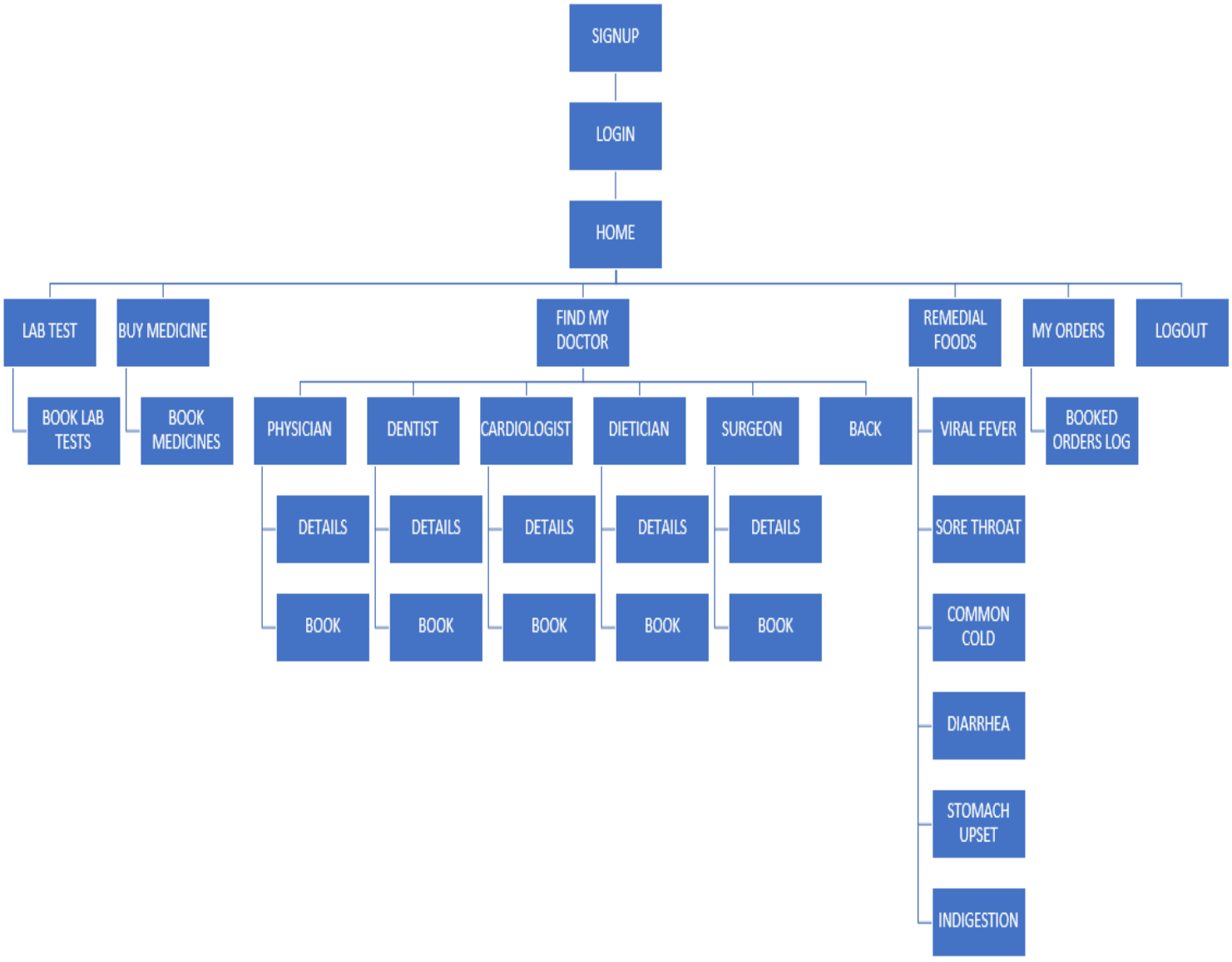
WEB DESIGN TECHNOLOGIES USED

The Medimate app primarily involves Android app development rather than web design. Therefore, the technologies used for this project would revolve around Android development rather than traditional web technologies. Here are the key technologies involved in developing the Android app:

- Java Programming Language:
    - Java: Java has traditionally been the primary language for Android development. It's versatile and widely used in the Android community.
- Android Studio: Android Studio is the official integrated development environment (IDE) for Android app development. It provides tools for designing, coding, testing, and debugging Android applications.
- XML (Extensible Markup Language):
- XML is used for defining the layout and structure of the user interface in Android apps. Android Studio includes a visual layout editor that generates XML files for UI components.
- Gradle: The Gradle build system is used for automating the build process of the Android app. It manages project dependencies, compiles code, and produces the APK (Android Package) file.
- Android SDK (Software Development Kit): The Android SDK provides the necessary libraries, tools, and APIs for Android app development. It includes everything from UI components to device-specific functionalities.
- Android Emulator: The Android Emulator is used for testing the app on virtual devices with different screen sizes, resolutions, and Android versions. It comes bundled with Android Studio.

