A PROJECT REPORT ON

Smart Fitness Monitoring System

Submitted By

Noorulayan Ansari

Seat No: TSD01

2019-2020

Under the Guidance Of

Ms. Krishnachalitha K C

Ms. Anjali Deshpande

SUBMITTED IN COMPLETE FULFILMENT OF THE REQUIREMENT FOR QUALIFYING

B. Voc. (Software Development)

Semester – V Examination

AUTONOMOUS

Jai Hind College

Basantsing Institute of Science

&

J.T. Lalvani College of Commerce

CHURCHGATE, MUMBAI 400020

CERTIFICATE

JAI HIND COLLEGE (AUTONOMOUS)

[2019-2020]

This is to certify that the project titled **Smart Fitness Monitoring System.**
Undertaken at the **JAI HIND COLLEGE (AUTONOMOUS)**
By Noorulayan Ansari

Seat no. 01
In complete fulfilment of B.Voc. Software Development Degree (Semester –V) Examination has not been submitted for any other examination or does not form part of any other course undergone by the candidate.
It is further certified that she has completed all required phases of the project.

Signature of Internal Guide *Signature of Coordinator*

Date:

Signature of External Examiner

ACKNOWLEDGEMENT

Firstly, I thank the Almighty, for helping and guiding me to complete this project successfully.

I take this opportunity to express my profound gratitude and deep regards to my Teacher for their exemplary guidance, monitoring and constant encouragement throughout the course of this project. The blessings, help and guidance given by them, from time to time, shall carry me a long way in the journey of life on which I am about to embark.

I also take this opportunity to express a deep sense of gratitude to the Head of Department, **Mr. Wilson Rao** for his cordial support, valuable information and guidance, which helped me in completing this task through various stages.

*A large Debt of gratitude is owned to our project guide Ms.****Krishna chalitha K C and Ms.Anjali Deshpande*** *who have not only endured, but also encouraged, assisted and inspired me for taking up the project on* **Smart Fitness Monitoring System.** *I want to acknowledge and thank them for giving us the opportunity to do this under their guidance and also for sharing their immense knowledge. Their continuous guidance, time, valuable suggestions, inputs and helpful criticisms has helped us to accomplish such a challenging task.*

Lastly, our parents, family and friends for their constant encouragement, with which I could carry on this project through thick and thin.

INDEX

Preliminary Investigation

1.1 INTRODUCTION

- Health monitoring systems named ad “Health ON Go” helps the user to track their health and monitor their records easily.
- “Health On Go” allow user to calculate their BMI and calorie consumed by the user during one meal.
- User can keep the track of their BMI whether it has increased or decreased they can update their height and weight.
- The system automatically calculates the BMI and stores it.
- As the name states Smart Health Monitoring System is a smart AI which calculates almost everything you need to take care of your health. The System helps in

1. BMI Level
2. Diet Monitoring,
3. Footstep monitoring,
4. Sleep Suggestion,
5. Water Alarm.

- So the user has to just register into the system by giving his personal details and physical attributes and the rest, the system takes care of everything.

- The Food items with its fats, carbs and proteins level are already stored in the database and the user can also add new food, which will help the system to monitor the users diet and accordingly suggests.

ADVANTAGES

- The User has to Login to use the app features.
- The system guides the user about his diet intakes.
- The System shows the bar of his intake level to let the user know about his limit.
- System also suggests the user about the food he should have.
- System lets the user know about his water and sleep intake.
- Data Changes when the user updates his physical attributes.
- System helps user to know about their intake of proteins, carbohydrates and fats
- System calculates BMI.

DISADVANTAGES

- It requires an active internet connection.
- The user should provide correct information to get the right output.
- The user has to on the alarm to get notification.
- The user should have an android phone.

1.2 EXISTING SYSTEM

In the Existing System, the user does not get the exact count of protein, carbohydrates and fats. in the existing system water alarm is not present which helps user to remind about their water intake. the user has to manually enter their food item. We found that before us, there was no application available in the market which can create the diet-plan for user. We had to find out initially what the activities they are performing are, how they analyze user and how diet plans are created for particular person.

1.3 LIMITATIONS OF EXISTING SYSTEM

- Difficult to use.
- In the existing system there is no reminder.
- Footstep monitoring is not enabled automatically we have to manually start it.

1.4 Proposed system:

This is a mobile application for people who are concern with their health issues. Not only general people but also with some problem like obese, thinness, diabetic person etc., can use this application.

The user can not only know their calorific requirements but also can calculate calories for the food consumed. Various low-calorie recipes have been included for reference. For those who don’t know how many calories they need in a day, Diet advisor provides functionality to calculate the calorific requirement also.in these system users will be able to calculate footsteps, have a water alarm for their water intake.

1.5 FACT FINDING TECHNIQUES:

- Tell me how much you are excited for smart health monitoring system?

  ____

- How can it help people on daily basis?

  ____

- How is this system better than other one?

  ____

- Does it give proper information about the diet?

  a) Yes b) No

- How will it analyze the diet?

  ____

- Do you expect to do more changes in this project?

  ____

- What more features you are expecting?

  ____

- Will it save time?

  a) Yes b)No

1.6 HARDWARE AND SOFTWARE REQUIREMENTS.

Software Requirements:

- Windows XP, Windows 7(ultimate, enterprise)
- Android Studio

- SQL Server/Visual Studio

Hardware Components:

- Processor – i3
- Hard Disk – 1 TB
- Memory – 8GB RAM
- Android Phone with KitKat and higher.

1.7 What Is Feasibility Study?

A feasibility study determines whether the project is likely to succeed in the first place. It is typically conducted before any steps are taken to move forward with a project, including planning. It is one of the—if not the—most important factors in determining whether the project can move forward. The study identifies the market for the project (if applicable); highlights key goals for the project based on market research; maps out potential roadblocks and offers alternative solutions; and factors in time, budget, legal and manpower requirements to determine whether the project is not only possible but advantageous for the company to undertake.

5 Areas of a Project Feasibility Study:

- **Technical Feasibility**

  Under technical feasibility, the assessment is centered on the technical resources available for the project. It helps organizations assess whether the technical team is capable of converting the ideas into working systems or not. Technical feasibility also involves evaluation of the hardware and the software requirements of the proposed system.

  This is concerned with specifying equipment and software that will successfully satisfy the user requirement. The technical needs of the system may vary considerably, but might include :

  • The facility to produce outputs in a given time.

  • Response time under certain conditions.

  • Ability to process a certain volume of transaction at a particular speed.

  • Facility to communicate data to distant locations.

- **Economic or financial feasibility**

  Economic feasibility of a project helps organizations assess the viability, cost, and benefits associated with projects**;** before financial resources are allocated. It helps decision-makers determine the positive economic benefits to the organization that the proposed system will provide, and helps quantify them too. This assessment typically involves a cost/ benefits analysis of the project.

  Economic analysis is the most frequently used technique for evaluating the effectiveness of a proposed system. More commonly known as Cost / Benefit analysis, the procedure is to determine the benefits and savings that are expected from a proposed system and compare them with costs. If benefits outweigh costs, a decision is taken to design and implement the system. Otherwise, further justification or alternative in the proposed system will have to be made if it is to have a chance of being approved. This is an outgoing effort that improves in accuracy at each phase of the system life cycle.

- **Legal feasibility**

  This area investigates if the proposed system conflicts with legal requirements like data protection acts or social media laws.

  it is a measure of legal implications on the project, ethical considerations. We need to make sure that project undertaken will meet all legal and ethical requirements.

- **Operational feasibility**

  This study helps analyze and determine whether the business needs can be fulfilled using the proposed solution or not. It helps to study if the business problem is worth solving.

  This is mainly related to human organizational and political aspects. The points to be considered are:

  • What changes will be brought with the system?

  • What organizational structure are disturbed?

  • What new skills will be required? Do the existing staff members have these skills? If not, can they be trained in due course of time?

  This feasibility study is carried out by a small group of people who are familiar with information system technique and are skilled in system analysis and design process. Proposed projects are beneficial only if they can be turned into information system that will meet the operating requirements of the organization.

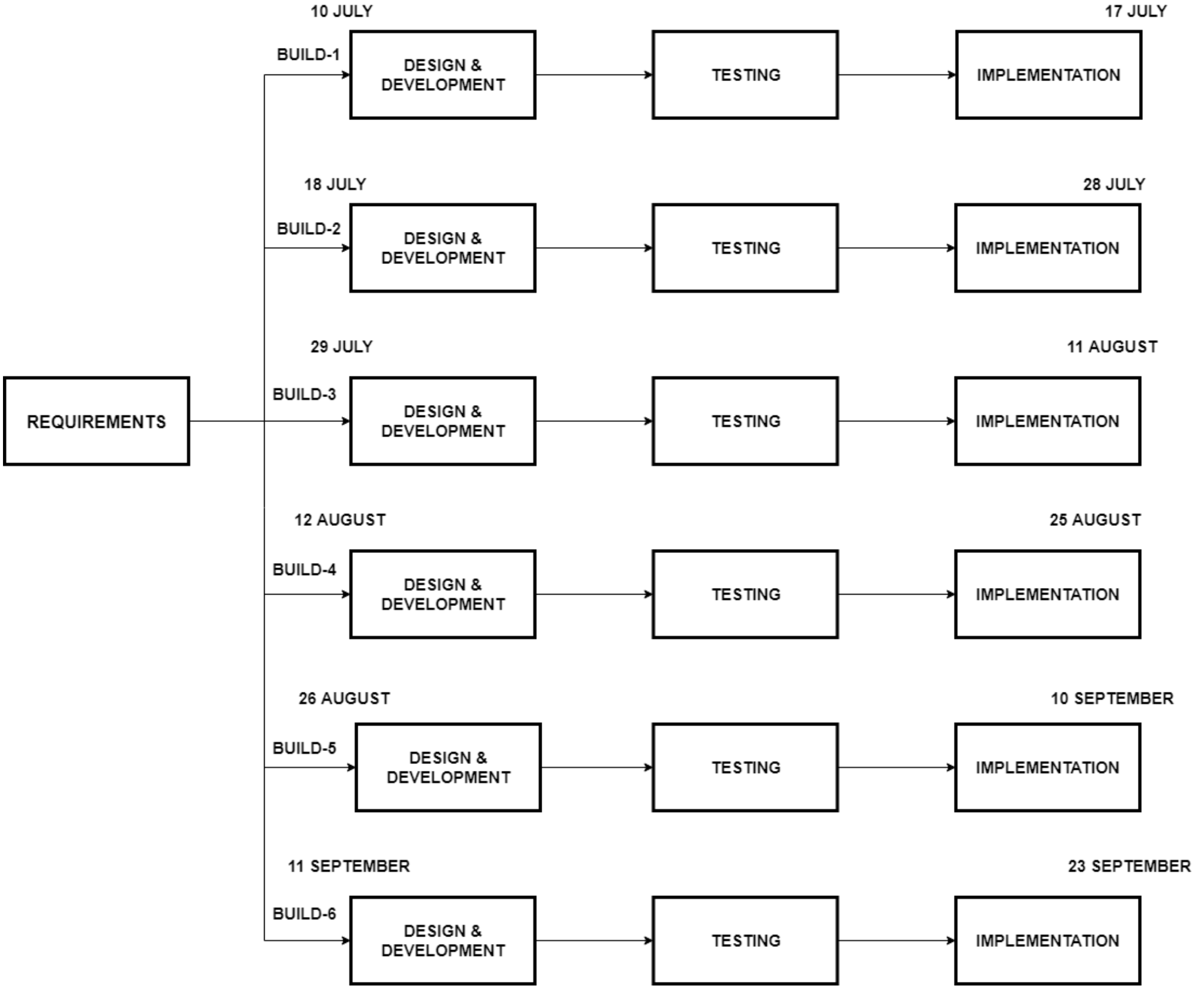
- **Scheduling feasibility**

  Scheduling Feasibility is the most important in terms of project success. A project will fail if not completed on time. In scheduling feasibility, we estimate how much time the system will take to complete and with our technical skill we need to estimate the period to complete the project using some methods.

1.8 PROJECT SCHEDULE:

GANTT CHART:-

Sr. No.	Task	From	To	Time
1	Build 1	10th July ,2019	17th July ,2019	7 days
2	Build 2	18th July ,2019	28th July ,2019	10 days
3	Build 3	29th July ,2019	11th August 2019	12 days
4	Build 4	12th August 2019	25th August 2019	13 days
5	Build 5	26th August 2019	10th September	14 days
6	Build 6	11th September	23rd September	12 days



1.9 SDLC Model:

Iterative Model

In the Iterative model, iterative process starts with a simple implementation of a small set of the software requirements and iteratively enhances the evolving versions until the complete system is implemented and ready to be deployed. An iterative life cycle model does not attempt to start with a full specification of requirements. Instead, development begins by specifying and implementing just part of the software, which is then reviewed to identify further requirements. This process is then repeated, producing a new version of the software at the end of each iteration of the model.

ADVANTAGES

- Some working functionality can be developed quickly and early in the life cycle.
- Results are obtained early and periodically.
- Parallel development can be planned.
- Progress can be measured.
- Less costly to change the scope/requirements.
- Testing and debugging during smaller iteration is easy.
- Risks are identified and resolved during iteration; and each iteration is an easily managed milestone.
- Easier to manage risk - High risk part is done first.
- With every increment, operational product is delivered.
- Issues, challenges and risks identified from each increment can be utilized/applied to the next increment.
- Risk analysis is better.
- It supports changing requirements.
- Initial Operating time is less.
- Better suited for large and mission-critical projects.
- During the life cycle, software is produced early which facilitates customer evaluation and feedback.

DISADVANTAGES

• More resources may be required.

• Although cost of change is lesser, but it is not very suitable for changing requirements.

• System architecture or design issues may arise because not all requirements are gathered in the beginning of the entire life cycle.

• Defining increments may require definition of the complete system.

• Not suitable for smaller projects.

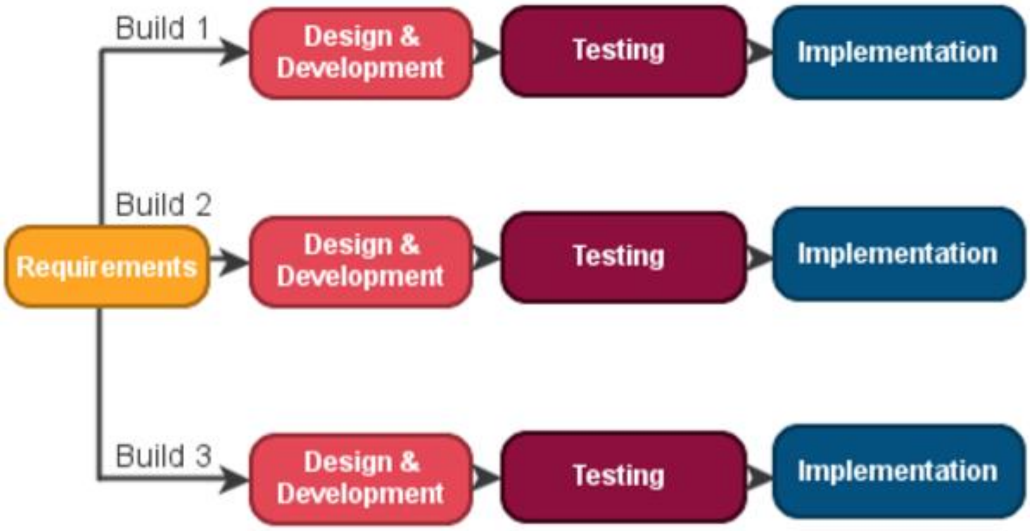
• Management complexity is more.

• End of project may not be known which is a risk.

• Highly skilled resources are required for risk analysis.

• Projects progress is highly dependent upon the risk analysis phase.

