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DEPARTMENT OF COMPUTER SCIENCE

KHOPOLI – 410203

A

PROJECT REPORT

ON

"**HEALTHCARE-ANDROID APP"**

UNDER THE GUIDANCE OF

Mrs.Nilam Patil

SUBMITTED TO

UNIVERSITY OF MUMBAI

BY

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T.Y.B.Sc (COMPUTER SCIENCE)

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Mrs. Neha Narendra Ghonge

T.Y.BSc(COMPUTER SCIENCE)

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Preliminary Investigation

ABSTRACT

Healthcare mobile apps are becoming a reality for users interested in keeping their daily activities under control. In the last years,several researchers have investigated the effect of healthcare mobile apps on the life of their users as well as the positive/negative impact they have on the quality of life. Nonetheless, it remains still unclear how users approach and interact with the developers of those apps. Understanding whether healthcare mobile app users request different features with respect to other applications is important to estimate the alignment between the development process of healthcare apps and the requests of their users. In this study, we perform an empirical analysis aimed at (i) classifying the user reviews of healthcare open-source apps and (ii) analyzing the sentiment with which users write down user reviews of those apps .In doing so, we define a manual process that enables the creation of an extended taxonomy of healthcare users' requests. The results of our study show that users of healthcare apps are more likely to request new features and support for other hardware than users of different types of apps. Moreover, they tend to be less critical of the defects of the application and better support developers when debug in..

Organization Chart:

History

Handheld medical apps are changing the healthcare landscape. While medical devices with embedded software have been around for over two decades, the advent of smartphones with touch screens, smart Bluetooth technologies and internet connectivity has brought about a tsunami of apps designed for every purpose, from monitoring body temperature to measuring heart rate. Today's medical apps are becoming increasingly smarter, multi-functional and user-friendly.

In the past, healthcare and life science companies concentrated on manufacturing medical equipment and devices for hospitals and doctors. Now, they are switching to mobile apps more and more as their mainstream offering. The majority of these apps are intended for direct use by consumers and patients rather than doctors and caregivers. This has brought about a paradigm shift in people's perception of healthcare by making healthcare more accessible to patients.

Because mobile apps are so easily made and so widely distributed, they are no longer a novelty. Any group of people with sufficient knowledge of medical diseases/conditions and software development, can create an app and distribute it over the internet.

Users can order a medical device from online vendors, download the software on their smartphone and use it to monitor their own health.

Today, there are nearly 43,700 medical apps available in the Apple store alone. However, not all medical apps are genuine healthcare apps. Only about 54% of the medical apps available on iTunes are genuine healthcare apps, according to a report co-authored by Murray Aiken, executive director of the IMS Institute of Healthcare Informatics.

The same report states that 69 percent of the apps are intended for consumers and patients, while 31 percent are intended for clinical use. The majority of apps intended for consumers are simplistic in design, and do little more than provide information. Only 159 of them have the ability to track or capture data entered by the user, and fewer than 50 provide calculators or tools for users to measure their vitals.

In terms of mobile app evolution, there are three waves: maturing apps to assist care providers, evolving apps for patient support and emerging apps for care monitoring. While wave 1 apps are of a more informal nature, wave 2 apps are passive to active and wave 3 apps work in real time. HCP tools lead the way with an 11 percent market share, followed closely by medical reference,

animal health, medical meeting, healthy living, diabetes and corporate apps.

Mobile phone technologies have evolved to handle increasingly complex tasks. While the majority of apps are designed for simple tasks, some of the more sophisticated ones can handle high resolution imaging, real-time monitoring and other advanced functions. Based on functional complexity, vision care apps lead the market, followed by medical sensors and specialized apps for patients with psoriasis, cardiovascular conditions, cancer support, apps for medical reference, baby care and others.

Healthcare mobile apps are becoming popular as they help to redefine the medical industry and strengthen doctor-patient relationship. Both healthcare providers and customers have been using such apps on their smartphones and tablets to achieve excellent results in the field of healthcare....

Description of application

The Healthcare app basically focuses on patient or any end users needs i.e needs can be for motivational purpose,for fitness ,for medical blogging which can raise awareness.

Health apps are application programs that offer health-related services for smartphones and tablet PCs.

mobile health technologies enable patients to quickly send secure messages, schedule appointments, and connect to providers 24/7 for telemedicine visits. In fact, telemedicine is one of the fastest growing ways patients are using Health apps on their mobile devices. They love the convenience of conducting a provider visit on their phone or tablet, as well as the fact that they don't need to travel to the physician's office or take time off work. Most health systems are responding to the uptick in demand by offering telemedicine visits delivered by network physicians, as well as contracted telehealth physicians after hours and on weekends.

Limitations

1.It takes more time and more usage.

2.The option mybot is present but still it is not interactive.(chatbot)

3.It has minimal data collection.

4.while some of the options are still not interactive.

5.while app is very useful but some of the screens are not scrollable i.e dosen't support scrollable.

Proposed Application

In Proposed Application we can store all details in one machine. All The records can be maintained properly in this system,so there is not chance in making a mistake,therefore it is very helpful.

The first item on our list is security as a competitive advantage. It goes without saying that safety is important for any digital product that is setting itself up for success. In terms of healthcare marketing trends, this issue is even more relevant for obvious reasons for dealing with health data. People feel especially vulnerable about Electronic Health Records used by most online healthcare providers. If you are in this business, you have probably taken the extra measures needed for your product to be safe from all potential issues, both external and internal in their nature. As for marketing, the guarantee of security has its own important place in your pitch. Be explicit about the security guarantees of your app. Tell about it in your landing page.

Personal branding goes a long way in medical marketing. This is why it will be a huge benefit for your app to involve a renowned physician to do some promotion. Ambassador medical experts will create a memorable impression about your product and earn the needed trust on part of your potential audience. One of the keys to winning these names over will be the value of your product and this outreach will put it to a true test.

Advantages

1.Monitor your diet Easily:-

Weight watchers or people who want to gain weight can mention the type and amount of foods consumed at each meal. ...

2.Monitor Your Progress:-

Helps you to monitor your progress

3.Give Free Health and Fitness Tips:-

It also gives you free health and fitness tips.

4.Track Your Foot Steps:-

When you begin exercising, you must set realistic goals. You must set targets as to how much weight you want to lose in how much time. So, you can use mobile applications for health and fitness to set realistic goals and achieve them.