CHAPTER 3

3. DESIGN



3.2. PROGRAM

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.my_health">
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.My_health">
        <activity
            android:name=".RemedialFoods"
            android:exported="false">
            <meta-data
                android:name="android.app.lib_name"
                android:value="" />
        </activity>
        <activity
            android:name=".article"
            android:exported="true" />
        <activity
```

```
    android:name=".articles"
    android:exported="true" />
<activity
    android:name=".medicine"
    android:exported="true" />
<activity
    android:name=".medicines"
    android:exported="true" />
<activity
    android:name=".test_1"
    android:exported="true" />
<activity
    android:name=".myorders"
    android:exported="true" />
<activity
    android:name=".labtest"
    android:exported="true" />
<activity
    android:name=".booking"
    android:exported="true" />
<activity
    android:name=".doctors_details"
    android:exported="true" />
```

```
        <activity
            android:name=".findmydoc"
            android:exported="true" />
        <activity
            android:name=".Home"
            android:exported="true" />
        <activity
            android:name=".Register"
            android:exported="true" />
        <activity
            android:name=".Login"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <meta-data
            android:name="preloaded_fonts"
            android:resource="@array/preloaded_fonts" />
    </application>
</manifest>
```

```
package com.example.my_health;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.TextView;
public class article extends AppCompatActivity {
    TextView name;
    ImageView imageView;
    Button back_a;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_article);
        name=findViewById(R.id.topic_name);
        imageView=findViewById(R.id.imageView);
        back_a=findViewById(R.id.back_a);
        Intent intent=getIntent();
        String namet= intent.getStringExtra("position");
        name.setText(namet);
         if (namet.compareTo("COVID-19") == 0){
```

```
            imageView.setImageResource(R.drawable.covid);
        }
        if (namet.compareTo("SMOKING KILLS")==0){
            imageView.setImageResource(R.drawable.smoking);
        }
        if (namet.compareTo("HEALTHY EATING") == 0){
            imageView.setImageResource(R.drawable.water);
        }
        if (namet.compareTo("EXERCISE DAILY") == 0){
            imageView.setImageResource(R.drawable.exercise);
        }
        back_a.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(article.this,Home.class));
            }
        });
    }
}
package com.example.my_health;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
```

```
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.ListView;
import android.widget.SimpleAdapter;
import java.util.ArrayList;
import java.util.HashMap;
public class articles extends AppCompatActivity {
    ListView art_list;
    Button art_back;
    SimpleAdapter adapt;
    String[] lists;
    HashMap<String, String> item;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_articles);
        art_list = findViewById(R.id.art_list);
        art_back = findViewById(R.id.art_back);
        lists= new String[]{"COVID-19", "SMOKING KILLS", "HEALTHY EATING"};
```

```
        ArrayAdapter adapt = new
ArrayAdapter(this,R.layout.support_simple_spinner_dropdown_item,lists);
        art_list.setAdapter(adapt);
        art_list.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
                Intent intent = new Intent(articles.this,article.class);
                intent.putExtra("position",lists[position]);
                System.out.println(lists[position]);
                startActivity(intent);
            }
        });
        art_back.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(articles.this,Home.class));
            }
        });
    }
}
package com.example.my_health;
import androidx.appcompat.app.AppCompatActivity;
```

```
import android.app.AlertDialog;
import android.app.DatePickerDialog;
import android.app.TimePickerDialog;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.TextView;
import android.widget.TimePicker;
import java.util.Calendar;
public class booking extends AppCompatActivity {
    TextView bname,baddress,bcash,registered;
    Button confirm,bback,time,date;
    private DatePickerDialog datePickerDialog;
    private TimePickerDialog timePickerDialog;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_booking);
        bname = findViewById(R.id.med_name);
        baddress = findViewById(R.id.baddress);
        bcash = findViewById(R.id.med_price);
```