General Model Diagram:-

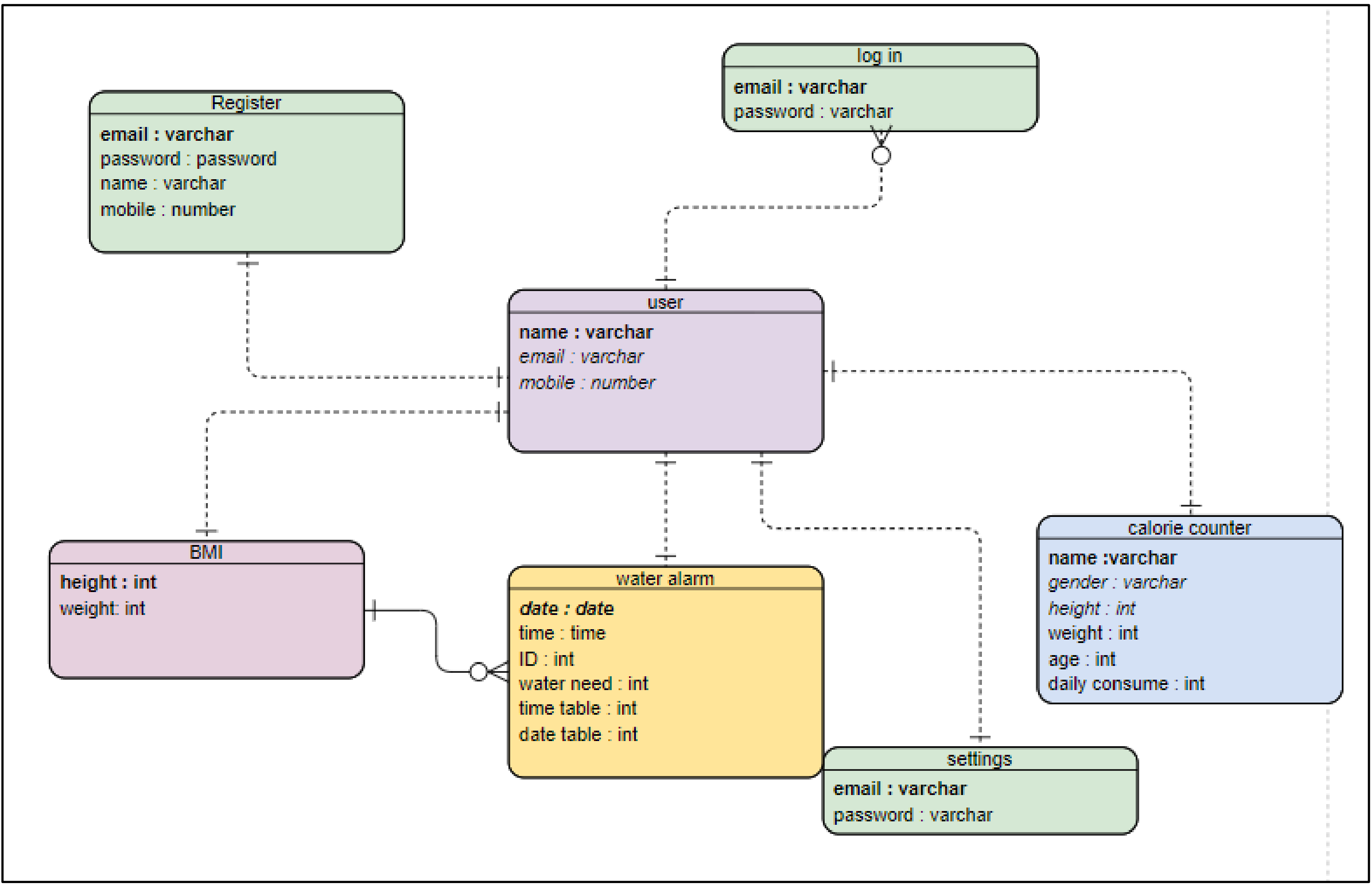


SYSTEM ANALYSIS

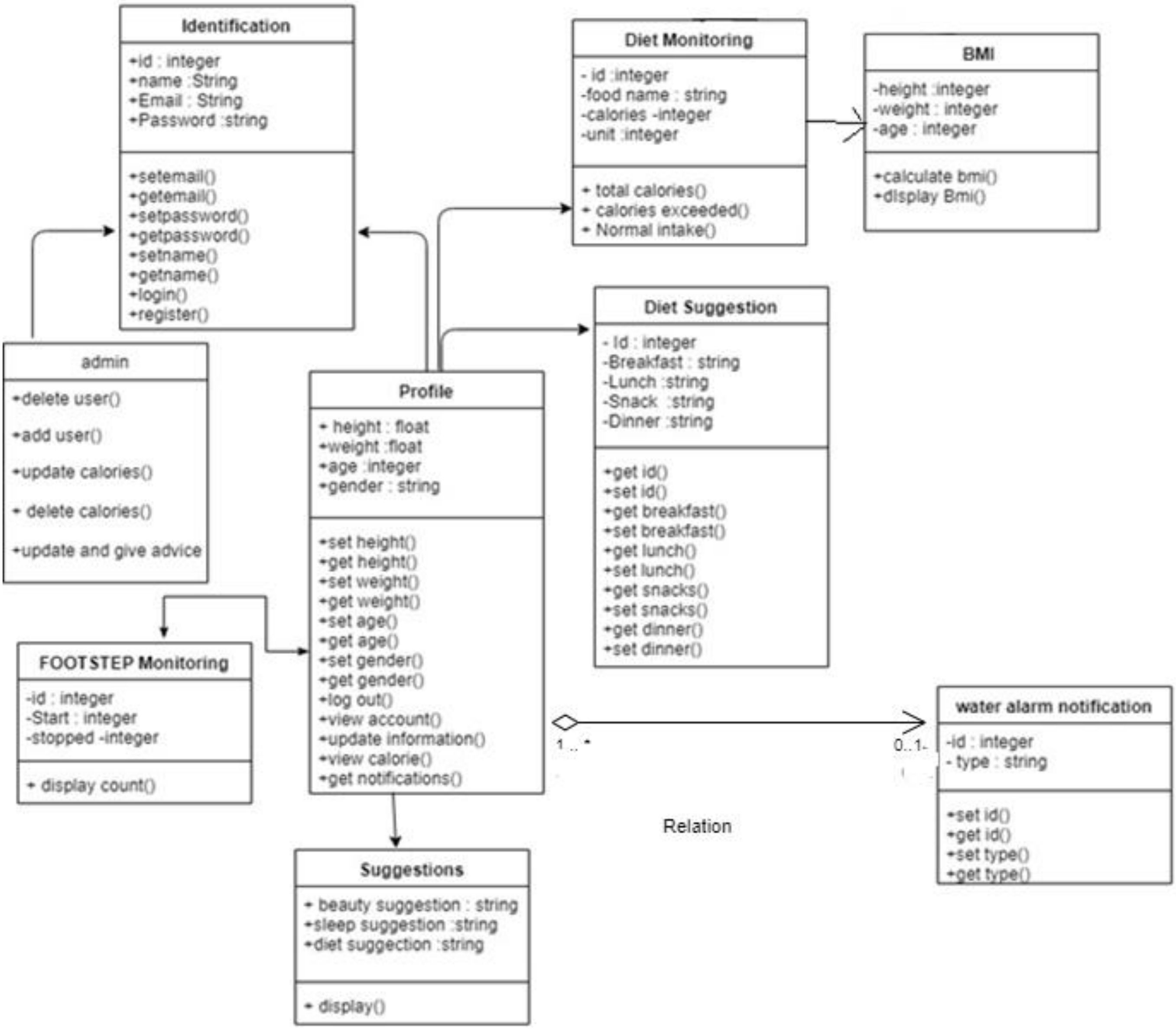
2.1 EVENT TABLE

Events	**Trigger**	**Source**	**Activity**	**Response**	**Destination**
User Registration	Registration Detail	User	Registers User	Log In	User
User Login	Login Using Email And Password	User/ Admin	Log In's User	Home Page	User/Admin
BMI Caalculate	User's Profile Enters Height, Weight, Age ,	User	1.Enters Height, Weight and Age	Displays the BMi of th person	User
Diet Monitoring	Food Tem, Units And Calorie Contained	User/ Admin	User Enter The Food Item	Gives The Calorie Consumed By The User. And Gives the Information Whether They Have Exceeded The Calorie Or Not.	User
BMI CALCULATOR	Height, Weight, Age	User	Enters Height , Weight And Age	Calculates BMI And Display	User
Footstep Monitoring	Start Button Stop Button	User	Clicks On The Button	1.Footstep Counting Starts 2. Footstep Counting Stops	User
Water Alarm	Notification Starts	User	Sets Alarm	Notification About Consuming Water Is Started	User