6.All In One Health Tool:-

It consist every thing like fitness,yoga,appointment ,creating blogs etc.

7.Keep You Motivated:-

"Remember a good meditation leads you togood motivation"

8.Carry Your Own Yoga Studio: All of us know that yoga is one of the most effective exercises to attain strength and flexibility. Most of them cannot afford yoga classes and don't have time for it. Well, yoga class is in your pocket now. The app has got yoga guidelines and videos for all the yoga poses.

Feasibility Study

It is an important part of the any system developing life cycle of preliminary investigation because only feasible projects go to development stages.

1)Technical feasibility:

Technical feasibility raises the questions like

a)Is it possible that the work can be done with current equipments, software technology and person?

b)Is new technology required, what is the possibilities that it can be developed?

In case of our project, the software which we have built up fully support current windows OS but it lacks the support of other environment OS. It is not depended on the large number of user. So, it can handle a very large number of user's environment.The support for the hardware:

It has full support for new hardware. So no hardware compatibility issues arise as it requires minimum configuration.

2)Economic feasibility:

It deals with economical impact of the system on the environment it is used i.e. benefit in creating the systems. And the project is economical feasible.

The system development cost will be significant so the proposed system is economically feasible.

3)Operational Feasibility:

As the user is familiar with the window environment and the system is developed in vb.net there is no need of special training for operational system. Hence the system is operationally feasible

STAKEHOLDERS

Stakeholders are those who have interest in the Successful implementation of the System.Stakeholder can be the administrative people who have all the authority of System.Stakeholders can be the management peoples. They have less authority than Administrative person. They maintain all the information about System.

Stake Holders:-

1. ***Patients****: Patients are key stakeholders, using mobile devices to access health records and lab tests, and make appointments. They can participate in their care in the emerging patient-centered health care models, potentially experiencing improved care and fewer medical errors.*
2. ***Clinician****s: Many clinicians appreciate the flexibility of mHealth devices and seek to improve care by accessing patients' records, utilizing computerized physician order entry, and prescribing medications electronically. They must balance costs, security and ease of use.*
3. ***Health care facilities****: Hospital and health systems, ambulatory surgery centers, long-term care facilities, home health agencies, other ancillary providers, and community group homes seek improvements in operational efficiency, reductions in the cost of patient care delivery, the ability to*

facilitate quality measurement, and expanded reporting capabilities.

4. ***Additional stakeholders****: Vendors, suppliers, distributors, small-to-medium enterprise app developers and consultants could potentially develop business via mHealth technologies, and major platform providers also benefit from these developments. The diversity of business models coming from the various players also influences the mHealth market and thus user expectations, regulatory processes, etc.*

Software Requirements:-

- ***Operating System: -*** *Windows XP/2010.*

Front End:-

xml

Back End:-

Java

IDE:-

Android Studio

Hardware Requirements:-

- ***C.P.U:-*** *RMD Ryzen.*
- ***R.A.M:-*** *8 Giga Bytes.*
- ***Hard Disk:-*** *40 Giga Bytes.*
- ***Type of System:-*** *Single User.*

Gantt Chart

Task Name	Date	December					January					February					March					April					Sign	Remark
		w1	w	w	w	w	w1	w2	w	w4	w	w1	w	w3	w	w5	w1	w2	w3	w4	w5	w1	w2	w3	w4	w5		
1. Project Searches																												
1.1 Planning the Idea																												
1.2 Determine Scope																												
2. Feasibility Phase																												
2.1Technical Feasibility																												
2.2 Economic Feasibility																												
2.3 Application Feasibility																												
2.4 Operational Feasibility																												
3. Integration of system requirements																												
3.1 Write stmt of need																												
3.2 Develop Event Table, Use case Diagram																												
4. Data and Process Modeling																												
4.1 Define Project Data																												
4.2 Identify process work																												
4.3 Organize the data																												
5. Project Scheduling																												
5.1 Estimate resource Duration procedure																												
5.2 Develop Gantt Chart																												
6.Application Design																												
6.1 Develop Page Layout																												
7. Program Coding																												
7.1 Write a code																												
8. Unit Testing																												
8.1 Check particular function																												
8.2 Code Modules																												
9. System Integration																												
9.1 Integrating Component of design																												
9.2 Integrating Coding to run																												
10. System Implementation																												
10.1 Run the data to give it																												
11. Acceptance Testing																												
11.1 Check unit of code																												
11.2 Check Well Design Architecture																												

Application Analysis

Questionnaires

A questionnaire is a research instrument consisting of series of questions and other prompts for the purpose of gathering information from respondents. Although they are often designed for statistical analysis of the responses, this is not always the case.

Questionnaires have advantages over some other types of surveys in that they are cheap, do not require as much effort from the questioner as verbal or telephone surveys, and often have standardized answers that it make simple to compile data. However, such standardized answers may frustrate users. Questionnaires are also sharply limited by the fact that respondents must be able to read the questions and respond to them. Thus, for some demographic groups connecting a survey by questionnaire may not be practical.

- **Questions:**
  - How will the Application work?
  - What output will we get?
  - Who is going to handle Application?
  - What the system will print?
  - Is anyone can use this Application?
  - Is output from the Application is correct or not?
  - Is it expensive for to use?
  - Is any training taken by the user to use this Application?

Event Table:-

- ***EVENT TABLE :***

Event	Triggers	Source	Activity	Response	Destination
Database helper maintain user detail and login to the screen	*User visit login page*	*Home screen*	*maintain user details and login*	*login successful*	*Home screen*
Working with home screen fitness button is clickable or not	*User visit home screen*	*Fitness page*	*Home screen maintains it or sees use button is clickable*	*Reference details*	*Fitness page*
Yoga button is clickable or not in home screen	*User visit home screen*	*Yoga page*	*Yoga button is clickable or not*	*Yoga page open*	*Yoga page*
Motivation button is clickable or not in home screen	*User visit home screen*	*Motivation fax*	*Motivation button is clickable or not*	*Motivation page open*	*Motivation page*
Patient say button is clickable or not in home screen	*User visit home screen*	*Patient say page*	*Patient say button is clickable or not*	*Patient say open*	*Patient say page*
Blogs button is clickable or not in home screen	*User visit page*	*Blog page*	*Blog button is clickable*	*Blog page open*	*Blog page*
My bot button is clickable or not in home screen	*User visit page*	*My bot page*	*My bot button is clickable or not*	*My bot page opens*	*My bot page*
Floating action button as dialer in home screen	*User visit home screen*	*Button as a dialer means calling*	*Tab button one is clickable or not*	*Dialer open*	*Dialer page*

clickable or not (call button)					
About floating action button is clickable or not	*User visit home screen*	*About page*	*Fab button two is clickable or not*	*About opens*	*About page*