```
registered = findViewById(R.id.registered);
confirm = findViewById(R.id.add_cart_med);
bback = findViewById(R.id.back_button_med);
time=findViewById(R.id.timebutton);
date=findViewById(R.id.datebutton);
Intent it = getIntent();
String name= it.getStringExtra("docname");
String address= it.getStringExtra("docaddress");
String cash= it.getStringExtra("docfees");
bname.setText(name);
baddress.setText(address);
bcash.setText(cash);
datepicker();
timepicker();
date.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        datePickerDialog.show();
    }
});
time.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
```

```
            timePickerDialog.show();
        }
    });
    confirm.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            registered.setText("APPOINTMENT BOOKED");
            startActivity(new Intent(booking.this,findmydoc.class));
        }
    });
    bback.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            startActivity(new Intent(booking.this,findmydoc.class));
        }
    });
}
  private void datepicker(){
    DatePickerDialog.OnDateSetListener dateSetListener = new
DatePickerDialog.OnDateSetListener() {
        @Override
        public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {
            date.setText(dayOfMonth+"/"+month+"/"+year);
```

```
        }
    };
    Calendar calendar = Calendar.getInstance();
    int year = calendar.get(Calendar.YEAR);
    int month = calendar.get(Calendar.MONTH);
    int day = calendar.get(Calendar.DAY_OF_MONTH);
    datePickerDialog = new DatePickerDialog(this,
AlertDialog.THEME_DEVICE_DEFAULT_DARK,dateSetListener,year,month,day);
    datePickerDialog.getDatePicker().setMinDate(calendar.getTimeInMillis()+86400000);}
  private void timepicker(){
    TimePickerDialog.OnTimeSetListener timeSetListener = new
TimePickerDialog.OnTimeSetListener() {
        @Override
        public void onTimeSet(TimePicker view, int hourOfDay, int minute) {
            time.setText(hourOfDay+":"+minute);
        }
    };
    Calendar calendar = Calendar.getInstance();
    int hour = calendar.get(Calendar.HOUR);
    int mins = calendar.get(Calendar.MINUTE);
    timePickerDialog = new
TimePickerDialog(this,AlertDialog.THEME_DEVICE_DEFAULT_DARK,timeSetListener,hou
r,mins,true);
  }
```

```
}
package com.example.my_health;
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import androidx.annotation.Nullable;
import java.util.ArrayList;
public class Database extends SQLiteOpenHelper {
    public Database(@Nullable Context context, @Nullable String name, @Nullable
SQLiteDatabase.CursorFactory factory, int version) {
        super(context, name, factory, version);
    }
    @Override
    public void onCreate(SQLiteDatabase db) {
        String query1 = "create table users(username text ,email text,password text,phone text ) ";
        db.execSQL(query1);
        String query2 = "create table cart(username text ,product text,price float,type text ) ";
        db.execSQL(query2);
    }
    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
```

```
}
public void register(String username,String email,String phone,String password){
    ContentValues cv = new ContentValues();
    cv.put("username",username);
    cv.put("email",email);
    cv.put("phone",phone);
    cv.put("password",password);
    SQLiteDatabase db =getWritableDatabase();
    db.insert("users",null,cv);
    db.close();
}
public int login(String username, String password){
    int match = 0;
    String [] str= new String[2];
    str[0]=username;
    str[1]=password;
    SQLiteDatabase db = getReadableDatabase();
    Cursor cr = db.rawQuery("select * from users where username = ? and password = ?",str);
    if (cr.moveToFirst()){match=1;}
    return match;
}
public void addingtocart(String username,String product,float price,String type){
    ContentValues cv = new ContentValues();
```

```
    cv.put("username",username);
    cv.put("product",product);
    cv.put("price",price);
    cv.put("type",type);
    SQLiteDatabase db =getWritableDatabase();
    db.insert("cart",null,cv);
    db.close();
}
public int checkcart(String username,String product){
    int result=0;
    String[] str = new String[2];
    str[0] = username;
    str[1] = product;
    SQLiteDatabase db = getReadableDatabase();
    Cursor cr = db.rawQuery("select * from cart where username = ? and product = ?",str);
    if (cr.moveToFirst()){result=1;}
    db.close();
    return  result;
}
public int removecart(String username){
    int result=0;
    String[] str = new String[1];
    str[0] = username;
```

```
        SQLiteDatabase db = getWritableDatabase();
        db.delete("cart","username = ?",str);
        db.close();
        return  result;
    }
    public ArrayList getcartdata(String username){
        ArrayList<String> arr = new ArrayList<>();
        SQLiteDatabase db = getReadableDatabase();
        String[] str = new String[1];
        str[0] = username;
        Cursor cr = db.rawQuery("select * from cart where username = ? ",str);
        if (cr.moveToFirst()){
            do {
                String product = cr.getString(1);
                String price = cr.getString(2);
                arr.add(product+"$"+price);
            }while(cr.moveToNext());
        }
        db.close();
        return arr;
    }
}
```