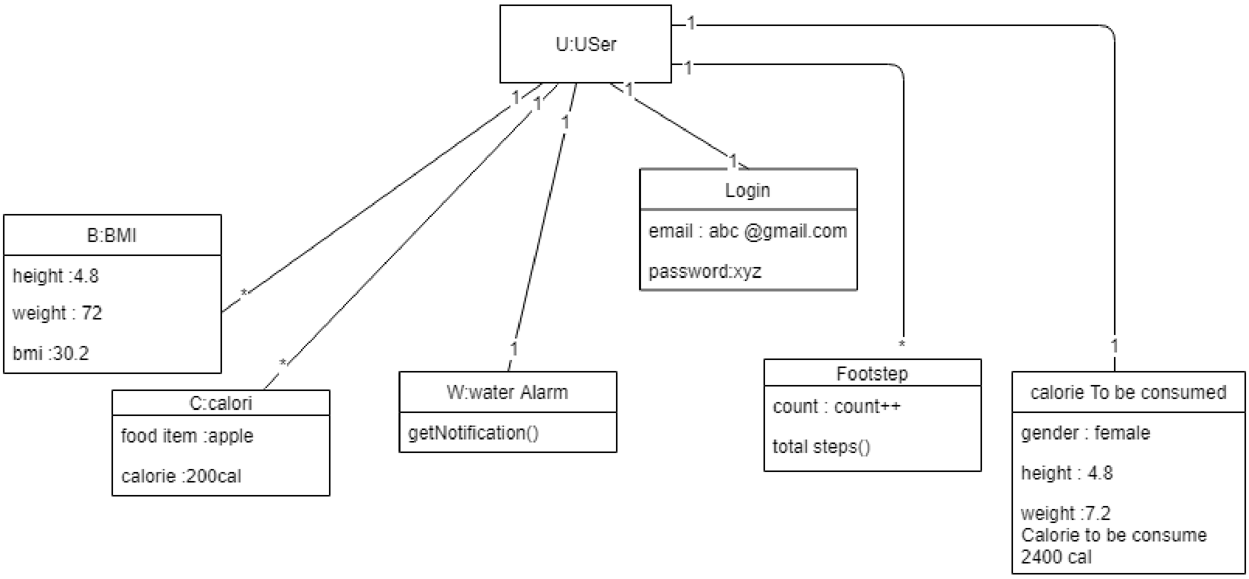
2.2 ENTITY RELATIONSHIP DIAGRAM



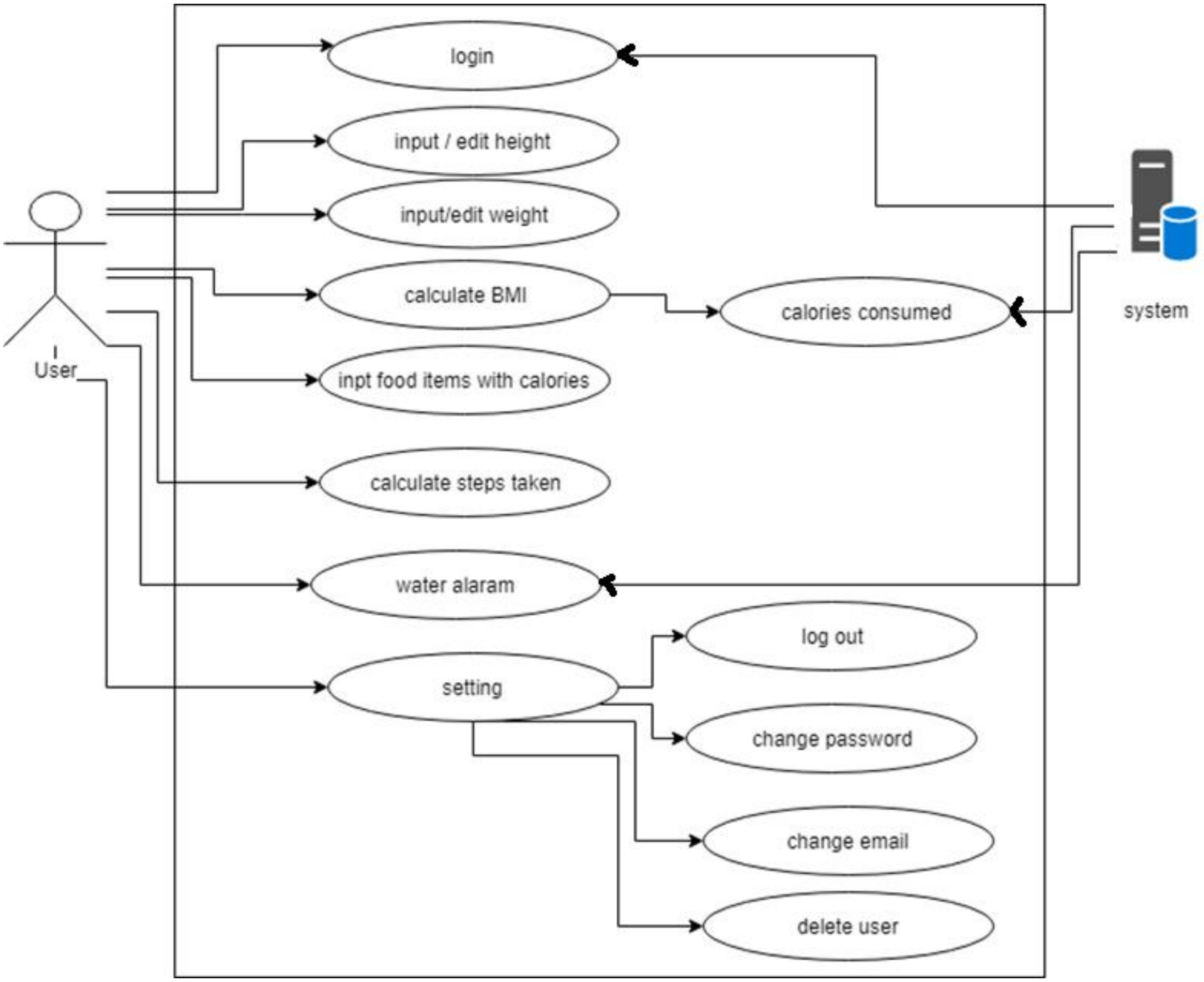
2.3 CLASS DIAGRAM



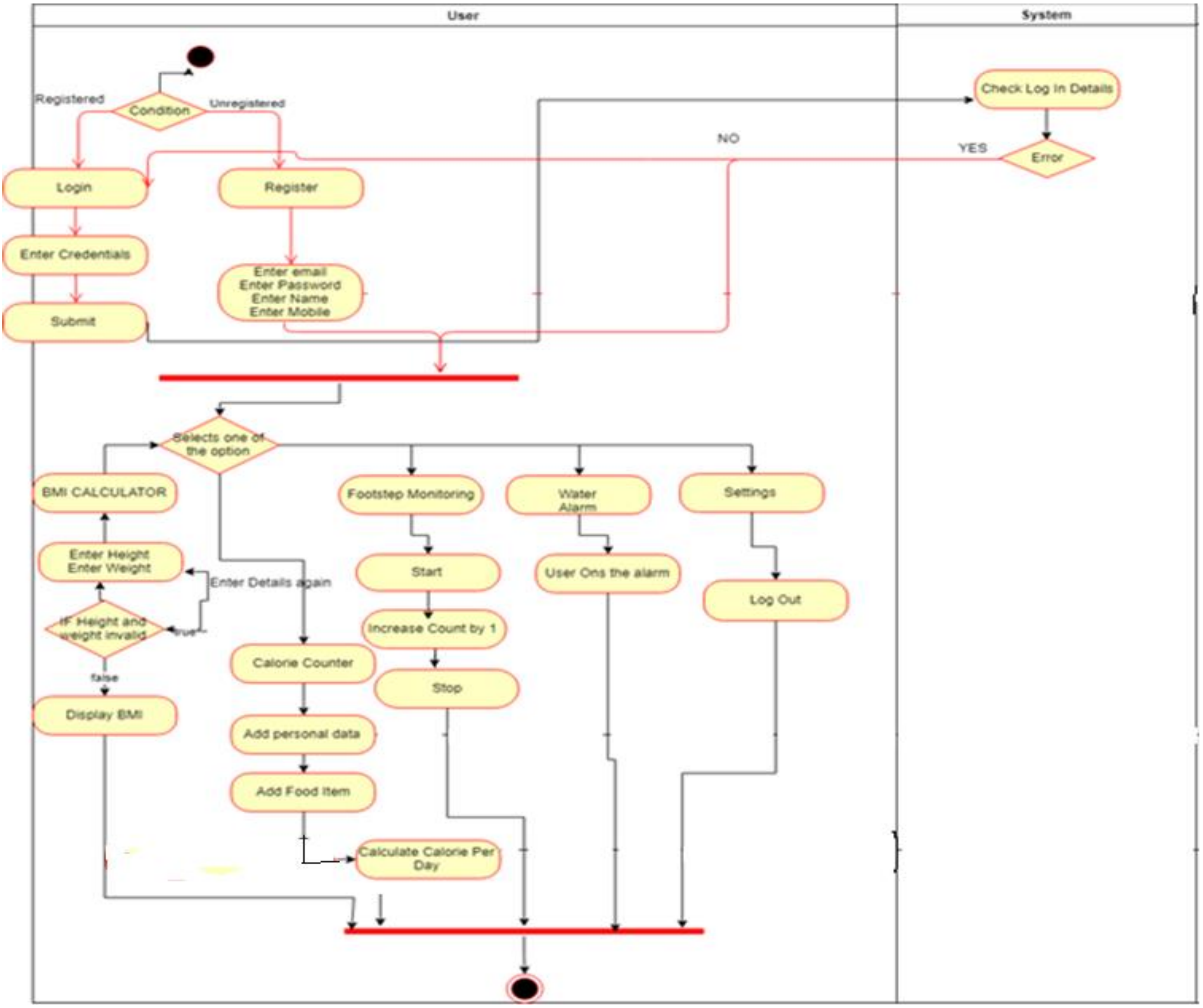
2.4 OBJECT DIAGRAM



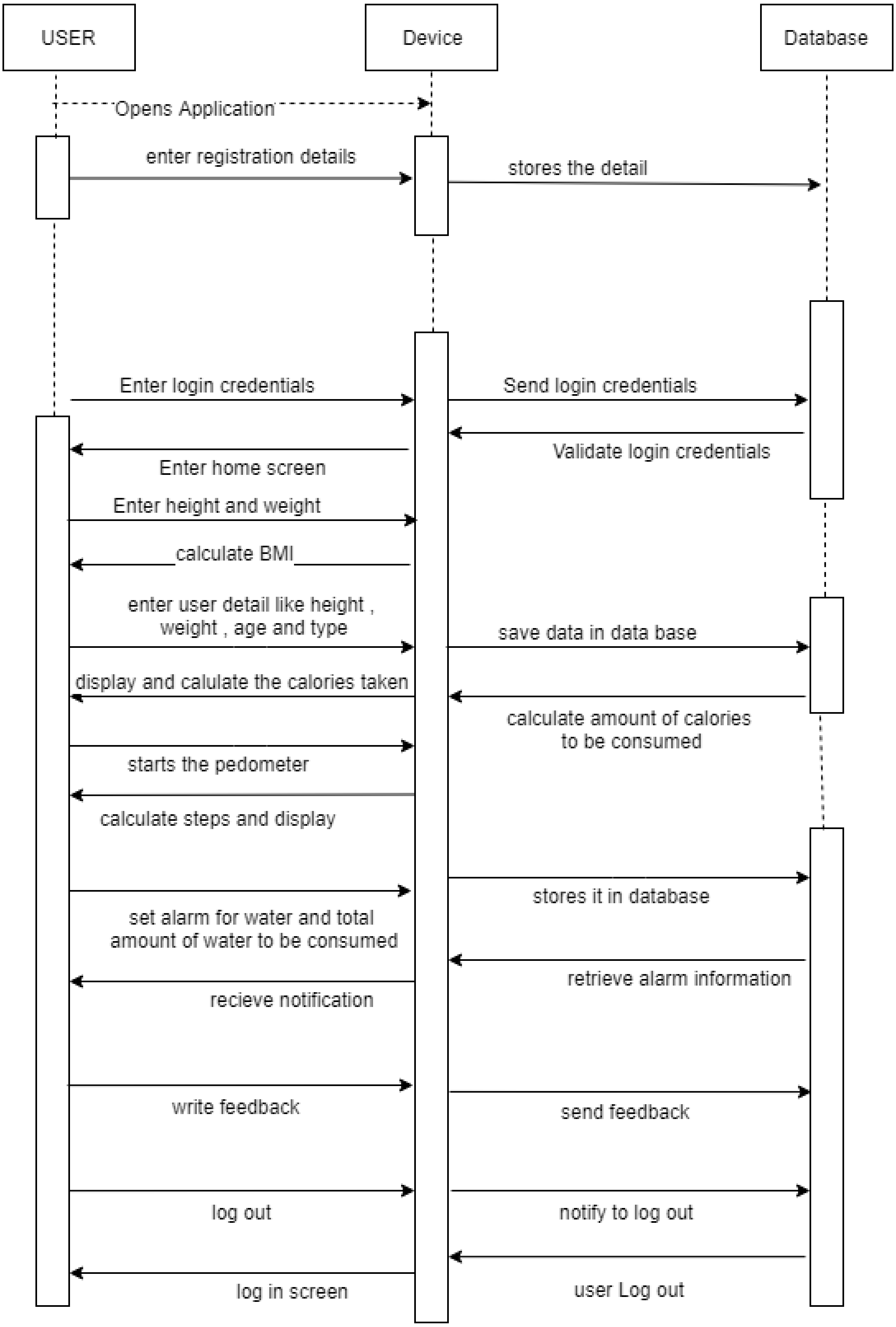
2.5 USE CASE DIAGRAM



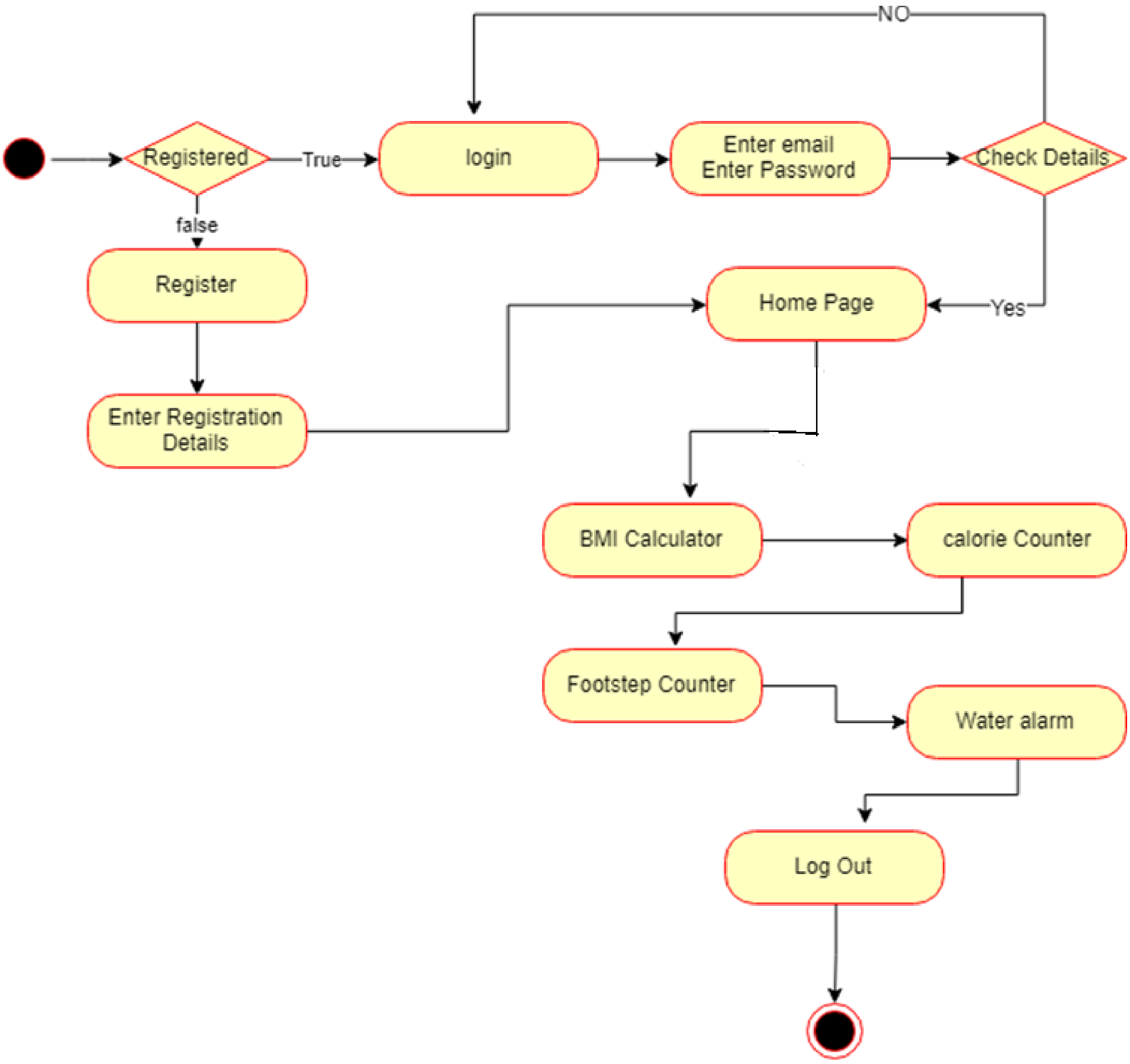
2.6 ACTIVITY DIAGRAM



2.7 SEQUENCE DIAGRAM

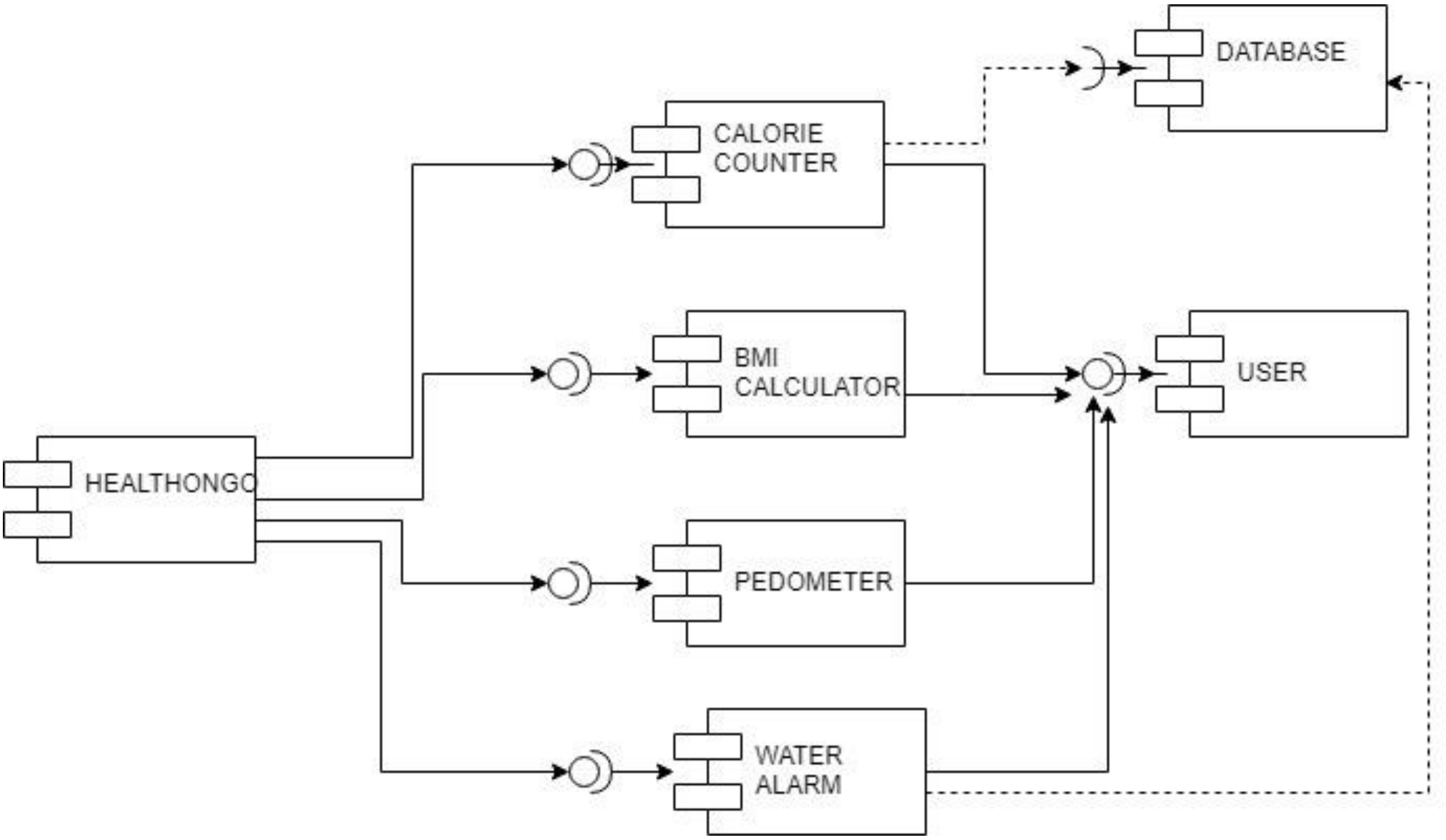


2.8 STATE DIAGRAM

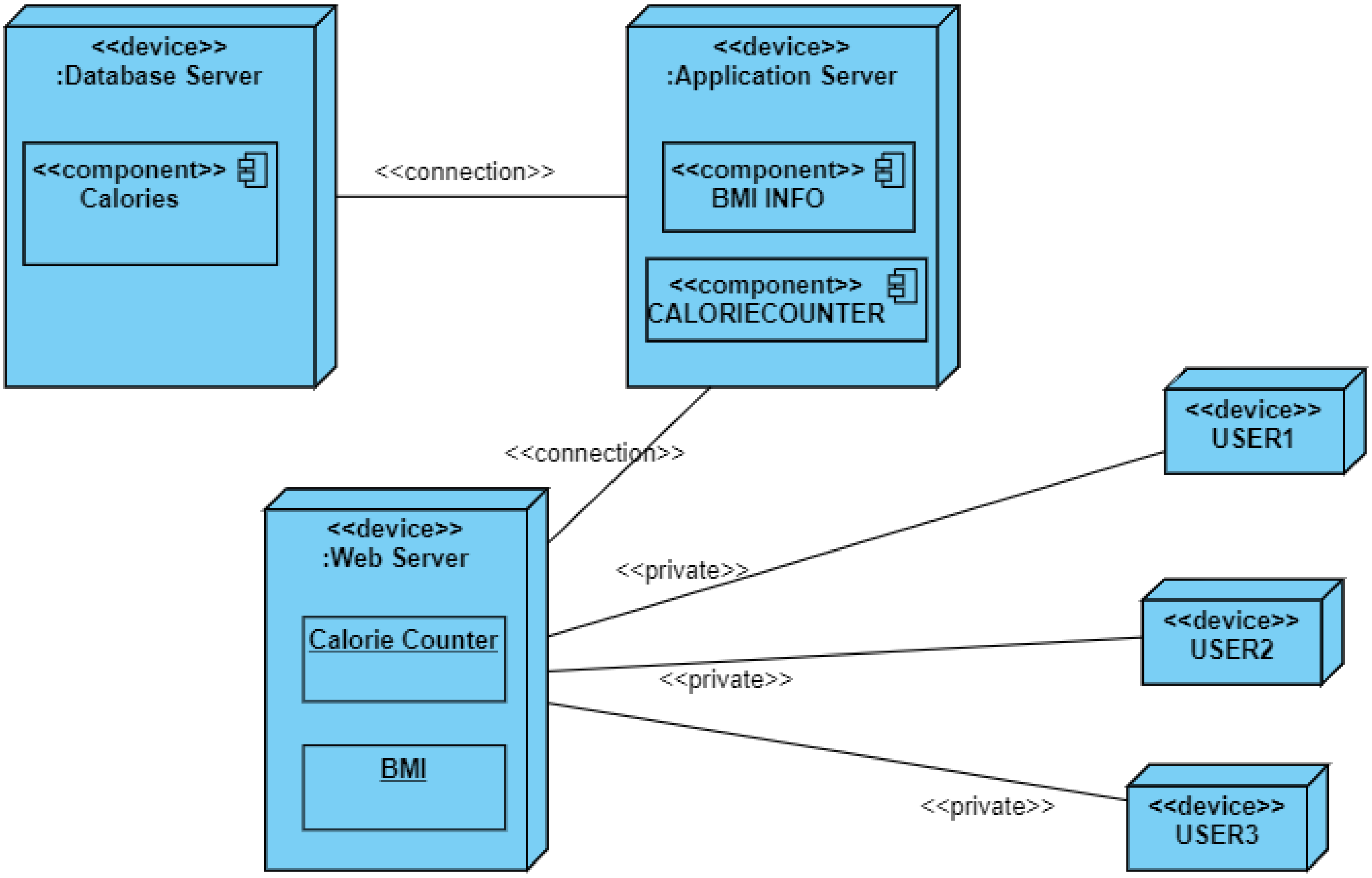


SYSTEM DIAGRAM

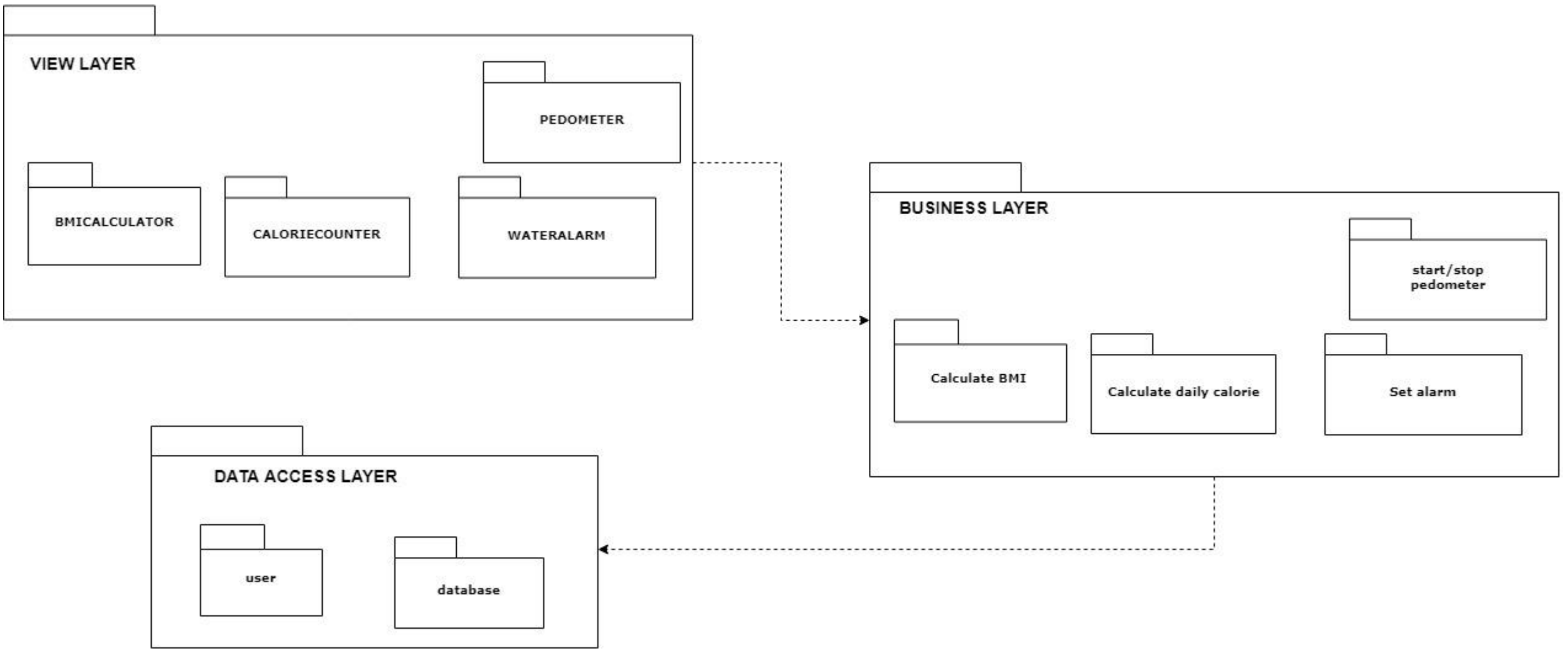
3.2 COMPONENT DIAGRAM



3.3 DEPLOYMENT DIAGRAM



3.4 PACKAGE DIAGRAM



SYSTEM CODING

XML CODE:

1)activity_add_new_entry.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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"
  tools:context=".AddNewEntryActivity"
  android:background="@drawable/bg"
  android:textColor="@color/defaultTextColor">
  <TextView
    android:id="@+id/date"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:paddingLeft="20dp"
    android:paddingTop="10dp"
    android:text="Date:"
    android:textColor="@color/defaultTextColor"
    android:textSize="20sp"
    android:textStyle="bold" />
  <TextView
    android:id="@+id/description"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/date"
    android:paddingLeft="20dp"
    android:textColor="@color/defaultTextColor"
    android:paddingTop="10dp"
    android:text="Description: "
    android:textSize="15sp"
    android:textStyle="bold" />
  <TextView
    android:id="@+id/total_calories"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/calories_per_weight"
    android:layout_alignParentLeft="true"
    android:textColor="@color/defaultTextColor"
    android:paddingLeft="20dp"
    android:paddingTop="10dp"
    android:text="Total Calories: "
    android:textSize="15sp"
    android:textStyle="bold" />
  <TextView
    android:id="@+id/total_weight_consumed"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/cancel_button"
    android:layout_alignLeft="@+id/per_weight"
    android:textColor="@color/defaultTextColor"
android:layout_marginBottom="24dp"
    android:maxWidth="150dp"
    android:paddingLeft="10dp"
    android:paddingTop="20dp"
    android:text="Total Weight/Volume/Serving Consumed: "
    android:textSize="13sp" />
  <TextView
    android:id="@+id/calories_per_weight"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:textColor="@color/defaultTextColor"
    android:layout_alignBottom="@+id/calories_per_weight_text"
    android:layout_toLeftOf="@+id/calories_per_weight_text"
```

```
   android:maxWidth="150dp"
   android:paddingLeft="10dp"
   android:paddingTop="30dp"
   android:text="Calories Per Weight/Volume/Serving: "
   android:textSize="13sp" />
<TextView
   android:id="@+id/per_weight"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:layout_above="@+id/total_weight_consumed"
   android:textColor="@color/defaultTextColor"
   android:layout_toLeftOf="@+id/per_weight_text"
   android:maxWidth="150dp"
   android:paddingLeft="10dp"
   android:paddingTop="20dp"
   android:text="Per Weight/Volume/Serving: "
   android:textSize="13sp" />
<EditText
   android:id="@+id/date_text"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:layout_alignParentEnd="true"
   android:layout_alignParentTop="true"
   android:ems="10"
   android:inputType="date"
   android:textAllCaps="false"
   android:backgroundTint="@color/defaultTextColor"
   android:textColor="@color/defaultTextColor"
   android:textColorLink="@color/defaultTextColor"
   android:textSize="13sp" />
<EditText
   android:id="@+id/description_text"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/total_calories"
    android:layout_alignParentRight="true"
    android:layout_below="@+id/date_text"
    android:backgroundTint="@color/defaultTextColor"
    android:drawableTint="@color/defaultTextColor"
    android:ems="10"
    android:gravity="top"
    android:hint="eg. eating some craisins, Lunch at Burrito Libre."
    android:inputType="textMultiLine"
    android:textColor="@color/defaultTextColor"
    android:textColorHighlight="@color/defaultTextColor"
    android:textColorHint="@color/defaultTextColor"
    android:textColorLink="@color/defaultTextColor"
    android:textSize="13sp" />
<EditText
    android:id="@+id/total_calories_text"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/calories_per_weight"
    android:layout_alignParentRight="true"
    android:ems="10"
    android:inputType="number"
    android:textColor="@color/defaultTextColor"
    android:backgroundTint="@color/defaultTextColor"
    android:textColorLink="@color/defaultTextColor"
    android:textSize="13sp" />
<EditText