UseCase Digram

Healthcare Application

State Digram:-

ERD:-

Login details
App developer
End-user patient
Home screen
Other activites
Log out

Activity Digram:-

Sequence Digram:-

Class Digram:-

Application Design

Converting ERD To Table:-

Login :-

Field Name	DataType	Description
Ed_username	String	Enter username
Ed_password	String	Enter password

MainActivity:-

Field Name	DataType	Description
Ed_username	String	Enter username
Ed_password	String	Enter password
Ed_cpassword	String	Confirm password

Homescreen:-

Field Name	DataType	Description
btn_fitness	-	Fitness Activity opens
btn_yoga	-	Yoga activity opens
btn_motivation	-	Motivational Activity opens
btn_patientsay	-	Patientsay activity opens

btn_blogs	***-***	***Blogs activity opens***
btn_bot	***-***	***Mybot activity opens***

BMI :-

Field Name	***DataType***	***Description***
Weightkg	***Double***	***Weight in kgs***
Heightcm	***Double***	***Height in cms***
Heightft	***Double***	***Height in feet***
Heightin	***Double***	***Height in inches***

BMICalcUtil

Field	***DataType***	***Description***
Centimetres_in_meters	***Int***	***Centimetres in meter***
Inches_in_foot	***Int***	***Inches in foot***
BmI_Impherical_weight	***Int***	***BMI imperial weight***

Component Digram:-

Package Digram:-

Deployment Digram:-

- **DEP ANDROID APPLICATION DEPLOYMENT :**

Arcitecture Digram

Application Coding

Menu Tree:-

MY Health CARE APP
Login Form
Home screen
Main Activity Form
Fitness
Motivation
Patient say
Blog
My Tool
BMI
Webpage
BMIcale util

ProgramList:-

Form Name	*Purpose*
Login	*Username and password enable to support security issue*
Mainscreen	*Confirms the password and helps to enter in home screen*
Homescreen	*Consist of buttons with constraint for further process*
Fitness	*Opens the BMI page to calculate BMI*
BMI	*Calculate BMI*
Motivation	*Open webpage view*
Patientsay	*Open next activity*
Blogs	*Opens the screen with get and post option*
Mybot	*Opens next activity*

Program Description with naming constraints:-

Login page:-

Button Id /text id	*Data type*	*Description*
ed_username	*Text string*	*Enters the username*
ed_password	*Int*	*Enter the password*
btn_login	*-*	*Login message is displayed and move to next main activity*
btn_register	*-*	*For registration*

MainActiity page:-

Button Id /text id	*Data type*	*Description*
ed_username	*String*	*Enter user name*

ed_password	*Int*	*Enter password*
ed_cpassword	*Int*	*Enter confirm password*
btn_llogin	*-*	*Login message displayed and move to home screen*
btn_lregister	*-*	*Move to login class again and register*

Homescreen page

Button Id	*Description*
Fit	*Opens new activity*
Yoga	*Opens webpage*
Motivation	*Opens webpage*
Patient say1	*Opens new activity*
Blog	*Opens new activity*
Fab1	*Opens call activity*
Fab2	*Opens new activity*
Fab3	*Exits the screen*

Fitness

Textview / Button Id	*Data type*	*Description*
Textview1	*Text*	*Simply display the text*
Textview2	*Text*	*Simply display the text*
Textview3	*Text*	*Simply display the text*
Bmi	*-*	*Open new activity i.e bmicalcutil page*
Warmup	*-*	*Open new activity*
Pushups	*-*	*Open new activity*
Squats	*-*	*Open new activity*

BmI page:-

Edit text / buttonid	*Datatype*	*Description*
Weightkg	*Double*	*Enter weight in kgs*
Heightcm	*Double*	*Enter height in cm*
Weightlbs	*Double*	*Weight in lbs*
Height ft	*Double*	*Height in feets*
Heightin	*Double*	*Height in inches*

BMICalcutil:-

Edittext /button	*Data type*	*Description*
Centimetres _in_meter	*Int*	*Centimetres in meter*
Inches_in_foot	*Int*	*Inches in foot*
Bmi_imperical_weight_scalar	*Int*	*Bmi imperial units scalar*

Yoga

Id	*Description*
Webview1	*Opens webpage*
Textview	*Display textmessage*
Imageview	*Display image*

Motivation

Id	*Description*
Webview	*Opens webpage*
Textview2	*Display text*
Imageview	*Display image*

Blog

Id	*Datatype*	*Description*
Postbtn	*-*	*Post button used for posting*
Textdesc	*Text*	*Display the text*
Texttitle	*Text*	*Display the text*
Imagebtn	*-*	*Display image*
Getbtn	*-*	*For getting reply*

MyBOT

Id	*Datatype*	*Description*
Text	*String*	*For displaying text*
Imgbtn	*-*	*For displaying image*

Patientsay

Id	*Datatype*	*Description*
Text	*String*	*Display text*

Coding:-

Splash Activity:-

Java Code:-

SplashActivity.java

```
package com.example.myhealthcareapp;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;

public class SplashActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_splash);
        final Intent i = new Intent(this,Login.class);
        Thread timer = new Thread(){
            @Override
            public void run() {
                try {
                    sleep(2000);

                }catch (InterruptedException e){
                    e.printStackTrace();
                }finally {
                    startActivity(i);
                    finish();
                }
                }
            };
        timer.start();
        }

}
```

Xml Code:-

Activity_splash.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/main"
    tools:context=".SplashActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="75dp"
        android:layout_gravity="center"
        android:gravity="center"
        android:text="HealthCare"
        android:textSize="30dp"
        android:textStyle="bold" />