```
package com.example.my_health;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.AdapterView;

import android.widget.Button;

import android.widget.ListView;

import android.widget.SimpleAdapter;

import android.widget.TextView;

import java.util.ArrayList;

import java.util.HashMap;

public class doctors_details extends AppCompatActivity {

    private String [][] PHYSICIAN = {

            {"Name : Dr. Zeeshan Saeed ","Address : MD Health Center ","Experience : 5 Years
","Fees : Rs. 2500"},

            {"Name : Dr. Idrees Ahmed ","Address : Central Park Teaching Hospital ","Experience :
7 Years ","Fees : Rs. 2500"},

            {"Name : Dr. Maleeha Faud ","Address : MD Health Center ","Experience : 5 Years
","Fees : Rs. 2500"},

            {"Name : Dr. Tabeer Sheikh ","Address : MD Health Center ","Experience : 3 Years
","Fees : Rs. 2500"},

            {"Name : Dr. Ali Shehvaiz Younus ","Address : Reactive Physio ","Experience : 5 Years
","Fees : Rs. 1000"},
```

{"Name : Miss. Namrah Ahmed ","Address : PhysioFitt Hospital ","Experience : 3 Years ","Fees : Rs. 2000"}

};

private String [][] DENTIST= {

{"Name : Dr. Urwa Javed ","Address : JA Aesthetics Dental Skin and Hair ","Experience : 2 Years ","Fees : Rs. 2000"},

{"Name : Dr. Urooj Bahadur Awan ","Address : JA Aesthetics Dental Skin and Hair ","Experience : 4 Years ","Fees : Rs. 2000"},

{"Name : Dr. Saqib Zia Ahmed Toor ","Address : Teeth and Gums - Best Veneers ","Experience : 4 Years ","Fees : Rs. 1000"},

{"Name : Dr. Mian Muhammad Bilal","Address : Reliance Dental Care ","Experience : 12 Years ","Fees : Rs. 1800"},

{"Name : Dr. Aamer Iqbal ","Address : Dental Care Clinic ","Experience : 27 Years ","Fees : Rs. 500"},

{"Name : Dr. Aqsa Abdul Ghaffar ","Address : Fatima Bai Hospital ","Experience : 1 Year ","Fees : Rs. 620"}

};

private String [][] SURGEON= {

{"Name : Dr. Amjad Saeed Mian ","Address : Saleem Memorial Trust Hospital ","Experience : 38 Years ","Fees : Rs. 3000"},

{"Name : Dr. Mirza Arshad Beg","Address : Liaquat National Hospital ","Experience : 7 Years ","Fees : Rs. 1500"},

{"Name : Dr. Ahsan Riaz","Address : Plasthetics ","Experience : 18 Years ","Fees : Rs. 2000"},

{"Name : Prof. Dr. Asim Jaffary ","Address : Hill Park General Hospita ","Experience : 33 Years ","Fees : Rs. 1000"},

```
        {"Name : Dr. Iftikhar Ahmed ","Address : Advanced International Hospital
","Experience : 15 Years ","Fees : Rs. 2000"},

        {"Name : Dr. Syed Asif Ali Zaidi","Address : Sir Syed Hospital ","Experience : 20 Years
","Fees : Rs. 1000"}

    };

    private String [][] DIETITIAN= {

        {"Name : Ms. Rebecca Tariq ","Address : Omar Hospital & Cardiac Centre
","Experience : 13 Years ","Fees : Rs. 2500"},

        {"Name : Ms. Sarah Ikram ","Address : South City Hospital ","Experience : 14 Years
","Fees : Rs. 2500"},

        {"Name : Ms. Mehwish Idrees ","Address : Evon Aesthetic Center ","Experience : 7
Years ","Fees : Rs. 2000"},

        {"Name : Dr. Saira Salman ","Address : Quick Care Clinic ","Experience : 25 Years
","Fees : Rs. 2500"},

        {"Name : Ms. Hina Anis ","Address : Karachi Medical Complex ","Experience : 2 Years
","Fees : Rs. 2500"},

        {"Name : Dr. Uswa Chaudhry","Address : Beautiholics Clinic ","Experience : 8 Years
","Fees : Rs. 1500"} } ;

    private String [][] CARDIOLOGIST={

        {"Name : Dr. Usama Makhdoom ","Address : Noor General Hospital ","Experience : 12
Years ","Fees : Rs. 1800"},