    android:id="@+id/calories_per_weight_text"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/per_weight"
    android:textColor="@color/defaultTextColor"
    android:layout_alignLeft="@+id/cancel_button"
    android:backgroundTint="@color/defaultTextColor"
    android:textColorLink="@color/defaultTextColor"
    android:layout_alignParentRight="true"
    android:ems="10"
    android:inputType="numberDecimal"
    android:textSize="13sp" />
<EditText
    android:id="@+id/per_weight_text"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/total_weight_consumed"
    android:layout_alignLeft="@+id/calories_per_weight_text"
    android:layout_alignParentRight="true"
    android:ems="10"
    android:inputType="numberDecimal"
    android:backgroundTint="@color/defaultTextColor"
    android:textColor="@color/defaultTextColor"
    android:textSize="13sp"
    android:visibility="visible" />
<EditText
    android:id="@+id/total_weight_text"
    android:layout_width="wrap_content"
    android:textColor="@color/defaultTextColor"
    android:layout_height="wrap_content"
    android:backgroundTint="@color/defaultTextColor"
    android:textColorLink="@color/defaultTextColor"
    android:layout_alignBottom="@+id/total_weight_consumed"
    android:layout_alignLeft="@+id/per_weight_text"
    android:ems="10"
```

```
        android:inputType="numberDecimal"
        android:textSize="13sp" />
    <Button
        android:id="@+id/cancel_button"
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_toLeftOf="@+id/submit_button"
        android:backgroundTint="@color/defaultTextColor"
        android:onClick="returnToPrevActivity"
        android:text="Cancel"
        android:textColor="@android:color/background_dark"
        android:textColorLink="@color/defaultTextColor" />
    <Button
        android:id="@+id/submit_button"
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentRight="true"
        android:backgroundTint="@color/defaultTextColor"
        android:onClick="createEntry"
        android:text="Submit"
        android:textColor="@android:color/background_dark"
        android:textColorLink="@color/defaultTextColor" />
</RelativeLayout>
```

2)activity_bmi

```
<?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"
  tools:context=".BMI"
  android:background="@drawable/gr2"
  android:orientation="vertical">
  <TextView
    android:id="@+id/tv1"
    android:layout_width="124dp"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:paddingLeft="15dp"
    android:paddingTop="40dp"
    android:shadowColor="@android:color/black"
    android:shadowDx="4"
    android:shadowDy="4"
    android:text="BMI"
    android:textAppearance="?android:attr/textAppearanceLarge"
    android:textColor="@android:color/white"
    android:textSize="50sp"
    android:typeface="serif" />
  <TextView
    android:id="@+id/tv2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Calculator"
    android:textColor="@android:color/white"
    android:textSize="20dp"
    android:textStyle="bold" />
  <TextView
  android:id="@+id/tv3"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_gravity="center"
  android:paddingTop="30dp"
  android:text="WEIGHT (KG)"
  android:textAppearance="?android:attr/textAppearanceMedium"
  android:textColor="@android:color/white"
  android:textStyle="bold|italic"
  android:typeface="serif" />
  <EditText
    android:id="@+id/et1"
    android:layout_width="96dp"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:hint="IN KGs"
    android:ems="10"
    android:fadingEdgeLength="10dp"
    android:inputType="numberDecimal"
    android:textAlignment="center" >
    <requestFocus />
  </EditText>
  <TextView
    android:id="@+id/tv8"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:paddingTop="30dp"
    android:text="HEIGHT (feets)"
    android:textAppearance="?android:attr/textAppearanceMedium"
```

```
  android:textColor="@android:color/white"
  android:textStyle="bold|italic"
  android:typeface="serif" />
<EditText
  android:id="@+id/et2"
  android:layout_width="96dp"
  android:layout_height="wrap_content"
  android:layout_gravity="center"
  android:hint="IN feets"
  android:ems="10"
  android:inputType="numberDecimal" >
</EditText>
<Button
  android:id="@+id/ib1"
  android:layout_width="158dp"
  android:layout_height="51dp"
  android:layout_gravity="center"
  android:layout_marginTop="20dp"
  android:fadingEdge="vertical"
  android:longClickable="true"
  android:nextFocusRight="@color/white"
  android:text="Calculate"
  android:visibility="visible" />
<TextView
  android:id="@+id/tv4"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_gravity="center"
  android:paddingTop="20dp"
  android:text=""
  android:textSize="20dp"
  android:textStyle="bold"
```