</LinearLayout>
```

Login:-

Java Code:-

Login.java

```
package com.example.myhealthcareapp;

import android.content.Intent;

import android.content.Context;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

import android.app.Activity;

import android.content.Context;

import android.content.Intent;

import android.os.Bundle;

import android.widget.Button;

import android.view.View;

import android.view.View.OnClickListener;

public class Login extends AppCompatActivity {

    Button btn_lregister, btn_llogin;

    EditText et_lusername, et_lpassword;


    DatabaseHelper databaseHelper;


    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_login);
```

```
databaseHelper = new DatabaseHelper(this);

et_lusername = (EditText) findViewById(R.id.et_lusername);
et_lpassword = (EditText) findViewById(R.id.et_lpassword);

btn_llogin = (Button) findViewById(R.id.btn_llogin);
btn_lregister = (Button) findViewById(R.id.btn_lregister);

btn_lregister.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(Login.this, MainActivity.class);
        startActivity(intent);
    }
});

btn_llogin.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String username = et_lusername.getText().toString();
        String password = et_lpassword.getText().toString();
        Intent int1= new Intent(Login.this,MainActivity.class);
                startActivity(int1);

        Boolean checklogin = databaseHelper.CheckLogin(username, password);
        if (checklogin == true) {
            Toast.makeText(getApplicationContext(), "Login Successful", Toast.LENGTH_SHORT).show();
```

```
            } else {
                Toast.makeText(getApplicationContext(), "Invalid username or password",
Toast.LENGTH_SHORT).show();
            }
        }
    });



  }
}
```

Xml code:-

Activity_login.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:background="@drawable/nurse"
  tools:context=".Login">

  <EditText
    android:id="@+id/et_lusername"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="145dp"
```

```
    android:ems="10"
    android:inputType="text"
    android:hint="Username" />

<EditText
    android:id="@+id/et_lpassword"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/et_lusername"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="50dp"
    android:ems="10"
    android:inputType="textPassword"
    android:hint="Password" />

<Button
    android:id="@+id/btn_llogin"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/et_lpassword"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="50dp"
    android:ems="10"
    android:text="Login"/>

<Button
    android:id="@+id/btn_lregister"
    android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_centerHorizontal="true"
        android:ems="10"
        android:text="Register"/>
</RelativeLayout>
```

Main Register and login:-

Java code:-

MainActivity.java

```
package com.example.myhealthcareapp;
import android.content.Intent;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    DatabaseHelper databaseHelper;
    EditText et_username, et_password, et_cpassword;
    Button btn_register, btn_login;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_main);

databaseHelper = new DatabaseHelper(this);
et_username = (EditText)findViewById(R.id.et_username);
et_password = (EditText)findViewById(R.id.et_password);
et_cpassword = (EditText)findViewById(R.id.et_cpassword);
btn_register = (Button)findViewById(R.id.btn_register);
btn_login = (Button)findViewById(R.id.btn_login);

btn_login.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(MainActivity.this, Login.class);
        startActivity(intent);
    }

});

btn_register.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String username = et_username.getText().toString();
        String password = et_password.getText().toString();
        String confirm_password = et_cpassword.getText().toString();

        if(username.equals("") || password.equals("") || confirm_password.equals("")){
            Toast.makeText(getApplicationContext(), "Fields Required", Toast.LENGTH_SHORT).show();
        }else{
```

```
                if(password.equals(confirm_password)){
                    Boolean checkusername = databaseHelper.CheckUsername(username);
                    if(checkusername == true){
                        Boolean insert = databaseHelper.Insert(username, password);
                        if(insert == true){
                            Toast.makeText(getApplicationContext(), "Registered", Toast.LENGTH_SHORT).show();
                            et_username.setText("");
                            et_password.setText("");
                            et_cpassword.setText("");
                        }
                    }else{
                        Toast.makeText(getApplicationContext(), "Username already taken",
Toast.LENGTH_SHORT).show();
                    }
                }else{
                    Toast.makeText(getApplicationContext(), "Password does not match",
Toast.LENGTH_SHORT).show();
                }
            }
        }
    });


    }
  }
```

Java code for DatabaseHelper:

```
package com.example.myhealthcareapp;


import android.content.ContentValues;
```

```
import android.content.Context;

import android.database.Cursor;

import android.database.sqlite.SQLiteDatabase;

import android.database.sqlite.SQLiteOpenHelper;



public class DatabaseHelper extends SQLiteOpenHelper {

    public static final String DATABASE_NAME = "login.db";



    public DatabaseHelper(Context context) {

        super(context, DATABASE_NAME, null, 1);

    }


    @Override

    public void onCreate(SQLiteDatabase db) {

        db.execSQL("CREATE TABLE user(ID INTEGER PRIMARY KEY AUTOINCREMENT, username TEXT, password
TEXT)");

    }


    @Override

    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {

        db.execSQL("DROP TABLE IF EXISTS user");

    }


    public boolean Insert(String username, String password) {

        SQLiteDatabase sqLiteDatabase = this.getWritableDatabase();

        ContentValues contentValues = new ContentValues();

        contentValues.put("username", username);
```

```
        contentValues.put("password", password);

        long result = sqLiteDatabase.insert("user", null, contentValues);

        if (result == -1) {

            return false;

        } else {

            return true;

        }

    }


    public Boolean CheckUsername(String username) {

        SQLiteDatabase sqLiteDatabase = this.getWritableDatabase();

        Cursor cursor = sqLiteDatabase.rawQuery("SELECT * FROM user WHERE username=?", new
String[]{username});

        if (cursor.getCount() > 0) {

            return false;

        } else {

            return true;

        }

    }


    public Boolean CheckLogin(String username, String password) {

        SQLiteDatabase sqLiteDatabase = this.getReadableDatabase();

        Cursor cursor = sqLiteDatabase.rawQuery("SELECT * FROM user WHERE username=? AND password=?",
new String[]{username, password});

        if (cursor.getCount() > 0) {

            return true;

        } else {

            return false;

        }
```

```
    }
}
```

Xml code:-

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/abc"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/et_username"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="65dp"
        android:ems="10"
        android:inputType="text"
        android:hint="Username"/>


    <EditText
        android:id="@+id/et_password"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="65dp"
    android:ems="10"
    android:layout_below="@+id/et_username"
    android:inputType="textPassword"
    android:hint="Password"/>