        {"Name : Dr. Abdul Wahab Shahid ","Address : Capital International Hospital
","Experience : 12 Years ","Fees : Rs. 1500"},

        {"Name : Dr. Asma Rauf ","Address : Neuface Skin and Medical Center ","Experience :
7 Years ","Fees : Rs. 1500"},
```

```
        {"Name : Dr. Abdul Salam Wazir ","Address : HM Diagnostic Center  ","Experience : 25Years ","Fees : Rs. 2000"},

        {"Name : Dr. Syed Naveed Pirzada ","Address : Smart Medical and Diagnostic ","Experience : 7 Years ","Fees : Rs. 2000"},

        {"Name : Assist. Prof. Dr. Farhan Faisal","Address : Al Safiya Medical and Diagnostic ","Experience : 18 Years ","Fees : Rs. 1500"}

    };

    TextView doctext;

    ListView docdetails;

    Button backtomydoc;

    String [][] doc_details= {};

    ArrayList list;

    HashMap<String, String> item;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_doctors_details);

        doctext=findViewById(R.id.lab);

        docdetails=findViewById(R.id.cartdetails);

        backtomydoc=findViewById(R.id.backtomain);

        Intent it = getIntent();

        String title= it.getStringExtra("title");

        doctext.setText(title);
```

```
    if(title.compareTo("PHYSICIAN") == 0){
        doc_details = PHYSICIAN ;
    }
    if(title.compareTo("DENTIST") == 0){
        doc_details = DENTIST ;
    }
    if(title.compareTo("SURGEON") == 0){
        doc_details = SURGEON ;
    }
    if(title.compareTo("DIETITIAN") == 0){
        doc_details = DIETITIAN ;
    }
    if(title.compareTo("CARDIOLOGIST") == 0){
        doc_details = CARDIOLOGIST ;
}
    backtomydoc.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            startActivity(new Intent(doctors_details.this,findmydoc.class));
        }
    });
    list = new ArrayList();
    for(int i = 0 ; i < doc_details.length;i++){
```

```
    item = new HashMap<String, String>();
    item.put("docname",doc_details[i][0]);
    item.put("docaddress",doc_details[i][1]);
    item.put("docexperience",doc_details[i][2]);
    item.put("docfees",doc_details[i][3]+" only");
    list.add(item);
}
SimpleAdapter adap = new SimpleAdapter(
        this,list,
        R.layout.detaildesign,
        new String[]{"docname","docaddress","docexperience","docfees"},
        new int[]{R.id.t_name, R.id.t_price,
        R.id.docexperience, R.id.docfees});
docdetails.setAdapter(adap);
docdetails.setOnItemClickListener(new AdapterView.OnItemClickListener() {
    @Override
    public void onItemClick(AdapterView<?> parent, View view, int i, long id) {
        Intent intent = new Intent(doctors_details.this,booking.class);
        intent.putExtra("docname",doc_details[i][0]);
        intent.putExtra("docaddress",doc_details[i][1]);
        intent.putExtra("docfees",doc_details[i][3]+" only");
        startActivity(intent);
    }
```

```
        });}
}
package com.example.my_health;
import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
public class findmydoc extends AppCompatActivity {
    CardView physician , dentist , cardiologist , dietitian, surgeon , back;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_findmydoc);
        physician = findViewById(R.id.Physician);
        dentist = findViewById(R.id.dentist);
        cardiologist = findViewById(R.id.cardiologist);
        dietitian = findViewById(R.id.dietition);
        surgeon= findViewById(R.id.surgeon);
        back= findViewById(R.id.back);
        physician.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
```

```
        Intent intent = new Intent(findmydoc.this,doctors_details.class);
        intent.putExtra("title","PHYSICIAN");
        startActivity(intent);
    }
});
dentist.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(findmydoc.this,doctors_details.class);
        intent.putExtra("title","DENTIST");
        startActivity(intent);
    }
});
surgeon.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(findmydoc.this,doctors_details.class);
        intent.putExtra("title","SURGEON");
        startActivity(intent);
    }
});
dietitian.setOnClickListener(new View.OnClickListener() {
    @Override
```

```
        public void onClick(View v) {
            Intent intent = new Intent(findmydoc.this,doctors_details.class);
            intent.putExtra("title","DIETITIAN");
            startActivity(intent);
        }
    });
    cardiologist.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            Intent intent = new Intent(findmydoc.this,doctors_details.class);
            intent.putExtra("title","CARDIOLOGIST");
            startActivity(intent);
        }
    });
    back.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            startActivity(new Intent(findmydoc.this,Home.class));
        }
    });
  }
}
package com.example.my_health;
```