```
        android:textColor="@android:color/holo_orange_dark"/>
</LinearLayout>
```

3)__**activity_chart**__

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context=".ChartActivity"
    android:background="@color/blue">
    <TabHost
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/tabHost"
        android:layout_centerHorizontal="true"
        android:layout_alignParentTop="true">
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="vertical"
            android:background="@color/bright_foreground_inverse_material_light">
            <TabWidget
                android:id="@android:id/tabs"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:gravity="top"></TabWidget>
            <FrameLayout
                android:id="@android:id/tabcontent"
                android:layout_width="match_parent"
                android:layout_height="match_parent">
```

```
<LinearLayout
  android:id="@+id/linearLayout"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:layout_marginTop="@dimen/activity_horizontal_margin"
  android:layout_marginRight="@dimen/activity_horizontal_margin"
  android:layout_marginLeft="@dimen/activity_horizontal_margin"
  android:layout_marginBottom="@dimen/activity_horizontal_margin"
  android:orientation="vertical">
  <TextView
    android:layout_width="354dp"
    android:layout_height="73dp"
    android:id="@+id/textView"
    android:layout_gravity="center_horizontal"
    android:textStyle="bold"
    android:textSize="20dp"
    android:paddingLeft="10dp"
    android:gravity="center_vertical"
    android:textColor="@color/blue"
    />
  <com.github.mikephil.charting.charts.BarChart
    android:id="@+id/day_chart"
    android:layout_width="match_parent"
    android:layout_height="match_parent" />
  />
</LinearLayout>
<LinearLayout
  android:id="@+id/linearLayout2"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:layout_marginTop="@dimen/activity_horizontal_margin"
  android:layout_marginRight="@dimen/activity_horizontal_margin"
```

```
          android:layout_marginLeft="@dimen/activity_horizontal_margin"
          android:layout_marginBottom="@dimen/activity_horizontal_margin"
          android:orientation="vertical">
          <TextView
            android:layout_width="354dp"
            android:layout_height="73dp"
            android:id="@+id/textView2"
            android:layout_gravity="center_horizontal"
            android:textStyle="bold"
            android:textSize="20dp"
            android:paddingLeft="10dp"
            android:gravity="center_vertical"
            android:textColor="@color/blue" />
          <com.github.mikephil.charting.charts.BarChart
            android:id="@+id/week_chart"
            android:layout_width="match_parent"
            android:layout_height="match_parent" />
          />
        </LinearLayout>
<LinearLayout
          android:id="@+id/linearLayout3"
          android:layout_width="match_parent"
          android:layout_height="match_parent"
          android:layout_marginTop="@dimen/activity_horizontal_margin"
          android:layout_marginRight="@dimen/activity_horizontal_margin"
          android:layout_marginLeft="@dimen/activity_horizontal_margin"
          android:layout_marginBottom="@dimen/activity_horizontal_margin"
          android:orientation="vertical">
          <TextView
            android:layout_width="354dp"
            android:layout_height="73dp"
            android:id="@+id/textView3"
        android:layout_gravity="center_horizontal"
        android:paddingLeft="10dp"
        android:textStyle="bold"
        android:textSize="20dp"
        android:gravity="center_vertical"
        android:textColor="@color/blue" />
    <com.github.mikephil.charting.charts.BarChart
        android:id="@+id/month_chart"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />
    />
</LinearLayout>
<LinearLayout
    android:id="@+id/linearLayout4"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_marginTop="@dimen/activity_horizontal_margin"
    android:layout_marginRight="@dimen/activity_horizontal_margin"
    android:layout_marginLeft="@dimen/activity_horizontal_margin"
    android:layout_marginBottom="@dimen/activity_horizontal_margin"
    android:orientation="vertical">
    <TextView
        android:layout_width="354dp"
        android:layout_height="73dp"
        android:id="@+id/textView4"
        android:paddingLeft="10dp"
        android:layout_gravity="center_horizontal"
        android:textStyle="bold"
        android:textSize="20dp"
        android:gravity="center_vertical"
        android:textColor="@color/blue" />
    <com.github.mikephil.charting.charts.BarChart
```

```
                    android:id="@+id/year_chart"
                    android:layout_width="match_parent"
                    android:layout_height="match_parent" />
                />
              </LinearLayout>
            </FrameLayout>
          </LinearLayout>
      </TabHost>
</RelativeLayout>
```

4)__**activity_data_classess**__

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.drawerlayout.widget.DrawerLayout
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:id="@+id/drawer_layout"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:fitsSystemWindows="true"
    tools:openDrawer="start"
    android:background="@drawable/bg"
    android:textColor="@color/defaultTextColor">
<include
        layout="@layout/app_bar_data__classess"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />
<com.google.android.material.navigation.NavigationView
        android:id="@+id/nav_view"
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        app:menu="@menu/activity_data__classess_drawer"
        android:layout_gravity="start"
        >
</com.google.android.material.navigation.NavigationView>
</androidx.drawerlayout.widget.DrawerLayout>
```

activity_date_log

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

    <ListView
        android:id="@+id/log_list"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:divider="@color/colorPrimaryDark"
        android:dividerHeight="4px"/>

</RelativeLayout>
```

activity_display_log

```
<?xml version="1.0" encoding="utf-8"?>

<RelativeLayout 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"
    tools:context=".DisplayLogActivity"
    android:background="@drawable/bg"
    android:orientation="vertical" >

    <Button
        android:id="@+id/back_button"
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentRight="true"
        android:minHeight="40dp"
        android:minWidth="100dp"
        android:onClick="closeActivity"
        android:text="Back"
        android:textColor="@android:color/background_dark" />

    <ListView
        android:id="@+id/log_list"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:layout_above="@+id/back_button"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:textColor="@android:color/background_dark"
        android:scrollbars="vertical"
        android:textSize="12sp" >
</ListView>
</RelativeLayout>
```

5)<u>activity_feedback</u>

```
<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:paddingLeft="@dimen/activity_horizontal_margin"
   android:paddingRight="@dimen/activity_horizontal_margin"
   android:paddingTop="@dimen/activity_vertical_margin"
   android:background="@drawable/gr2"
   android:paddingBottom="@dimen/activity_vertical_margin" tools:context=".Feedback"
  >
   <ImageView
      android:id="@+id/imageView3"
      android:layout_width="205dp"
      android:layout_height="161dp"
      android:layout_marginStart="100dp"
      android:layout_marginTop="0dp"
      app:srcCompat="@drawable/feedback2" />

   <Button
      android:id="@+id/btn_feedback"
      android:layout_width="200dp"
      android:layout_height="wrap_content"
      android:layout_marginStart="100dp"
      android:layout_marginTop="170dp"
      android:text="@string/button_feedback"
      android:fontFamily="@font/playfair_display_black_italic"
      android:background="@drawable/backgroundxml"/>


</RelativeLayout>
```

6)activity_footstep

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
   android:orientation="vertical"
   android:gravity="center"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:background="#9AD1D4">
<TextView
      android:id="@+id/tv_steps"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:gravity="center"
      android:textSize="50dp"
      android:fontFamily="@font/playfair_display_black_italic"
      android:textStyle="bold"
      android:textColor="#CC3363"      />
<Button
      android:id="@+id/btn_start"
      android:layout_width="200dp"
      android:layout_height="wrap_content"
      android:drawableLeft="@drawable/ic_start"
      android:text="Start Pedometer"
      android:background="@drawable/button"      />
   <Button
      android:id="@+id/btn_stop"
      android:layout_width="200dp"
      android:layout_height="wrap_content"
      android:layout_marginTop="50dp"
      android:drawableLeft="@drawable/ic_stop"
```

```
        android:background="@drawable/button"
        android:text="Stop Pedometer"       />
</LinearLayout>
```

7)<u>activity_fragment</u>

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical" android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="center"
    android:weightSum="1">
    <ImageView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/image_view"
        android:cropToPadding="false"
        android:adjustViewBounds="true"
        android:maxWidth="110dp"
        android:maxHeight="110dp"
        android:scaleType="fitCenter"
        android:layout_marginRight="3dp"
        android:src="@color/blue"
        android:foregroundGravity="center" />
    <TextView
        android:layout_width="212dp"
        android:layout_height="200dp"
        android:text=" New Text"
        android:id="@+id/review_view"
        android:foregroundGravity="center_vertical"
        android:gravity="center"
        android:textSize="20dp"
        android:textStyle="bold" />
    <Button
         android:layout_width="168dp"
        android:layout_height="50dp"
        android:text=" Share advice"
        android:id="@+id/shareBtn"
        android:textColor="@color/colorPrimaryDark"
        android:layout_gravity="bottom|center_horizontal"
        android:background="@drawable/round_corner"
        android:layout_alignParentBottom="true"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="90dp" />
</LinearLayout>
```

8)<u>activity_home</u>

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.drawerlayout.widget.DrawerLayout
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=".home"
    android:id="@+id/drawerLayout"
    android:background="@drawable/gr2">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical">
        <FrameLayout
    android:layout_width="wrap_content"
    android:layout_height="match_parent"
        android:id="@+id/main_container"          >
     <LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:orientation="vertical"
          android:divider="@android:color/black"
          android:showDividers="middle" >
          <TextView
              android:id="@+id/BMI"
              android:layout_width="wrap_content"
              android:layout_height="wrap_content"
              android:text="BMI Calculaor"
              android:layout_marginTop="20dp"
              android:textSize="30sp"
             android:drawableLeft="@drawable/bmi4"
              android:layout_marginStart="44dp"
              android:layout_marginBottom="10dp"
android:fontFamily="@font/playfair_display_black_italic"/>
          <TextView
              android:id="@+id/textView2"
              android:layout_width="wrap_content"
              android:layout_height="wrap_content"
              android:textSize="30sp"
              android:layout_marginStart="44dp"
              android:layout_marginTop="20dp"
              android:drawableStart="@drawable/calorie2"
              android:layout_marginBottom="10dp"
              android:fontFamily="@font/playfair_display_black_italic"
              android:text="Calorie Counter" />
          <TextView
              android:id="@+id/textView3"
              android:layout_marginTop="20dp"
              android:fontFamily="@font/playfair_display_black_italic"
              android:layout_width="wrap_content"
              android:textSize="30sp"
              android:drawableStart="@drawable/footstep"
              android:layout_marginStart="44dp"
              android:layout_marginBottom="10dp"
              android:layout_height="wrap_content"
              android:text="Footstep Monitoring" />
          <TextView
              android:id="@+id/textView4"
              android:fontFamily="@font/playfair_display_black_italic"
              android:layout_width="wrap_content"
              android:layout_height="wrap_content"
              android:textSize="30sp"
              android:layout_marginTop="20dp"
      android:layout_marginBottom="10dp"
              android:drawableStart="@drawable/water"
              android:layout_marginStart="44dp"
              android:text="Water alarm" />
          <TextView
             android:id="@+id/textView5"
              android:fontFamily="@font/playfair_display_black_italic"
              android:layout_width="wrap_content"
              android:layout_height="wrap_content"
              android:drawableStart="@drawable/suggestion"
              android:textSize="30sp"
              android:layout_marginTop="20dp"
              android:layout_marginStart="44dp"
              android:text="Suggestion" />
      </LinearLayout>
```

```
        </FrameLayout>
    </LinearLayout>
    <com.google.android.material.navigation.NavigationView
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        app:menu="@menu/navigation"
        android:layout_gravity="start"
        android:id="@+id/navigation_view">
</com.google.android.material.navigation.NavigationView>
</androidx.drawerlayout.widget.DrawerLayout>
```

9)activity_log_out

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.coordinatorlayout.widget.CoordinatorLayout
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:fitsSystemWindows="true"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".LogOut"
    android:background="@drawable/gr2">
<LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical">
<EditText
            android:id="@+id/old_email"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:hint="Enter Email"
```

```
      android:inputType="textEmailAddress"
      android:maxLines="1"
      android:singleLine="true" />
    <EditText
      android:id="@+id/new_email"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:hint="Enter new Email"
      android:inputType="textEmailAddress"
      android:maxLines="1"
      android:singleLine="true" />
<EditText
      android:id="@+id/password"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:focusableInTouchMode="true"
      android:hint="Enter Password"
      android:imeActionId="6"
      android:imeOptions="actionUnspecified"
      android:inputType="textPassword"
      android:maxLines="1"
      android:singleLine="true" />
    <EditText
      android:id="@+id/newPassword"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:focusableInTouchMode="true"
      android:hint="Enter New Password"
      android:imeActionId="6"
      android:imeOptions="actionUnspecified"
      android:inputType="textPassword"
```

```
        android:maxLines="1"
        android:singleLine="true" />
<Button
        android:id="@+id/changeEmail"
        style="?android:textAppearanceSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:background="@color/colorPrimaryDark"
        android:text="Change Email"
        android:layout_gravity="center"
        android:textColor="@android:color/white"
        android:textStyle="bold" />
    <Button
        android:id="@+id/changePass"
        android:layout_gravity="center"
        style="?android:textAppearanceSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:background="@color/colorPrimaryDark"
        android:text="Change Password"
        android:textColor="@android:color/white"
        android:textStyle="bold" />
    <Button
        android:id="@+id/send"
        android:layout_gravity="center"
        android:layout_width="wrap_content"
        android:layout_height="45dp"
        android:layout_marginTop="10dp"
        android:background="@color/colorPrimaryDark"
        android:text="Send Password Reset Email"
    android:textColor="@android:color/white"
     />
<ProgressBar
    android:id="@+id/progressBar"
    android:layout_width="30dp"
    android:layout_height="30dp"
    android:visibility="gone" />
<Button
    android:layout_gravity="center"
    android:id="@+id/remove"
    style="?android:textAppearanceSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
    android:background="@color/colorPrimaryDark"
    android:text="Remove user"
    android:textColor="@android:color/white"
    android:textStyle="bold" />
<LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    android:layout_gravity="center"
    android:textAlignment="center">
<Button
    android:id="@+id/change_email_button"
    style="?android:textAppearanceSmall"
    android:layout_width="150dp"
    android:layout_gravity="center"
    android:layout_height="70dp"
    android:layout_marginTop="10dp"
    android:drawableRight="@drawable/ic_mail"
    android:text="Change Email"
    android:textStyle="bold" />
<Button
    android:id="@+id/change_password_button"
    style="?android:textAppearanceSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginTop="10dp"
    android:text="Change Password"
    android:drawableRight="@drawable/password"
    android:textStyle="bold" />
<Button
    android:layout_gravity="center"
    android:id="@+id/sending_pass_reset_button"
    style="?android:textAppearanceSmall"
    android:layout_width="wrap_content"
    android:layout_height="70dp"
    android:layout_marginTop="10dp"
    android:drawableRight="@drawable/ic_mail"
    android:text="Send Password Reset Email"
    android:textStyle="bold" />
<Button
    android:id="@+id/remove_user_button"
    style="?android:textAppearanceSmall"
    android:layout_width="wrap_content"
    android:layout_height="70dp"
    android:layout_marginTop="10dp"
    android:layout_gravity="center"
    android:text="Remove User"
    android:drawableRight="@drawable/ic_remove"
    android:textStyle="bold" />
```

```
        <Button
            android:id="@+id/sign_out"
            style="?android:textAppearanceSmall"
            android:layout_width="wrap_content"
            android:layout_height="70dp"
            android:layout_marginTop="10dp"
            android:background="@color/colorPrimary"
            android:text="Sign Out"
            android:layout_gravity="center"
            android:drawableRight="@drawable/signout"
            android:textColor="@android:color/white"
            android:textStyle="bold" />
</LinearLayout>
    </LinearLayout>
</androidx.coordinatorlayout.widget.CoordinatorLayout>
```

10)<u>**activity_login**</u>

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_height="match_parent"
    android:gravity="center"
    android:orientation="vertical"
    android:background="@drawable/gr2" >
    <ImageView
        android:layout_width="wrap_content"
        android:layout_height="100dp"
        android:layout_gravity="center_horizontal"
        android:layout_marginBottom="24dp"
    android:src="@drawable/logo2" />
<EditText
    android:id="@+id/loginEmail"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="15dp"
    android:hint="Email"
    android:fontFamily="casual"
    android:drawableLeft="@drawable/ic_email"
    android:inputType="textEmailAddress" />
<EditText
    android:id="@+id/loginpaswd"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="15dp"
    android:hint="Password"
    android:fontFamily="casual"
    android:drawableLeft="@drawable/ic_action_lock"
    android:inputType="textPassword"/>
<androidx.appcompat.widget.AppCompatCheckBox
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/passwordshow"
    android:text="Show Password"/>
<Button
    android:id="@+id/btnLogIn"
    android:layout_width="200dp"
    android:layout_height="wrap_content"
    android:layout_margin="15dp"
    android:text="Log In"
    android:textSize="25dp" />
    <TextView
        android:id="@+id/TVSignIn"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="15dp"
        android:text="New User? Register Here"
        android:textSize="20dp"
        android:textAlignment="center"      />
    <TextView
        android:id="@+id/forgot"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="15dp"
        android:text="forgot password?"
        android:textSize="20dp"
        android:textAlignment="center"/>
    <ProgressBar
        android:id="@+id/progressBar"
        android:layout_width="30dp"
        android:layout_height="30dp"
        android:layout_gravity="center|bottom"
        android:layout_marginBottom="20dp"
        android:visibility="gone"
        />
</LinearLayout>
```

12)activity_main