<EditText
    android:id="@+id/et_cpassword"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="65dp"
    android:ems="10"
    android:layout_below="@+id/et_password"
    android:inputType="textPassword"
    android:hint="Confirm Password"/>

<Button
    android:id="@+id/btn_register"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="65dp"
    android:ems="10"
    android:text="Register"
```

```
        android:layout_below="@+id/et_cpassword" />

    <Button
        android:id="@+id/btn_login"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:ems="10"
        android:text="Login"
        android:layout_alignParentBottom="true"/>

</RelativeLayout>
```

HomeScreen:-

Java code:-

HomeScreen.java

```
package com.example.myhealthcareapp;

import android.content.Intent;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
```

```
import com.google.android.material.floatingactionbutton.FloatingActionButton;


public class Homescreen extends AppCompatActivity {
    Button patientsay1, fit1, yoga, motivation, blog, bot;
    FloatingActionButton floatingActionButton1, floatingActionButton2, floatingActionButton3;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_homescreen);
        patientsay1 = (Button) findViewById(R.id.patientsay1);



        patientsay1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(Homescreen.this, Patientsay.class);
                startActivity(intent);
            }


        });
        fit1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(Homescreen.this, Fitness.class);
                startActivity(intent);
            }
```

```
});
yoga.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(Homescreen.this, Yoga.class);
        startActivity(intent);
    }

});

motivation.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(Homescreen.this, Motivation.class);
        startActivity(intent);
    }

});
blog.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(Homescreen.this, Blogs.class);
        startActivity(intent);
    }

});

bot.setOnClickListener(new View.OnClickListener() {
```

```
        @Override
        public void onClick(View v) {
            Intent intent = new Intent(Homescreen.this, Mybot.class);
            startActivity(intent);
        }

    });
    }

  }
```

Xml code:-

Activity_Homescreen.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  tools:context=".Homescreen">

  <TextView
    android:id="@+id/text1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_marginTop="8dp"
    android:ems="14"
```

```
    android:hint="welcome to health care app"
    android:inputType="text"
    android:textColor="@color/black"
    android:textColorHighlight="#03A9F4"
    android:textColorHint="#2B2222"
    android:textSize="45dp"
    android:textStyle="bold" />
<Button
    android:id="@+id/fit1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/text1"
    android:layout_marginTop="23dp"
    android:ems="16"
    android:text="Fitness"
    android:layout_centerHorizontal="true"
    android:drawableTop="@drawable/fit"/>

<Button
    android:id="@+id/yoga"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/fit1"
    android:layout_marginTop="16dp"
    android:drawableTop="@drawable/yoga"
    android:ems="16"
    android:layout_centerHorizontal="true"
    android:text="yoga" />
```

```
<Button
    android:id="@+id/motivation"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/yoga"
    android:layout_marginTop="16dp"
    android:drawableTop="@drawable/motivation2"
    android:ems="16"
    android:layout_centerHorizontal="true"
    android:text="motivation" />
<Button
    android:id="@+id/patientsay1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/motivation"
    android:layout_marginTop="16dp"
    android:ems="16"
    android:layout_centerHorizontal="true"
    android:text="patientsay" />
<Button
    android:id="@+id/blog"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/patientsay1"
    android:layout_marginTop="16dp"
    android:ems="16"
    android:layout_centerHorizontal="true"
    android:text="Blogs" />
```

```
<Button
    android:id="@+id/bot"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/blog"
    android:layout_marginTop="16dp"
    android:ems="16"
    android:layout_centerHorizontal="true"
    android:text="My bot" />


<com.google.android.material.floatingactionbutton.FloatingActionButton
    android:id="@+id/floatingActionButton1"
    android:layout_width="107dp"
    android:layout_height="127dp"
    android:layout_below="@id/bot"
    android:layout_alignParentBottom="true"
    android:layout_marginTop="82dp"
    android:layout_marginBottom="174dp"
    android:clickable="true"
    android:foregroundGravity="left"
    app:srcCompat="@android:drawable/sym_action_call" />

<com.google.android.material.floatingactionbutton.FloatingActionButton
    android:id="@+id/floatingActionButton2"
    android:layout_width="91dp"
    android:layout_height="76dp"
    android:layout_below="@id/bot"
```

```
        android:layout_alignParentBottom="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="122dp"
        android:layout_marginBottom="185dp"
        android:clickable="true"
        android:foregroundGravity="bottom|center"
        app:srcCompat="@android:drawable/ic_menu_info_details" />

    <com.google.android.material.floatingactionbutton.FloatingActionButton
        android:id="@+id/floatingActionButton3"
        android:layout_width="95dp"
        android:layout_height="95dp"
        android:layout_below="@id/bot"
        android:layout_alignLeft="@id/bot"
        android:layout_alignParentBottom="true"
        android:layout_marginLeft="590dp"
        android:layout_marginTop="175dp"
        android:layout_marginBottom="115dp"
        android:clickable="true"
        android:foregroundGravity="bottom|center"
        app:srcCompat="@android:drawable/sym_def_app_icon" />

</RelativeLayout>
```

Fitness:-

Java code:-

Fitness.java

```
package com.example.myhealthcareapp;
```

```
import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;

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.ToggleButton;

public class Fitness extends AppCompatActivity {
    private EditText weightKgEditText, heightCmEditText;
    private EditText weightLbsEditText, heightFtEditText, heightInEditText;
    private Button calculateButton;
    private TextView bmiTextView, categoryTextView;
    private ToggleButton toggleUnitsButton;
    private CardView bmiResultCardView;

    private boolean inMetricUnits;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_fitness);
        Button calculator,countdown,push,squats,planks;
```

```
        getIntent();


        calculator = (Button) findViewById(R.id.calculator);
        calculator.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                openNewActivity();
            }


        });
    }
    public void openNewActivity(){
        Intent intent = new Intent(this, Bmi.class);
        startActivity(intent);
    }
}
```

Xml code:-

Activity_Fitness.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Fitness">
  <TextView
      android:id="@+id/bmi_1"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="65dp"
    android:ems="10"
    android:inputType="text"
    android:textColor="@color/purple_500"
    android:textStyle="bold"
    android:hint="Calculate your body mass index"
    android:textSize="45dp"/>