```
import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;
import android.content.Intent;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class Home extends AppCompatActivity {
    CardView labtest,buymedicine,findmydoc,articles,orders,logout;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_home);
        labtest = findViewById(R.id.c_labtest);
        buymedicine= findViewById(R.id.c_buymedicine);
        findmydoc = findViewById(R.id.c_finddoc);
        articles = findViewById(R.id.c_articles);
        orders = findViewById(R.id.c_orderdetails);
        logout = findViewById(R.id.logout);
        labtest.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
```

```
        startActivity(new Intent(Home.this,labtest.class));


    }
});

findmydoc.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {


        startActivity(new Intent(Home.this,findmydoc.class));
    }
});
logout.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        startActivity(new Intent(Home.this,Login.class));
    }
});
orders.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        startActivity(new Intent(Home.this,myorders.class));
    }
```

```
        });
        buymedicine.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(Home.this,medicines.class));
            }
        });
        articles.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(Home.this,RemedialFoods.class));
            }
        });
    }
}
package com.example.my_health;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
```

```
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
public class Login extends AppCompatActivity {
    EditText login_username ,login_password;
    Button login_button;
    TextView register_nu;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login2);
        login_username= findViewById(R.id.r_email);
        login_password= findViewById(R.id.r_Cpassword);
        login_button= findViewById(R.id.add_cart_med);
        register_nu= findViewById(R.id.registered);
        Database db = new Database(getApplicationContext(),"myhealth",null,1);
        login_button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {//startActivity(new Intent(Login.this,Home.class));
               String username = login_username.getText().toString();
                String password = login_password.getText().toString();
                if (username.length() == 0 || password.length() == 0){
```

```
            Toast.makeText(getApplicationContext(), "Please fill the complete information",
Toast.LENGTH_SHORT).show();
        }else{
            if(db.login(username,password)==1){
                Toast.makeText(getApplicationContext(), "LOGIN SUCCESSFULLY",
Toast.LENGTH_SHORT).show();
                SharedPreferences sharedPreferences = getSharedPreferences("sharedprefs",
Context.MODE_PRIVATE);
                SharedPreferences.Editor editor = sharedPreferences.edit();
                editor.putString("username",username);
                editor.apply();
                startActivity(new Intent(Login.this,Home.class));
            }
        else{Toast.makeText(getApplicationContext(), "INVALID USERNAME AND
PASSWORD", Toast.LENGTH_SHORT).show();
            }
        }
    });
  register_nu.setOnClickListener(
        new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(Login.this,Register.class));
```

```
            }
        }
    );
    }
}
package com.example.my_health;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.Button;
import android.widget.ListView;
import android.widget.SimpleAdapter;
import java.util.ArrayList;
import java.util.HashMap;
public class labtest extends AppCompatActivity {
    Button myorders,back;
    ListView list;
    SimpleAdapter adapt;
    ArrayList lists;
    HashMap<String, String> item;
    private String[][] packages={
```

```
        {"PACKAGE 1: E.C.G ","1100"},
        {"PACKAGE 2: Echocardiography ","4800"},
        {"PACKAGE 3: HAV Total Antibody ","2600"},
        {"PACKAGE 4: Transferrin ","600"},
        {"PACKAGE 5: IGf -1 (Insulin-like growth factor 1)", "7200"},
        {"PACKAGE 6: IGRA          ","15600"},
        {"PACKAGE 7: Gamma-Glutamyl Transpeptidase ","660"},
        {"PACKAGE 8: Albumin-to-creatinine ratio (ACR) ","1050"},
        {"PACKAGE 9: Anti SARS-CoV-2 IgG,IgM ","3500"},
        {"PACKAGE 10: Anti HCV (Hepatitis C Antibody) Screening ","1050"},
        {"PACKAGE 11: COVID-19","5000"}
};
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_labtest);
    list =findViewById(R.id.art_list);
    myorders =findViewById(R.id.tomyorders_med);
    back =findViewById(R.id.art_back);
    lists = new ArrayList();
    for(int i = 0 ; i < packages.length;i++){
        item = new HashMap<String, String>();
        item.put("name",packages[i][0]);
```