```
<?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="fill_parent"
    android:layout_height="fill_parent"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    tools:context=".MainActivity"
    android:textColor="@color/defaultTextColor"
    android:background="@drawable/bg">
<TextView
        android:id="@+id/Name"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Name:"
        android:textAppearance="@style/TextAppearance.AppCompat"
        android:textColor="@color/defaultTextColor"
        android:textSize="15sp"
        android:layout_above="@+id/Age"
        android:layout_alignEnd="@+id/Age"
        android:layout_alignTop="@+id/namevar"
        android:layout_alignParentStart="true"        />
    <TextView
        android:id="@+id/Weight"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBottom="@+id/weight"
        android:layout_alignEnd="@+id/Height"
        android:layout_alignParentStart="true"
        android:layout_below="@+id/Height"
        android:text="Weight: (kg)"
        android:textAppearance="@style/TextAppearance.AppCompat"
        android:textColor="@color/defaultTextColor"
        android:textSize="15sp" />
```

```
<TextView
    android:id="@+id/Height"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBottom="@+id/height"
    android:layout_alignParentStart="true"
    android:layout_below="@+id/age"
    android:text="Height: (feet)"
    android:textAppearance="@style/TextAppearance.AppCompat"
    android:textColor="@color/defaultTextColor"
    android:textSize="15sp" />
<TextView
    android:id="@+id/Level"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Level Of Exercise:"
    android:textAppearance="@style/TextAppearance.AppCompat"
    android:textColor="@color/defaultTextColor"
    android:textSize="15sp"
    android:textStyle="bold"
    android:layout_below="@+id/Weight"
    android:layout_alignParentStart="true" />
<TextView
    android:id="@+id/Age"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Age:"
    android:textAppearance="@style/TextAppearance.AppCompat"
    android:textColor="@color/defaultTextColor"
    android:textSize="15sp"
    android:layout_above="@+id/Height"
    android:layout_below="@+id/namevar"
    android:layout_alignParentStart="true"
    android:layout_alignEnd="@+id/Height" />
<TextView
    android:id="@+id/Gender"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Gender: "
    android:textAppearance="@style/TextAppearance.AppCompat"
    android:textColor="@color/defaultTextColor"
    android:textSize="20sp"
    android:layout_alignParentTop="true"
    android:layout_alignParentStart="true"
    android:layout_above="@+id/Name" />
<RadioGroup
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/radioGroup"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_marginEnd="41dp"
    android:orientation ="vertical">
    <RadioButton
        android:id="@+id/Male"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBottom="@+id/Gender"
        android:layout_alignTop="@+id/Gender"
        android:layout_marginEnd="14dp"
        android:layout_toStartOf="@+id/Female"
        android:checked="true"
        android:text="Male"
        android:textColor="@color/defaultTextColor"
```

```
         android:textColorLink="@color/defaultTextColor" />
       <RadioButton
         android:id="@+id/Female"
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout_alignBottom="@+id/Male"
         android:layout_alignParentEnd="true"
         android:layout_alignTop="@+id/Gender"
         android:layout_marginEnd="20dp"
         android:text="Female"
         android:textColor="@color/defaultTextColor"
         android:textColorLink="@color/defaultTextColor" />
     </RadioGroup>
    <EditText
       android:id="@+id/namevar"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout_alignParentEnd="true"
       android:layout_below="@+id/radioGroup"
       android:ems="10"
       android:inputType="textPersonName"
       android:singleLine="true"
       android:textColor="@color/defaultTextColor"
       android:textColorLink="@color/defaultTextColor"  />
     <EditText
       android:id="@+id/age"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout_alignParentEnd="true"
       android:layout_below="@+id/namevar"
       android:ems="10"
       android:gravity="right"
    android:inputType="number"
    android:singleLine="true"
    android:textColor="@color/defaultTextColor"
    android:textColorLink="@android:color/background_light"
    android:visibility="visible" />
<EditText
    android:id="@+id/weight"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_below="@+id/height"
    android:ems="10"
    android:gravity="right"
    android:inputType="numberDecimal"
    android:singleLine="true"
    android:textColor="@color/defaultTextColor"
    android:textColorLink="@color/defaultTextColor"
    android:visibility="visible" />
<EditText
    android:id="@+id/height"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_below="@+id/age"
    android:ems="10"
    android:gravity="right"
    android:inputType="numberDecimal"
    android:singleLine="true"
    android:textColor="@color/defaultTextColor"
    android:textColorLink="@color/defaultTextColor"
    android:textIsSelectable="false" />
<Button
```

```
    android:id="@+id/calc"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/radioGroup1"
    android:layout_centerHorizontal="true"
    android:onClick="onClick"
    android:text="Calculate"
    android:textColor="?attr/actionMenuTextColor"
    android:textColorLink="@color/defaultTextColor" />
<RadioGroup
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/radioGroup1"
    android:orientation ="vertical"
    android:layout_below="@+id/Level"
    android:layout_alignParentStart="true"
    android:textColor="@color/defaultTextColor"
    android:textSize="10sp" >
    <RadioButton
        android:id="@+id/r1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_below="@+id/Level"
        android:text="Little to none"
        android:textColor="@color/defaultTextColor"
        android:textColorLink="@color/defaultTextColor"
        android:textSize="13sp" />
    <RadioButton
        android:id="@+id/r2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_below="@id/r1"
        android:text="1 to 3x/week"
        android:textColor="@color/defaultTextColor"
        android:textColorLink="@color/defaultTextColor"
        android:textSize="13sp" />
    <RadioButton
        android:id="@+id/r3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_below="@id/r2"
        android:text="3 to 5x/week"
        android:textColor="@color/defaultTextColor"
        android:textColorLink="@color/defaultTextColor"
        android:textSize="13sp" />
    <RadioButton
        android:id="@+id/r4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_below="@id/r3"
        android:text="6 to 7x/week"
        android:textColor="@color/defaultTextColor"
        android:textColorLink="@color/defaultTextColor"
        android:textSize="13sp" />
    <RadioButton
        android:id="@+id/r5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_below="@id/r4"
        android:text="2x/day"
        android:textColor="@color/defaultTextColor"
        android:textColorLink="@color/defaultTextColor"
        android:textSize="13sp" />
    </RadioGroup>
    <TextView
      android:id="@+id/result1"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_alignParentStart="true"
      android:layout_below="@+id/calc"
      android:layout_marginTop="12dp"
      android:textColor="@color/defaultTextColor"
      android:textSize="20sp"  />
    <TextView
      android:id="@+id/Goals"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Goals: "
      android:textAppearance="@style/TextAppearance.AppCompat"
      android:textColor="@color/defaultTextColor"
      android:textSize="15sp"
      android:layout_below="@+id/weight"
      android:layout_alignStart="@+id/radioGroup" />
    <Spinner
      android:id="@+id/spinner"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
```

```
    android:spinnerMode="dialog"
    android:textColor="@color/defaultTextColor"
    android:layout_below="@+id/Goals"
    android:layout_alignParentEnd="true"
    android:layout_toEndOf="@+id/Level" />
</RelativeLayout>
```

13)activity_main2

```
<?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:background="@drawable/gr2"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  tools:context=".MainActivity">
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <ImageView
      android:id="@+id/imageView"
      android:layout_marginStart="75dp"
      android:layout_width="wrap_content"
      android:layout_gravity="center"
      android:layout_height="wrap_content"
      app:srcCompat="@drawable/edited" />
  </LinearLayout>
  <TableLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TableRow
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:gravity="bottom"
      android:layout_marginTop="500dp"
      android:layout_marginBottom="25dp"         >
      <Button
        android:id="@+id/button"
        android:layout_width="300dp"
        android:layout_height="50dp"
        android:layout_marginStart="50dp"
        android:background="@drawable/backgroundxml"
        android:text="LOG IN"
        android:textAppearance="@style/TextAppearance.AppCompat.Large"
        android:textColor="#FFFFFF" />
    </TableRow>
    <TableRow>
      <Button
        android:id="@+id/button2"
        android:layout_width="300dp"
        android:layout_height="50dp"
        android:layout_marginStart="50dp"
        android:layout_marginBottom="100dp"
        android:background="@drawable/backgroundxml"
        android:padding="4dp"
        android:text="REGISTER"
        android:textAppearance="@style/TextAppearance.AppCompat.Large"
        android:textColor="#FFFFFF" />
    </TableRow>
  </TableLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

14)activity_outline

```
<?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=".OutlineActivity"
   android:paddingBottom="@dimen/activity_vertical_margin"
   android:paddingLeft="@dimen/activity_horizontal_margin"
   android:paddingRight="@dimen/activity_horizontal_margin"
   android:paddingTop="@dimen/activity_vertical_margin"
   >
      <androidx.viewpager.widget.ViewPager
         xmlns:android="http://schemas.android.com/apk/res/android"
         android:id="@+id/pager"
         android:layout_width="match_parent"
         android:layout_height="match_parent"
         android:layout_alignParentTop="true" />
     <TextView
         android:layout_width="90dp"
         android:layout_height="50dp"
         android:id="@+id/pageNum"
         android:layout_alignParentStart="true"
         android:layout_alignTop="@+id/pager"
         android:text="1/6" />
   </RelativeLayout>
```

15)<u>activity_reset</u>

```
<?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/gr2"
   android:gravity="center"
   android:orientation="vertical"
   tools:context=".Reset">
   <ImageView
      android:layout_width="@dimen/logo_w_h"
      android:layout_height="@dimen/logo_w_h"
      android:layout_gravity="center_horizontal"
      android:layout_marginBottom="10dp"
      android:src="@drawable/logo2" />
   <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_gravity="center_horizontal"
      android:padding="10dp"
      android:text="Forgot Password?"
      android:textColor="@android:color/white"
      android:textSize="20dp" />
<TextView
      android:layout_width="350dp"
      android:layout_height="wrap_content"
      android:layout_marginBottom="10dp"
      android:gravity="center_horizontal"
      android:padding="@dimen/activity_horizontal_margin"
      android:text="We just need your registered Email Id to send you password reset
instructions."
      android:textColor="@android:color/white"
      android:textSize="16dp" />
   <EditText
```

```
        android:id="@+id/email"
        android:layout_width="350dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:layout_marginBottom="10dp"
        android:hint="Email"
        android:padding="20dp"
        android:paddingTop="20dp"
        android:textSize="20sp"
        android:inputType="textEmailAddress"
        android:textColor="@android:color/white"
        android:textColorHint="@android:color/white"
        android:background="@drawable/custom_background"/>
    <Button
        android:id="@+id/btn_reset_password"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:text="Reset Password"
        android:textColor="@android:color/black" />
<Button
        android:id="@+id/btn_back"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:background="@null"
        android:text="back"
        android:textColor="@color/colorAccent" />
</LinearLayout>
```

16) activity_signup

```
<?xml version="1.0" encoding="utf-8"?>
<ScrollView
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:fitsSystemWindows="true"
    android:background="@drawable/gr2">
    <LinearLayout
        android:orientation="vertical"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:paddingTop="56dp"
        android:paddingLeft="24dp"
        android:paddingRight="24dp">
        <ImageView
            android:layout_width="wrap_content"
            android:layout_height="72dp"
            android:layout_gravity="center_horizontal"
            android:layout_marginBottom="24dp"
            android:src="@drawable/logo2" />
        <EditText
            android:id="@+id/name1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:drawableLeft="@drawable/ic_action_user"
            android:inputType="textPersonName"
            android:fontFamily="casual"
            android:hint="name"
            android:padding="20dp"
            android:paddingTop="20dp"
            android:textSize="20sp" />
        <EditText
            android:id="@+id/email2"
            android:drawableLeft="@drawable/ic_email"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="textEmailAddress"
            android:fontFamily="casual"
            android:hint="Email ID"
            android:padding="20dp"
            android:paddingTop="20dp"
            android:textSize="20sp" />
        <EditText
            android:id="@+id/password2"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:drawableLeft="@drawable/ic_action_lock"
            android:fontFamily="casual"
            android:hint="Password"
            android:inputType="textPassword"
            android:padding="20dp"
            android:paddingTop="20dp"
            android:textSize="20sp" />
        <EditText
            android:id="@+id/mobile"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:drawableLeft="@drawable/ic_smartphone"
            android:fontFamily="casual"
            android:hint="mobile"
            android:inputType="phone"
            android:padding="20dp"
            android:paddingTop="20dp"
            android:textSize="20sp" />
```

```
        <Button
            android:id="@+id/button3"
            android:layout_width="200dp"
            android:layout_height="50dp"
            android:layout_marginStart="80dp"
            android:fontFamily="casual"
            android:gravity="center"
            android:text="Create an Account" />
        <Button android:id="@+id/link_login"
            android:layout_width="200dp"
            android:layout_height="70dp"
            android:layout_marginBottom="50dp"
            android:layout_marginStart="80dp"
            android:text="Already a member? Login"
            android:gravity="center"
            android:textSize="16dp"/>
        <ProgressBar
            android:id="@+id/progressBar"
            android:layout_width="30dp"
            android:layout_height="30dp"
            android:layout_gravity="center|bottom"
            android:layout_marginBottom="20dp"           />
    </LinearLayout>
</ScrollView>
```

17)<u>activity_water</u>

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

```
xmlns:custom="http://schemas.android.com/apk/res-auto"
android:background="@drawable/main_page_backgound">
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    android:id="@+id/main_view"
    android:padding="20dp">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Today you drank"
        android:textColor="@color/colorPrimaryDark"
        android:paddingTop="60dp"
        android:textSize="20sp"
        android:layout_gravity="center_horizontal"/>
    <com.github.lzyzsd.circleprogress.DonutProgress
        android:id="@+id/donut_progress"
        android:layout_width="170dp"
        android:layout_height="170dp"
        android:layout_marginTop="10dp"
        android:layout_gravity="center"
        custom:donut_finished_color="@color/colorPrimaryDark"
        custom:donut_unfinished_stroke_width="5dp"
        custom:donut_unfinished_color="@color/blue"
        custom:donut_finished_stroke_width="10dp"
        custom:donut_text_size="50sp"
        custom:donut_text_color="@color/colorPrimaryDark"/>
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textColor="@color/colorPrimaryDark"
        android:layout_marginStart="180dp"
        android:textSize="15sp"
        android:id="@+id/choosen_drink_text"            />
    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/add_drink_button"
        android:text="add a drink"
        android:layout_marginLeft="30dp"
        android:layout_marginRight="30dp"
        android:textColor="@color/colorPrimaryDark"
        android:tint ="@color/colorPrimaryDark"
        android:layout_gravity="center_horizontal"
        android:layout_marginTop="10dp"
        android:background="@drawable/drink_button"/>
    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_gravity="center_horizontal"
        android:paddingTop="30dp">
        <ImageButton
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/log_button"
            android:src = "@drawable/history_icon"
            android:tint="@color/colorPrimaryDark"
            android:padding="7dp"
            android:background="@drawable/circle_button />
        <ImageButton
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/outlines_button"
            android:src = "@drawable/info"
            android:tint="@color/colorPrimaryDark"
            android:padding="7dp"
            android:layout_marginLeft="15dp"
            android:background="@drawable/circle_button"            />
          <ImageButton
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/chart_button"
            android:src = "@drawable/show_chart"
            android:tint="@color/colorPrimaryDark"
            android:padding="7dp"
            android:layout_marginLeft="15dp"
            android:background="@drawable/circle_button”   />
          <ImageButton
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/setting_button"
            android:src = "@drawable/setting_icon"
            android:tint="@color/colorPrimaryDark"
            android:padding="7dp"
            android:layout_marginLeft="15dp"
            android:background="@drawable/circle_button”/>
        </LinearLayout>
      </LinearLayout>
    </RelativeLayout>
```