<Button
    android:id="@+id/calculator"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/bmi_1"
    android:layout_marginTop="23dp"
    android:ems="10"
    android:text="BMI Calculator"
    android:layout_centerHorizontal="true"/>
<TextView
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Start your warm up right now "
    android:layout_centerHorizontal="true"
  android:layout_below="@id/calculator"
  android:id="@+id/warm1"
```

```
  android:ems="12"
  android:layout_marginTop="23dp"
  android:textSize="45dp"/>

<Button
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
  android:layout_centerHorizontal="true"
  android:layout_below="@id/warm1"
  android:ems="10"
  android:layout_marginTop="23dp"
  android:text="countdown timer"
  android:id="@+id/countdown"/>
<TextView
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:text="Let's get start with exercise"
   android:layout_centerHorizontal="true"
   android:layout_below="@id/countdown"
   android:id="@+id/exercise"
   android:ems="12"
   android:layout_marginTop="23dp"
   android:textSize="45dp"/>
<Button
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:layout_centerHorizontal="true"
   android:layout_below="@id/exercise"
```

```
    android:ems="10"
    android:layout_marginTop="23dp"
    android:text="pushups"
    android:id="@+id/push"/>
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_below="@id/push"
    android:ems="10"
    android:layout_marginTop="23dp"
    android:text="squats"
    android:id="@+id/squats"/>
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_below="@id/squats"
    android:ems="10"
    android:layout_marginTop="23dp"
    android:text="planks"
    android:id="@+id/planks"/>

</RelativeLayout>
```

Calculating BMI:-

Java Code:-

1. Bmi.java:-

```
package com.example.myhealthcareapp;

import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;

import android.app.Activity;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
import android.widget.ToggleButton;

import static com.example.myhealthcareapp.BMICalcUtil.BMI_CATEGORY_HEALTHY;
import static com.example.myhealthcareapp.BMICalcUtil.BMI_CATEGORY_OBESE;
import static com.example.myhealthcareapp.BMICalcUtil.BMI_CATEGORY_OVERWEIGHT;
import static com.example.myhealthcareapp.BMICalcUtil.BMI_CATEGORY_UNDERWEIGHT;

public class Bmi extends Activity {
        private boolean inMetricUnits;
        private EditText weightKgEditText, heightCmEditText;
         private EditText weightLbsEditText, heightFtEditText, heightInEditText;
        private Button calculateButton;
        private TextView bmiTextView, categoryTextView;
        private ToggleButton toggleUnitsButton;
         private CardView bmiResultCardView;
```

```
@Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        weightKgEditText = findViewById(R.id.activity_main_weightkgs);
        heightCmEditText = findViewById(R.id.activity_main_heightcm);

        weightLbsEditText = findViewById(R.id.activity_main_weightlbs);
        heightFtEditText = findViewById(R.id.activity_main_heightfeet);
        heightInEditText = findViewById(R.id.activity_main_heightinches);

        calculateButton = findViewById(R.id.activity_main_calculate);
        toggleUnitsButton = findViewById(R.id.activity_main_toggleunits);

        bmiTextView = findViewById(R.id.activity_main_bmi);
        categoryTextView = findViewById(R.id.activity_main_category);
        bmiResultCardView = findViewById(R.id.activity_main_resultcard);

        inMetricUnits = true;
        updateInputsVisibility();
        bmiResultCardView.setVisibility(View.GONE);

        calculateButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                if (inMetricUnits) {
```

```
                if (weightKgEditText.length() == 0 || heightCmEditText.length() == 0) {
                    Toast.makeText(Bmi.this, "Populate Weight and Height to Calculate BMI",
Toast.LENGTH_SHORT).show();
                } else {
                    double heightInCms = Double.parseDouble(heightCmEditText.getText().toString());
                    double weightInKgs = Double.parseDouble(weightKgEditText.getText().toString());
                    double bmi = BMICalcUtil.getInstance().calculateBMIMetric(heightInCms, weightInKgs);
                    displayBMI(bmi);
                }
            } else {
                if (weightLbsEditText.length() == 0 || heightFtEditText.length() == 0 || heightInEditText.length()
== 0) {
                    Toast.makeText(Bmi.this, "Populate Weight and Height to Calculate BMI",
Toast.LENGTH_SHORT).show();
                } else {
                    double heightFeet = Double.parseDouble(heightFtEditText.getText().toString());
                    double heightInches = Double.parseDouble(heightInEditText.getText().toString());
                    double weightLbs = Double.parseDouble(weightLbsEditText.getText().toString());
                    double bmi = BMICalcUtil.getInstance().calculateBMIImperial(heightFeet, heightInches,
weightLbs);
                    displayBMI(bmi);
                }
            }
        }
    });

    toggleUnitsButton.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            inMetricUnits = !inMetricUnits;
```

```
            updateInputsVisibility();
        }
    });
}

private void updateInputsVisibility() {
    if (inMetricUnits) {
        heightCmEditText.setVisibility(View.VISIBLE);
        weightKgEditText.setVisibility(View.VISIBLE);
        heightFtEditText.setVisibility(View.GONE);
        heightInEditText.setVisibility(View.GONE);
        weightLbsEditText.setVisibility(View.GONE);
    } else {
        heightCmEditText.setVisibility(View.GONE);
        weightKgEditText.setVisibility(View.GONE);
        heightFtEditText.setVisibility(View.VISIBLE);
        heightInEditText.setVisibility(View.VISIBLE);
        weightLbsEditText.setVisibility(View.VISIBLE);
    }
}

private void displayBMI(double bmi) {
    bmiResultCardView.setVisibility(View.VISIBLE);

    bmiTextView.setText(String.format("%.2f", bmi));

    String bmiCategory = BMICalcUtil.getInstance().classifyBMI(bmi);
    categoryTextView.setText(bmiCategory);
```

```
            switch (bmiCategory) {
                case BMI_CATEGORY_UNDERWEIGHT:
                    bmiResultCardView.setCardBackgroundColor(Color.YELLOW);
                    break;
                case BMI_CATEGORY_HEALTHY:
                    bmiResultCardView.setCardBackgroundColor(Color.GREEN);
                    break;
                case BMI_CATEGORY_OVERWEIGHT:
                    bmiResultCardView.setCardBackgroundColor(Color.YELLOW);
                    break;
                case BMI_CATEGORY_OBESE:
                    bmiResultCardView.setCardBackgroundColor(Color.RED);
                    break;
            }
        };
    }
```

2. BMICalcutil.java:-