```
    item.put("price","PRICE = "+packages[i][1]);
    lists.add(item);
}
adapt= new SimpleAdapter(this,lists,R.layout.labtest_adap,new String[]{"name","price"},
        new int[]{R.id.t_name, R.id.t_price});
list.setAdapter(adapt);
list.setOnItemClickListener(new AdapterView.OnItemClickListener() {
    @Override
    public void onItemClick(AdapterView<?> parent, View view, int i, long id) {
        Intent intent = new Intent(labtest.this,test_1.class);
        intent.putExtra("name",packages[i][0]);
        intent.putExtra("price",packages[i][1]);
        startActivity(intent);
    }
});
myorders.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        startActivity(new Intent(labtest.this,myorders.class) );
    }
});
back.setOnClickListener(new View.OnClickListener() {
    @Override
```

```
        public void onClick(View v) {
            startActivity(new Intent(labtest.this,Home.class));
        }
    });
  }
}
package com.example.my_health;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
public class Register extends AppCompatActivity {
  EditText r_email,r_username,r_phone,r_password,r_Cpassword;
  Button register_button;
  TextView login_nu;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_register);
```

```
r_email = findViewById(R.id.r_email);
r_username = findViewById(R.id.med_name);
r_phone = findViewById(R.id.baddress);
r_password = findViewById(R.id.med_price);
r_Cpassword = findViewById(R.id.r_Cpassword);
register_button = findViewById(R.id.add_cart_med);
login_nu = findViewById(R.id.registered);
login_nu.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        startActivity(new Intent(Register.this,Login.class));
    }
});
register_button.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String username = r_username.getText().toString();
        String email = r_email.getText().toString();
        String phone = r_phone.getText().toString();
        String password = r_password.getText().toString();
        String Cpassword = r_Cpassword.getText().toString();
        Database db = new Database(getApplicationContext(),"myhealth",null,1);
```

```
        if (username.length() == 0 || password.length() == 0 || email.length() == 0 ||
phone.length() == 0|| Cpassword.length() == 0){
            Toast.makeText(getApplicationContext(), "Please fill the complete information",
Toast.LENGTH_SHORT).show();
        }else{
            if (password.compareTo(Cpassword)==0){
                if( valid(password)){
                    db.register(username,email,phone,password);
                Toast.makeText(getApplicationContext(), "REGISTERED
SUCCESSFULLY", Toast.LENGTH_SHORT).show();
                startActivity(new Intent(Register.this,Login.class));
                }
                else{
                Toast.makeText(getApplicationContext(), "PASSWORD MUST CONTAIN
AT LEAST 8 CHARACTERS , HAVING LETTERS AND DIGITS",
Toast.LENGTH_SHORT).show();
                }
            }else{
            Toast.makeText(getApplicationContext(), "CONFIRM PASSWORD DIDN'T
MATCH", Toast.LENGTH_SHORT).show();
            }
            }
        }
    });
```

```
    }
    public static boolean valid(String password){
        int failure1=0,failure2=0;
        if(password.length()<8){
            return false;
        }
        else{
            for (int d=0 ;  d< password.length();d++){
                if (Character.isDigit(password.charAt(d))){
                    failure1 = 1;
                }}
            for (int l=0 ;  l< password.length();l++){
                if (Character.isLetter(password.charAt(l))){
                    failure2 = 1;
                }}
            if(failure1 == 1 && failure2 == 1){
                return true;
            }
            return false;
        }
    }
}
package com.example.my_health;
```