18)add_drink_dialog

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout_width="fill_parent"
```

```
android:layout_height="fill_parent"
android:orientation="vertical"
android:paddingTop="@dimen/activity_horizontal_margin"
android:paddingLeft="@dimen/activity_horizontal_margin"
android:paddingRight="@dimen/activity_horizontal_margin"
android:paddingBottom="@dimen/activity_horizontal_margin">
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:orientation="horizontal"
  android:paddingTop="10dp"
  android:layout_gravity="center">
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/water_glass_button"
    android:padding="10dp"
    android:drawableTop="@drawable/water_glass_big"
    android:background="@drawable/drink_icon_backgorund"
    android:textColor="@color/colorPrimaryDark"        />
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/water_bottle_button"
    android:drawableTop="@drawable/water_bottle_big"
    android:layout_marginStart="10dp"
    android:padding="10dp"
    android:textColor="@color/colorPrimaryDark"
    android:background="@drawable/drink_icon_backgorund"        />
</LinearLayout>
<LinearLayout
  android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_gravity="center"
        android:paddingTop="20dp"
        android:paddingRight="10dp"
        android:paddingLeft="10dp"
        android:weightSum="1">
        <Button
          android:id="@+id/other_size_button"
          android:layout_width="wrap_content"
          android:layout_height="wrap_content"
          android:background="@drawable/round_corner"
          android:text="other size"
          android:textColor="@color/colorPrimaryDark"
          android:layout_marginStart="10dp”       />
        <Button
          android:id="@+id/cancel_button"
          android:layout_width="wrap_content"
          android:layout_height="wrap_content"
          android:text="cancel"
          android:background="@drawable/round_corner"
          android:textColor="@color/colorPrimaryDark"
          android:layout_marginLeft="10dp"/>
    </LinearLayout>
</LinearLayout>
```

19)<u>app_bar_data__classess</u>

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.coordinatorlayout.widget.CoordinatorLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
        <include layout="@layout/content_data__classess" />
    <com.google.android.material.floatingactionbutton.FloatingActionButton
        android:id="@+id/fab"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="bottom|end"
        android:layout_margin="@dimen/fab_margin"
        app:backgroundTint="@android:color/darker_gray"
        app:srcCompat="@android:drawable/btn_plus"  />
</androidx.coordinatorlayout.widget.CoordinatorLayout>
```

20)<u>congratulation_dialog</u>

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_alignParentLeft="true"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:background="@android:color/transparent"
    android:orientation="vertical"
    android:weightSum="1">
    <FrameLayout
        android:layout_width="wrap_content"
        android:layout_height="200dp"
        android:layout_gravity="center_horizontal">
        <TextView
    android:ems="10"
    android:layout_width="263dp"
    android:layout_height="145dp"
    android:background="@android:drawable/editbox_background_normal"
    android:inputType="textMultiLine"
    android:layout_marginTop="40dp"
    android:scrollbars="vertical"
    android:text="Congratulation!"
    android:id="@+id/text1"
    android:textStyle="bold"
    android:textSize="30dp"
    android:textColor="@color/blue"
    android:paddingBottom="50dp"
    android:gravity="bottom|center_horizontal"
    android:layout_marginLeft="70dp" />
<ImageView
    android:layout_marginTop="0dp"
    android:layout_width="match_parent"
    android:layout_height="79dp"
    android:layout_gravity="top|center"
    android:src="@drawable/champion" />
<TextView
    android:layout_width="wrap_content"
    android:layout_height="53dp"
    android:text="the norm is achieved"
    android:id="@+id/textView5"
    android:textStyle="bold"
    android:textColor="@color/blue"
    android:gravity="center"
    android:layout_gravity="center"
    android:layout_marginBottom="20dp"
    android:paddingTop="20dp" />
    <ImageView
      android:layout_width="53dp"
      android:layout_height="53dp"
      android:id="@+id/imageView2"
      android:layout_gravity="center_horizontal|bottom"
      android:src="@drawable/button_round_cancel_icon"
      android:layout_marginTop="10dp" />
  </FrameLayout>
</LinearLayout>
```

21)content_data__classess

```
<?xml version="1.0" encoding="utf-8"?>
  <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:layout_alignParentTop="true"
    android:layout_alignParentStart="true"
    xmlns:tools="http://schemas.android.com/tools"
    app:layout_behavior="@string/appbar_scrolling_view_behavior"
    tools:context=".Data_Classes"
    tools:showIn="@layout/app_bar_data__classess">
    <TextView
      android:id="@+id/textView3"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:gravity="left"
      android:text="Today"
      android:textAppearance="@style/TextAppearance.AppCompat"
```

```
        android:textColor="@color/defaultTextColor"
        android:textSize="20sp"
        android:layout_alignParentTop="true"
        android:layout_alignParentStart="true" />
    <TextView
        android:id="@+id/delete"
        android:layout_width="wrap_content"
        android:gravity="center"
        android:textSize="25sp"
        android:textAppearance="@style/TextAppearance.AppCompat"
        android:textColor="@color/defaultTextColor"
        android:layout_height="wrap_content"
        android:text="TextView"
        android:layout_below="@+id/textView3"
        android:layout_centerHorizontal="true" />
<TextView
    android:id="@+id/resulttext"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_below="@+id/delete"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="145dp"
    android:gravity="center"
    android:paddingBottom="10dp"
    android:paddingTop="10dp"
    android:text="TextView"
    android:textAlignment="center"
    android:textColor="@color/defaultTextColor" />
<TextView
    android:id="@+id/total_cals"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_alignStart="@+id/resulttext"
    android:layout_below="@+id/resulttext"
    android:gravity="center"
    android:paddingBottom="10dp"
    android:paddingTop="10dp"
    android:text="TextView"
    android:textAlignment="center"
    android:textColor="@color/defaultTextColor" />
<TextView
    android:id="@+id/total_time"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_below="@+id/total_cals"
    android:gravity="center"
    android:paddingBottom="10dp"
    android:paddingTop="10dp"
    android:text="TextView"
    android:textAlignment="center"
    android:textColor="@color/defaultTextColor" />
<TextView
    android:id="@+id/suggest"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_below="@+id/total_time"
    android:layout_centerHorizontal="true"
    android:gravity="center"
    android:paddingTop="10dp"
    android:text="TextView"
    android:textAlignment="center"
    android:textColor="@color/defaultTextColor" />
<Button
```

```
        android:id="@+id/reset"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/delete"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="18dp"
        android:onClick="reset"
        android:text="Reset Calorie" />
</RelativeLayout>
```

22)<u>list_entry</u>

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:id="@+id/LinearLayout0"
    android:layout_width="fill_parent"
xmlns:android="http://schemas.android.com/apk/res/android"
    android:paddingLeft="10sp" android:paddingRight="10sp"
    android:layout_height="wrap_content"
    android:orientation="vertical" android:paddingTop="2sp">
    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="fill_parent"
        android:orientation="horizontal">
        <TextView android:layout_height="wrap_content"
            android:layout_width="fill_parent" android:id="@+id/tvDate"
            android:text="Date" android:typeface="sans" android:textSize="16sp"
android:textStyle="bold"
            android:textColor="@color/defaultTextColor"></TextView>
        <Button
            android:id="@+id/btnRemove"
            android:layout_width="32dp"
            android:layout_height="25dip"
    android:text="x"
    android:textSize="8dp" />
</LinearLayout>
<LinearLayout android:id="@+id/LinearLayout01"
  android:layout_height="wrap_content"
  android:layout_width="fill_parent">
  <TextView android:id="@+id/TextView01" android:layout_width="wrap_content"
    android:layout_height="wrap_content" android:textStyle="bold"
    android:text="Description:  " android:textSize="13sp"
    android:textColor="@color/defaultTextColor"></TextView>
  <TextView android:layout_width="wrap_content"
    android:layout_height="wrap_content" android:text="filler"
    android:id="@+id/tvDescription" android:textSize="13sp"
    android:textColor="@color/defaultTextColor"></TextView>
</LinearLayout>
<LinearLayout android:id="@+id/LinearLayout02"
  android:layout_height="wrap_content"
  android:layout_width="fill_parent">
  <TextView android:id="@+id/TextView02" android:layout_width="wrap_content"
    android:layout_height="wrap_content" android:textStyle="bold"
    android:text="Total Calories:  " android:textSize="13sp"
    android:textColor="@color/defaultTextColor"></TextView>
  <TextView android:layout_width="wrap_content"
    android:layout_height="wrap_content" android:text="filler"
    android:id="@+id/tvTotalCalories" android:textSize="13sp"
    android:textColor="@color/defaultTextColor"></TextView>
</LinearLayout>
<LinearLayout android:id="@+id/LinearLayout03"
  android:layout_height="wrap_content"
  android:layout_width="fill_parent">
  <TextView android:id="@+id/TextView03" android:layout_width="wrap_content"
    android:layout_height="wrap_content" android:textStyle="bold"
```

```
      android:text="Calories per weight/vol/serving:  " android:textSize="13sp"
      android:textColor="@color/defaultTextColor"></TextView>
    <TextView android:layout_width="wrap_content"
      android:layout_height="wrap_content" android:text=""
      android:id="@+id/tvCalPerWeight" android:textSize="13sp"
      android:textColor="@color/defaultTextColor"></TextView>
  </LinearLayout>
  <LinearLayout android:id="@+id/LinearLayout04"
    android:layout_height="wrap_content"
    android:layout_width="fill_parent">
    <TextView android:id="@+id/TextView04" android:layout_width="wrap_content"
      android:layout_height="wrap_content" android:textStyle="bold"
      android:text="Per weight/vol/serving:  " android:textSize="13sp"
      android:textColor="@color/defaultTextColor"></TextView>
    <TextView android:layout_width="wrap_content"
      android:layout_height="wrap_content" android:text=""
      android:id="@+id/tvPerWeight" android:textSize="13sp"
      android:textColor="@color/defaultTextColor"></TextView>
  </LinearLayout>
  <LinearLayout android:id="@+id/LinearLayout05"
    android:layout_height="wrap_content"
    android:layout_width="fill_parent">
    <TextView android:id="@+id/TextView05" android:layout_width="wrap_content"
      android:layout_height="wrap_content" android:textStyle="bold"
      android:text="Total weight/vol/serving consumed:  " android:textSize="13sp"
      android:textColor="@color/defaultTextColor"></TextView>
    <TextView android:layout_width="wrap_content"
      android:layout_height="wrap_content" android:text=""
      android:id="@+id/tvTotalWeightCon" android:textSize="13sp"
android:layout_weight="1"
      android:textColor="@color/defaultTextColor"></TextView>
    </LinearLayout>
</LinearLayout>
```

23)number_picker_dialog

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingBottom="@dimen/activity_horizontal_margin">
    <NumberPicker
        android:id="@+id/numberPicker"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"    />
    <Button
        android:id="@+id/set_button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="@drawable/round_corner"
        android:layout_marginLeft="10dp"
        android:text="set"
        android:textColor="@color/colorPrimaryDark"
        />
</LinearLayout>
```

24)settings_toolbar

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.appcompat.widget.Toolbar
```

```
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:id="@+id/toolbar"
    app:theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:minHeight="?attr/actionBarSize"
    app:navigationContentDescription="@string/abc_action_bar_up_description"
    android:background="?attr/colorPrimary"
    app:navigationIcon="?attr/homeAsUpIndicator"
    app:title="@string/action_settings"    />
```

25)<u>time_log_activity</u>

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/main_page_backgound">
    <ListView
        android:id="@+id/time_log_list"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:divider="@color/colorPrimaryDark"
        android:dividerHeight="4px"/>
</RelativeLayout>
```

26)<u>time_log_raw</u>

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

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:padding="10dp"
    android:weightSum="1">
    <ImageButton
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:src="@drawable/water_glass"
        android:padding="10dp"
        android:layout_marginLeft="10dp"
        android:background="@drawable/circle_button"
        android:id="@+id/containerTyp"
        android:maxHeight="20dp"
        android:maxWidth="20dp" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="20dp"
        android:id="@+id/amount"
        android:paddingTop="10dp"
        android:textSize="20dp"
        android:textStyle="bold"
        android:textColor="@color/colorPrimaryDark"/>
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/time"
        android:gravity="right"
        android:paddingRight="10dp"
        android:paddingTop="10dp"
        android:textSize="20dp"
        android:textColor="@color/colorPrimaryDark"
        android:dividerHeight="2dp"
        android:layout_weight="1" />
  </LinearLayout>
</RelativeLayout>
```

27)<u>**time_picker_dialog**</u>

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:orientation="vertical" android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:theme="@android:style/Theme.Holo.Light"    >
  <TimePicker
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/timePicker"
    android:layout_gravity="center_horizontal">
    <requestFocus />
  </TimePicker>
  <LinearLayout
    android:orientation="horizontal"
    android:layout_width="match_parent"
    android:layout_height="87dp"
    android:weightSum="1"
    android:gravity="center">
    <Button
      android:id="@+id/set_time_button"
      android:layout_width="111dp"
      android:layout_height="wrap_content"
      android:background="@drawable/round_corner"
```

```
        android:layout_marginLeft="10dp"
        android:text="set"
        android:textColor="@color/colorPrimaryDark"
        android:layout_weight="0.13" />
      <Button
        android:id="@+id/cancel_time_button"
        android:layout_width="111dp"
        android:layout_height="wrap_content"
        android:background="@drawable/round_corner"
        android:layout_marginLeft="10dp"
        android:text="Cancel"
        android:textColor="@color/colorPrimaryDark"
        android:layout_weight="0.13" />
    </LinearLayout>
</LinearLayout>
```

28)<u>widger_layout</u>

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/layout"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:padding="10dp"
    android:background="@drawable/w_shape"
    android:orientation="horizontal">
    <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      style="@android:style/TextAppearance.Medium"
      android:textSize="50sp"
      android:layout_gravity="center"
```

```
   android:id="@+id/drank_per_textview"
   android:textColor="@color/colorPrimaryDark"
   android:layout_marginStart="10dp"      />
<LinearLayout
   android:layout_width="wrap_content"
   android:layout_height="match_parent"
   android:layout_marginStart="15dp"
   android:orientation="vertical">
   <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:textColor="@color/colorPrimaryDark"
      android:textSize="20sp"
      android:layout_marginTop="10dp"
      style="@android:style/TextAppearance.Medium"
      android:text="Drank"/>
   <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      style="@android:style/TextAppearance.Medium"
      android:textColor="@color/white"
      android:id="@+id/drank_textview"
      android:textSize="15sp"/>
</LinearLayout>
<ImageView
   android:id="@+id/refresh"
   style="@android:style/TextAppearance.Medium"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:paddingLeft="20dp"
   android:layout_gravity="center"
   android:src= "@drawable/refresh"      >
```

```
  </ImageView>
</LinearLayout>
```