```
package com.example.myhealthcareapp;

public class BMICalcUtil {
    public static final BMICalcUtil instance = new BMICalcUtil();

    private static final int CENTIMETERS_IN_METER = 100;
    private static final int INCHES_IN_FOOT = 12;
```

```
private static final int BMI_IMPERIAL_WEIGHT_SCALAR = 703;

public static final String BMI_CATEGORY_UNDERWEIGHT = "Underweight";
public static final String BMI_CATEGORY_HEALTHY = "Healthy Weight Range";
public static final String BMI_CATEGORY_OVERWEIGHT = "Overweight";
public static final String BMI_CATEGORY_OBESE = "Obese";

public static BMICalcUtil getInstance() {
    return instance;
}

public double calculateBMIMetric(double heightCm, double weightKg) {
    return (weightKg / ((heightCm / CENTIMETERS_IN_METER) * (heightCm / CENTIMETERS_IN_METER)));
}

public double calculateBMIImperial(double heightFeet, double heightInches, double weightLbs) {
    double totalHeightInInches = (heightFeet * INCHES_IN_FOOT) + heightInches;
    return (BMI_IMPERIAL_WEIGHT_SCALAR * weightLbs) / (totalHeightInInches * totalHeightInInches);
}

public String classifyBMI(double bmi) {
    if (bmi < 18.5) {
        return BMI_CATEGORY_UNDERWEIGHT;
    } else if (bmi >= 18.5 && bmi < 25) {
        return BMI_CATEGORY_HEALTHY;
    } else if (bmi >= 25 && bmi < 30){
        return BMI_CATEGORY_OVERWEIGHT;
    } else {
```

```
            return BMI_CATEGORY_OBESE;
        }
    }
}
```

Xml code:-

Activity_bmi.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    tools:context=".Bmi"
    android:orientation="vertical">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center_horizontal"
        android:text="BMI Calculator"
        android:textSize="32sp"/>

    <ToggleButton
        android:id="@+id/activity_main_toggleunits"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:checked="true"
        android:textOff="Imperial Units"
```

```
    android:textOn="Metric Units" />

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="200dp"
    android:orientation="horizontal">

    <androidx.cardview.widget.CardView
        android:layout_width="0dp"
        android:layout_weight="0.5"
        android:layout_height="match_parent"
        android:layout_margin="6dp"
        app:cardElevation="6dp"
        app:cardCornerRadius="6dp">

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="vertical"
            android:layout_gravity="center_vertical">

            <TextView
                android:id="@+id/activity_main_heightlabel"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:gravity="center_horizontal"
                android:text="Height"
                android:textSize="24sp"/>
```

```
<EditText
    android:id="@+id/activity_main_heightcm"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="3"
    android:inputType="numberDecimal"
    android:layout_gravity="center_horizontal"
    android:gravity="center_horizontal"
    android:hint="cm"/>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:gravity="center_horizontal">

    <EditText
        android:id="@+id/activity_main_heightfeet"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="3"
        android:inputType="numberDecimal"
        android:gravity="center_horizontal"
        android:hint="ft"/>

    <EditText
        android:id="@+id/activity_main_heightinches"
```

```
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:ems="3"
            android:inputType="numberDecimal"
            android:gravity="center_horizontal"
            android:hint="in"/>

        </LinearLayout>

    </LinearLayout>

</androidx.cardview.widget.CardView>

<androidx.cardview.widget.CardView
    android:layout_width="0dp"
    android:layout_weight="0.5"
    android:layout_height="match_parent"
    android:layout_margin="6dp"
    app:cardElevation="6dp"
    app:cardCornerRadius="6dp">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical"
        android:layout_gravity="center_vertical">

        <TextView
```

```
        android:id="@+id/activity_main_weightlabel"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center_horizontal"
        android:text="Weight"
        android:textSize="24sp"/>

    <EditText
        android:id="@+id/activity_main_weightkgs"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="3"
        android:inputType="numberDecimal"
        android:layout_gravity="center_horizontal"
        android:gravity="center_horizontal"
        android:hint="kg"/>

    <EditText
        android:id="@+id/activity_main_weightlbs"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="3"
        android:inputType="numberDecimal"
        android:layout_gravity="center_horizontal"
        android:gravity="center_horizontal"
        android:hint="lbs"/>

</LinearLayout>
```

```
    </androidx.cardview.widget.CardView>

</LinearLayout>
<Button
    android:id="@+id/activity_main_calculate"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="center_horizontal"
    android:text="Calculate" />
<androidx.cardview.widget.CardView
    android:layout_width="match_parent"
    android:layout_height="100dp"
    app:cardCornerRadius="6dp"
    app:cardMaxElevation="6dp"
    android:layout_margin="6dp"
    android:id="@+id/activity_main_resultcard">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical"
        android:layout_gravity="center_vertical">

        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:gravity="center_horizontal"
            android:text="BMI"
```

```
            android:textSize="24sp"/>

        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_gravity="center_horizontal"
            android:gravity="center_horizontal"
            android:id="@+id/activity_main_bmi"
            android:textSize="20sp"/>

        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_gravity="center_horizontal"
            android:gravity="center_horizontal"
            android:id="@+id/activity_main_category"
            android:textSize="16sp"/>

    </LinearLayout>

  </androidx.cardview.widget.CardView>
</LinearLayout>
```

Motivation:-

Java Code:-

Motivation.java

```
package com.example.myhealthcareapp;


import androidx.appcompat.app.AppCompatActivity;


import android.content.Context;
import android.os.Bundle;
import android.webkit.JavascriptInterface;
import android.webkit.WebSettings;
import android.webkit.WebView;
import android.widget.Toast;


public class Motivation extends AppCompatActivity {


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        getIntent();
        setContentView(R.layout.activity_motivation);
        WebView myWebView = (WebView) findViewById(R.id.Web);
        myWebView.loadUrl("https://www.fearlessmotivation.com/2018/01/22/its-not-easy-but-its-worth-it-
motivational-speech/");
        WebSettings webSettings = myWebView.getSettings();
        getIntent();


    }
}
```

Xml code:-

Activity_Motivation.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Motivation">
<WebView
    android:id="@+id/webview"
    android:layout_width="match_parent"
    android:layout_height="445dp"
    android:layout_x="0dp"
    android:layout_y="248dp"
    tools:layout_editor_absoluteX="142dp"
    tools:layout_editor_absoluteY="209dp" />