```
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }}
```

CHAPTER 4

4. IMPLEMENTATION PROCESS

4.1. MODULES USED TO BUILD A PROJECT

- Android Framework: The project is built on top of the Android framework, which provides the essential components and APIs for developing Android applications
- AppCompatActivity: This class is imported from the androidx.appcompat.app package. It is a part of the AndroidX library, which provides backward compatibility for modern Android features on older versions of Android
- Views: The project utilizes various Android UI components such as EditText, Button, and TextView to create the user interface. These views are imported from the android.widget package
- Listeners: The View.OnClickListener interface is used to handle click events on the Button. It is imported from the android.view package
- Bundle: The Bundle class is used to pass data between activities. It is imported from the android.os package
- R class: The R class is an automatically generated class that contains references to resources such as layouts, strings, and IDs. It is used to access resources defined in the project's res directory
- EditText, Button, TextView: These are the UI elements used in the layout file (activity_main.xml). They are imported from the android.widget package
- findViewById(): This method is used to find a view by its ID. It is called on the activity instance to locate views within the layout
- Overall, the project relies on the Android framework, AndroidX library, and standard Java language features to build the application. Additionally, resources such as layouts and strings are defined in the project's res directory, and the R class is used to reference them.

CHAPTER 5

RESULTS

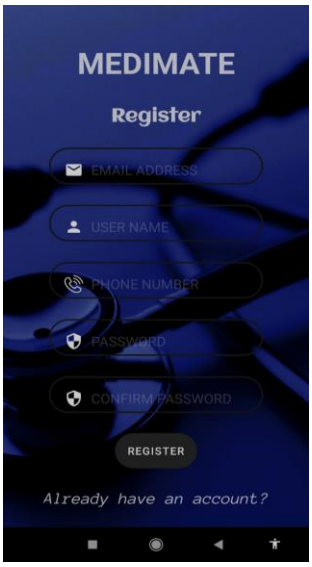


Fig 5.1: Register

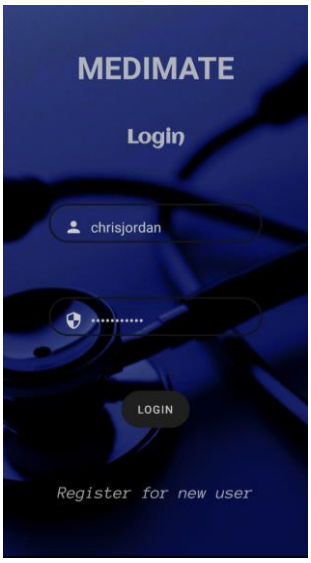


Fig 5.2: Login

Fig 5.3: Home

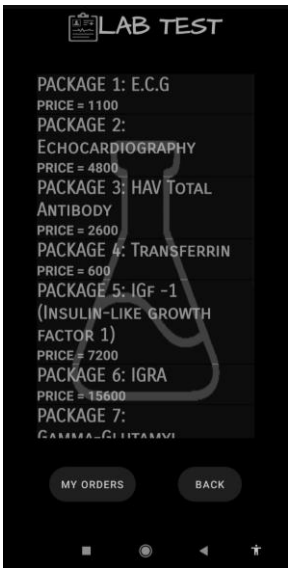
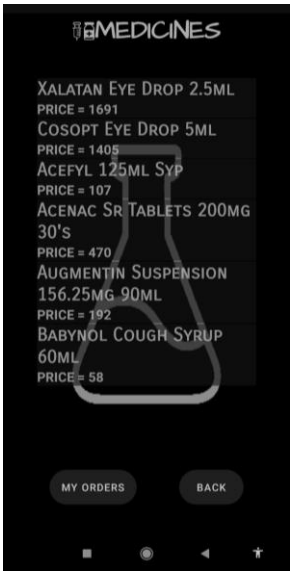


Fig 5.4: Lab test



3Fig 5.5: Medicines

Fig 5.6: Find Doctor

Fig 5.7: Remedial foods

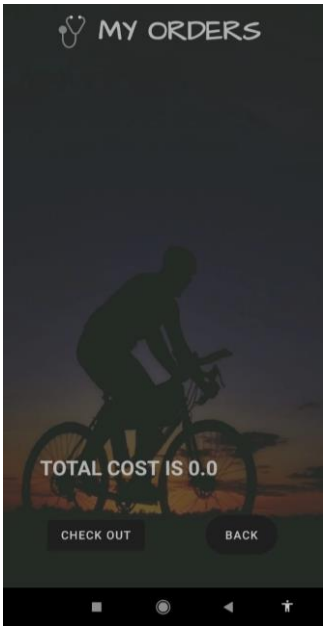


Fig 5.8: My orders

CHAPTER 6

CONCLUSION

In conclusion, the development and implementation of the Medimate app represent a significant step forward in revolutionizing healthcare management for users. By leveraging modern technologies and user-centric design principles, Medimate offers a comprehensive solution for individuals to conveniently manage their healthcare needs from the palm of their hand. Through intuitive user interfaces and seamless integration with backend services, Medimate empowers users to schedule doctor appointments, book laboratory tests, order prescription medications, and receive personalized dietary recommendations tailored to their specific health conditions. The implementation process outlined for Medimate involves meticulous planning, development, testing, and deployment to ensure a smooth and reliable user experience.

In summary, Medimate represents a significant advancement in healthcare technology, offering users a convenient and personalized platform to take control of their health and well-being. With ongoing maintenance, updates, and user feedback, Medimate is poised to continue evolving and improving, ultimately contributing to better healthcare outcomes for individuals worldwide.

CHAPTER 7

REFERENCES

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3. Journal of Medical Internet Research (JMIR) - Publishes research articles and studies on healthcare technology and digital health: https://www.jmir.org/

4. Healthcare IT News - Offers news, analysis, and insights on healthcare technology trends and innovations: https://www.healthcareitnews.com/.