<TextView
    android:id="@+id/textView2"
    android:layout_width="248dp"
    android:layout_height="55dp"
    android:layout_x="25dp"
    android:layout_y="81dp"
    android:text="Experts are here to motivate you"

    android:visibility="visible" />
```

```
<ImageView
    android:id="@+id/imageView"
    android:layout_width="129dp"
    android:layout_height="236dp"
    android:layout_x="265dp"
    android:layout_y="-7dp"
    app:srcCompat="@drawable/motivation2" />
</RelativeLayout>
```

PatientSay:-

Java Code:-

Patientsay.java

```
package com.example.myhealthcareapp;
import androidx.appcompat.app.AppCompatActivity;
import android.app.Activity;
import android.os.Bundle;import android.content.Intent;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class Patientsay extends Activity {

    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_patientsay);
        getIntent();
    }
}
```

XML Code:-

Activity_Patientsay:-

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Patientsay">
<TextView
    android:id="@+id/text1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_marginTop="8dp"
    android:ems="14"
    android:hint="This is patient say "
    android:inputType="text"
    android:textColor="@color/black"
    android:textColorHighlight="#03A9F4"
    android:textColorHint="#2B2222"
    android:textSize="45dp"
```

```
    android:textStyle="bold" />

<TextView
    android:id="@+id/textView"
    android:layout_width="381dp"
    android:layout_height="202dp"
    android:layout_x="5dp"
    android:layout_y="102dp"
    android:text="Here patient can comment about their queries"
    android:textSize="24sp" />
</RelativeLayout>
```

Blogs:-

Java code:-

```
package com.example.myhealthcareapp;

import androidx.appcompat.app.AppCompatActivity;

import android.app.Activity;
import android.os.Bundle;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ImageButton;
import android.widget.TextView;

public class Blogs extends Activity {
```

```
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_blogs);
        ImageButton imageBtn;
        Button postBtn;
        TextView textDesc,textTitle;

        postBtn = (Button)findViewById(R.id.postBtn);
        textDesc = (TextView) findViewById(R.id.textDesc);
        textTitle = (TextView) findViewById(R.id.textTitle);

    }
}
```

Xml code:-

Activity_blogs.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Blogs">
    <ScrollView xmlns:android="http://schemas.android.com/apk/res/android"
        xmlns:app="http://schemas.android.com/apk/res-auto"
        xmlns:tools="http://schemas.android.com/tools"
        android:layout_width="match_parent"
```

```
android:layout_height="match_parent">
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:orientation="vertical"
    android:background="@color/purple_500"
    android:layout_height="match_parent"
    tools:context="com.example.ekene.blogzone.PostActivity">
    <ImageButton
        android:id="@+id/imageBtn"
        android:layout_width="match_parent"
        android:layout_height="250dp"
        android:adjustViewBounds="true"
        android:scaleType="centerCrop"
        android:src="@drawable/main" />
    <TextView
        android:layout_marginTop="20dp"
        android:id="@+id/textTitle"
        android:background="@color/design_default_color_primary_dark"
        android:padding="10dp"
        android:textColor="#fff"
        android:textStyle="bold"
        android:hint="Post Title"
        android:layout_marginRight="5dp"
        android:layout_marginLeft="5dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
    <TextView
```

```
            android:background="@color/design_default_color_primary_variant"
            android:padding="10dp"
            android:layout_marginTop="20dp"
            android:hint="Post Description"
            android:textColor="#fff"
            android:id="@+id/textDesc"
            android:layout_marginRight="5dp"
            android:layout_marginLeft="5dp"
            android:layout_width="match_parent"
            android:layout_height="wrap_content" />
        <Button
            android:layout_marginTop="30dp"
            android:id="@+id/postBtn"
            android:textColor="#fff"
            android:textStyle="bold"
            android:layout_marginRight="5dp"
            android:layout_marginLeft="5dp"
            android:background="@color/design_default_color_secondary"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Post"/>
    </LinearLayout>
  </ScrollView>

</androidx.constraintlayout.widget.ConstraintLayout>
```

MYBot:-

Java code:-

Mybot.java

```
package com.example.myhealthcareapp;


import androidx.appcompat.app.AppCompatActivity;


import android.app.Activity;
import android.os.Bundle;
import android.widget.TextView;
import android.widget.Toast;


public class Mybot extends Activity {


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        getIntent();
        setContentView(R.layout.activity_mybot);
        TextView  text;
    }


    @Override
    protected void onStart() {
        super.onStart();
        Toast.makeText(this,"Hehe!!!Do you want help...(:",Toast.LENGTH_LONG).show();
    }
}
```

XML code:-

Activity_mybot

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Mybot">




    <TextView
        android:id="@+id/text"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_marginTop="8dp"
        android:ems="14"
        android:hint="The chatter bot is here to help you "
        android:inputType="text"
        android:textColor="@color/black"
        android:textColorHighlight="#03A9F4"
        android:textColorHint="#2B2222"
        android:textSize="25dp"
        android:textStyle="bold"/>


    <ImageView
```

```
    android:id="@+id/imageView"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:src="@drawable/mybot" />


</RelativeLayout>
```

Application Implementation

1] Install Android Studio

2]create your project files.

3] Execute the project.

FutureEnhancements

- ✓ *Interactive Helper chatbot*
- ✓ *Fingerprint detection*
- ✓ *Pulse checker*
- ✓ *Location detection*

Conclusion

- ***Easy login and Accessibility.***
- ***Fitness calculations can be more helpful***
- ***Motivation option provides best web page view i.e you can easily ascess further web page .***
- ***Also yoga option provides easy accessibility over other webpage.***

References and Websites and Reference Apps

Books

1. *Android Programming: The Big Nerd Ranch Guide*
2. *Headfirst Android Development*
3. *Java Programming for Android Developers for Dummies*
4. *"Programming Android Java Programming for the New Generation of Mobile Devices" by Zigurd Mennieks*

Websites:

https://developer.android.com

https://www.sourcecodester.com

https://code-projects.org/medical-adviser-application-in-android

Apps:-

1. WebMD

2.MyFitnessPal

3. 7 Minute Workout

4. Lifesum