29)<u>**fragment_prefs**</u>

```
<PreferenceScreen xmlns:android="http://schemas.android.com/apk/res/android"
         xmlns:preference="http://schemas.android.com/apk/res-auto">
 <PreferenceCategory android:title="Daily Need Measurement "
   > </PreferenceCategory>
  <com.example.healthongo.NumberPickerPreference
    android:key="key_weight_number"
    android:title="@string/pref_weight_title"
    android:icon="@drawable/weight_icon"
    preference:maxValue="@integer/weight_max_vlaue"
    preference:minValue="@integer/weight_min_value"
    android:summary="Add your weight!"
    preference:wrapSelectorWheel="false    />
  <SwitchPreference
    android:defaultValue="false"
    android:icon="@drawable/training_icon"
    android:key="key_training"
    android:title="@string/pref_training_title"    />
  <com.example.healthongo.NumberPickerPreference
    android:defaultValue="2500"
    android:key="key_water_recommendation"
    android:title="@string/pref_water_need_title"
    android:icon="@drawable/icon_water_drop"
    preference:maxValue="@integer/water_recom_number_max_value"
    preference:minValue="@integer/water_recom_number_min_value"
    android:summary="2500 ml"
    preference:wrapSelectorWheel="false" />
  <Preference android:layout="@layout/divider">
```

```
</Preference>
<PreferenceCategory
  android:title="Container Size “      >
  <ListPreference
    android:key="key_glass"
    android:title="Glass size"
    android:defaultValue="250"
    android:icon="@drawable/water_glass"
    android:entries="@array/glass_size_names_array"
    android:entryValues="@array/glass_size_values_array”/>
  <ListPreference
    android:key="key_bottle"
    android:title="Bottle size"
    android:defaultValue="1500"
    android:entries="@array/bottle_size_names_array"
    android:entryValues="@array/bottle_size_values_array"
    android:icon="@drawable/water_bottle"        />
</PreferenceCategory>
<Preference android:layout="@layout/divider">
</Preference>
<PreferenceCategory
  android:title="Notifications and Sounds"       >
  <SwitchPreference
    android:defaultValue="false"
    android:key="key_notif_enable"
    android:icon="@drawable/icon_notification"
    android:title="@string/pref_notif_enable_title"           />
  <SwitchPreference
    android:defaultValue="false"
    android:icon="@drawable/icon_sound"
    android:key="key_notif_sound"
    android:title="@string/pref_notif_sound_title"         />
    </PreferenceCategory>
    <Preference
        android:key="key_from_time"
        android:defaultValue="8:0"
        android:icon="@drawable/clock_from_icon"
        android:title="From"
        android:enabled="false"/>
    <Preference
        android:key="key_to_time"
        android:defaultValue="20:0"
        android:icon="@drawable/clock_to_icon"
        android:title="To"
        android:enabled="false"/>
    <com.example.healthongo.NumberPickerPreference
        android:enabled="false"
        android:icon="@drawable/interval_icon"
        android:defaultValue="@integer/defualt_time_interval"
        android:key="key_notif_interval_time"
        android:title="@string/pref_notif_interval_time_title"
        preference:maxValue="@integer/notif_time_interval_max_value"
        preference:minValue="@integer/notif_time_interval_min_value"
        preference:wrapSelectorWheel="false"      />
</PreferenceScreen>
```

30)widget_info

```
<?xml version="1.0" encoding="utf-8"?>
<appwidget-provider
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:initialLayout="@layout/widger_layout"
    android:minHeight="90dp"
    android:minWidth="300dp"
    android:updatePeriodMillis="300000">
</appwidget-provider>
```

menu:

1)data__classess

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto">
    <group >
        <item
            android:id="@+id/entry"
            android:title="Add Entry" />
        <item
            android:id="@+id/log"
            android:title="View Record" />
        <item
            android:id="@+id/edit"
            android:title="Edit Info" />
    </group>
<group>
    <item
        android:id="@+id/action_settings"
        android:orderInCategory="100"
        android:title="Exit" />
</group>
</menu>
```

2)menu_time_log

```
<menu xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    tools:context="a2dv606_aa223de.assignment_2.MyCountries.My_Countries">
    <item android:id="@+id/add_drink"
        android:icon="@drawable/plus_icon"
        app:showAsAction="always"
        android:title="" />
    <item android:id="@+id/sort_by_time_desc"
        android:title="Sort by time DESC"  ></item>
    <item android:id="@+id/sort_by_time_ASC"
        android:title="Sort by time ASC"  ></item>
    <item android:id="@+id/sort_by_amount_desc"
        android:title="Sort by water drank DESC"  ></item>
    <item android:id="@+id/sort_by_amount_asc"
        android:title="Sort by water drank ASC"  ></item>
</menu>
```

3)navigation

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
<group>
    <item android:id="@+id/contact"
        android:title="Contact us"
        android:icon="@drawable/ic_local_phone"/>
    <item android:id="@+id/logout"
        android:title="Setting"
        android:icon="@drawable/ic_settings_black_24dp"/>
</group>
    <item android:id="@+id/Aboutus"
        android:title="SHARE"
        android:icon="@drawable/ic_send"/>
</menu>
```

Java Code :

1)BootBroadcastReceiver

```
package com.example.healthongo.BroadcastReceivers;
import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import com.example.healthongo.AlarmHelper;
import com.example.healthongo.DrinkDataSource;
import com.example.healthongo.PrefsHelper;
public class BootBroadcastReceiver extends BroadcastReceiver {
   @Override
   public void onReceive(Context pContext, Intent intent) {
      DrinkDataSource db= new DrinkDataSource(pContext);
      db.open();
     int waterNeed= PrefsHelper.getWaterNeedPrefs(pContext);
     db.createMissingDateLog(0,waterNeed);
     AlarmHelper.setDBAlarm(pContext);
  }}
```

2) DateLogBroadcastReceiver

```
package com.example.healthongo.BroadcastReceivers;
import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;
import android.preference.PreferenceManager;
import com.example.healthongo.AlarmHelper;
import com.example.healthongo.DateHandler;
import com.example.healthongo.DrinkDataSource;
import com.example.healthongo.PreferenceKey;
import com.example.healthongo.PrefsHelper;
import java.util.Date;
public class DateLogBroadcastReceiver extends BroadcastReceiver {
  private DrinkDataSource db;
  private Context mContext;
  @Override
  public void onReceive(Context context, Intent intent) {
    mContext =context;
    SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
    boolean NotificationSet= prefs.getBoolean(PreferenceKey.PREF_IS_ENABLED,true);
        insertDateLog();
         if(NotificationSet)
         { AlarmHelper.setNotificationsAlarm(context);
          AlarmHelper.setCancelNotificationAlarm(context);}    }
  private void insertDateLog() {
    int waterNeed= PrefsHelper.getWaterNeedPrefs(mContext);
    db= new DrinkDataSource(mContext);
    db.open();
     db.createDateLog(0,waterNeed, DateHandler.getCurrentDate());
    System.out.println("db alarm fired "+ DateHandler.getCurrentDate());
    System.out.println("new record inserted: "+new Date()+" water need: "+waterNeed+"
Water drank: "+0);
    Intent local = new Intent();
    local.setAction("com.update.view.action");
    mContext.sendBroadcast(local);
  }}
```

3) AddDialog

```
package com.example.healthongo;
import android.app.Dialog;
import android.content.Context;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class AddDialog extends Dialog implements View.OnClickListener{
    private Context context;
    private final String GLASS="glass";
    private final String BOTTLE="bottle";
    private int glassSize;
    private int bottleSize;
    private DrinkDataSource db;
    private MediaPlayer mediaPlayer;
    private Button otherSize,cancel, glassButton,bottleButton;
    public AddDialog(Context context, DrinkDataSource db){
        super(context);
        this.context = context;
        this.db= db;    }
  @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.add_drink_dialog);
        mediaPlayer= MediaPlayer.create(context, R.raw.splash_water);
        otherSize = (Button) findViewById(R.id.other_size_button);
        cancel = (Button) findViewById(R.id.cancel_button);
        bottleButton= (Button)findViewById(R.id.water_bottle_button);
        glassButton=  (Button) findViewById(R.id.water_glass_button);
        bottleButton.setOnClickListener(this);
        glassButton.setOnClickListener(this);
        cancel.setOnClickListener(this);
        otherSize.setOnClickListener(this);
        setTitle("Select drink");
        loadContainerSizePrefs();    }
    public void onClick(View v) {
        int id = v.getId();
        switch (id){
             case R.id.water_bottle_button:
                addBottle();
                break;
            case R.id.water_glass_button:
                addGlass();
                break;
            case R.id.cancel_button:
              dismiss();
                break;
            case R.id.other_size_button:
               showOtherSizeDialog();
                break;}
        dismiss();    }
    private void showOtherSizeDialog() {
        OtherSizeDialog otherSizeDialog = new OtherSizeDialog(context, db);
        otherSizeDialog.show();
        dismiss();    }
    private void playSound() {
        if (PrefsHelper.getSoundsPrefs(context))
            mediaPlayer.start();    }
    private void addGlass(){
       int perBefore= db.getConsumedPercentage();
        db.createTimeLog(glassSize,GLASS,
DateHandler.getCurrentDate(),DateHandler.getCurrentTime());
        db.updateConsumedWaterForTodayDateLog(glassSize);
        updateView(perBefore);
        playSound();
        dismiss();    }
    private void addBottle() {
        int perBefore= db.getConsumedPercentage();
```

```
db.createTimeLog(bottleSize,BOTTLE,DateHandler.getCurrentDate(),DateHandler.getCurrent
Time());
        db.updateConsumedWaterForTodayDateLog(bottleSize);
        updateView(perBefore);
        playSound();
        dismiss();    }
    private void updateView(int perBefore) {
        int perValue= db.getConsumedPercentage();
       Water.circleProgress.setProgress(perValue);
Water.choosenAmountTv.setText(String.valueOf(db.geConsumedWaterForToadyDateLog()+
" out of "+
                PrefsHelper.getWaterNeedPrefs(context)+" ml"));
            if (perValue==100&&perBefore<100) {
                congratulationDialog c = new congratulationDialog(context);
                c.show();           }    }
    private void loadContainerSizePrefs() {
       String glassSizeStr= PrefsHelper.getGlassSizePrefs(context);
        String bottleSizeStr =PrefsHelper.getBottleSizePrefs(context);
        this.glassSize = Integer.valueOf(glassSizeStr);
        this.bottleSize = Integer.valueOf(bottleSizeStr);
        glassButton.setText(glassSizeStr+ " ml");
        bottleButton.setText(bottleSizeStr+ " ml");
    }}
```

4) StopNotificationBroadcastReceiver

```
package com.example.healthongo.BroadcastReceivers;
import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import com.example.healthongo.AlarmHelper;
public class StopNotificationBroadcastReceiver extends BroadcastReceiver {
    @Override
    public void onReceive(Context context, Intent intent) {
        AlarmHelper.stopNotificationsAlarm(context);
        System.out.println("fired!");
    }}
```

5) <u>AddNewEntryActivity</u>

```
package com.example.healthongo;
import androidx.appcompat.app.AppCompatActivity;
import android.annotation.SuppressLint;
import android.os.Bundle;
import android.text.Editable;
import android.text.TextWatcher;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
public class AddNewEntryActivity extends AppCompatActivity {
    private EditText calPerWeight;
    private EditText perWeight;
    private EditText totalWeight;
    private EditText totalCalories;
    private EditText date;
    private EditText description;
    private Button submitButton;
    private TextWatcher watcher;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_add_new_entry);
        calPerWeight = (EditText) findViewById(R.id.calories_per_weight_text);
        perWeight = (EditText) findViewById(R.id.per_weight_text);
        totalWeight = (EditText) findViewById(R.id.total_weight_text);
        totalCalories = (EditText) findViewById(R.id.total_calories_text);
        date = (EditText) findViewById(R.id.date_text);
        description = (EditText) findViewById(R.id.description_text);
        submitButton = (Button) findViewById(R.id.submit_button);
        watcher = new LocalTextWatcher();
        calPerWeight.addTextChangedListener(watcher);
        perWeight.addTextChangedListener(watcher);
        totalWeight.addTextChangedListener(watcher);
        totalCalories.addTextChangedListener(watcher);
        updateSubmitButton();
        automateDate();}
    private void automateDate() {
        Date today = new Date();
        TextView tv = (TextView) findViewById(R.id.date_text);
        tv.setText(new SimpleDateFormat("yyyy-MM-dd").format(today));}
public void createEntry(View view) {
        Date d;
        String de;
        int totalCal = 0;
        float calPerWeightf, perWeightf, totalWeightConf = 0;
        LogEntry l;
        d = convertToDate(date.getText().toString());
        de = description.getText().toString();
        if (!totalCalories.getText().toString().equals("")) {
            totalCal = Integer.parseInt(totalCalories.getText().toString());
            l = new LogEntry(d, de, totalCal);
        } else {
            calPerWeightf = Float.parseFloat(calPerWeight.getText().toString());
            perWeightf = Float.parseFloat(perWeight.getText().toString());
            totalWeightConf = Float.parseFloat(totalWeight.getText().toString());
            l = new LogEntry(d, de, calPerWeightf, perWeightf, totalWeightConf);        }
    LogManager.writeToCalorieLog(l, this);
    finish();   }
  public void returnToPrevActivity(View view) {
    finish();   }
@SuppressLint("SimpleDateFormat")
  private Date convertToDate(String s) {
    Date date = new Date();
    try {
      SimpleDateFormat format = new SimpleDateFormat("yyyy-MM-dd");
      date = format.parse(s);
    } catch (ParseException e) { e.printStackTrace(); }
    return date;   }
  private void updateSubmitButton() {
    boolean enabled = (checkEditText(calPerWeight) &&
        checkEditText(perWeight) &&
        checkEditText(totalWeight)) || (checkEditText(totalCalories));
    submitButton.setEnabled(enabled);   }
  private void updateTextFields() {
    boolean totalCalEnabled = checkEditText(calPerWeight) ||
        checkEditText(perWeight) ||
        checkEditText(totalWeight);
    boolean othersEnabled = checkEditText(totalCalories);
    totalCalories.setEnabled(!totalCalEnabled);
    calPerWeight.setEnabled(!othersEnabled);
    perWeight.setEnabled(!othersEnabled);
    totalWeight.setEnabled(!othersEnabled);}
  private boolean checkEditText(EditText edit) {
    return !edit.getText().toString().equals("");   }
  private class LocalTextWatcher implements TextWatcher {
    @Override
    public void afterTextChanged(Editable s) {
      updateSubmitButton();
```

```
            updateTextFields();
        }       @Override
        public void beforeTextChanged(CharSequence s, int start, int count, int after) }
        @Override
        public void onTextChanged(CharSequence s, int start, int count, int after) {       }
    }}
```

6) <u>AlarmHelper</u>

```
package com.example.healthongo;
import android.app.AlarmManager;
import android.app.PendingIntent;
import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;
import android.preference.PreferenceManager;
public class AlarmHelper {
    public static void setDBAlarm(Context context) {
        boolean alarmDown =(PendingIntent.getBroadcast(context, 90,
                new Intent(context, DateLogBroadcastReceiver.class),
                PendingIntent.FLAG_NO_CREATE) == null);
        if(alarmDown) {
            Calendar calendar = Calendar.getInstance();
            calendar.set(Calendar.HOUR_OF_DAY,0);
            calendar.set(Calendar.MINUTE,0);
            calendar.set(Calendar.SECOND,0);
            calendar.add(Calendar.DAY_OF_YEAR,1);
            Intent mIntent = new Intent(context,DateLogBroadcastReceiver.class);
            PendingIntent pendingIntent = PendingIntent.
                    getBroadcast(context,90,mIntent, PendingIntent.FLAG_UPDATE_CURRENT);
            AlarmManager alarmManager =
(AlarmManager)context.getSystemService(ALARM_SERVICE);
alarmManager.setRepeating(AlarmManager.RTC_WAKEUP,calendar.getTimeInMillis(),
                AlarmManager.INTERVAL_DAY,pendingIntent);    }}
    public static void setNotificationsAlarm(Context mContext) {
        boolean isAlarmUp = (PendingIntent.getBroadcast(mContext, 101, new
Intent(mContext, NotificationReciever.class)
              , PendingIntent.FLAG_UPDATE_CURRENT)!= null);
            if(isAlarmUp) {
              stopNotificationsAlarm(mContext);
              }
               SharedPreferences prefs =
PreferenceManager.getDefaultSharedPreferences(mContext);
               String from = prefs.getString(PreferenceKey.FROM_KEY, "8:0");
               int interval = prefs.getInt(PreferenceKey.PREF_INTERVAL, 2);
               String[] values = from.split(":");
               String hr = values[0];
               String mt = values[1];
               Calendar calendar = Calendar.getInstance();
               Calendar now = Calendar.getInstance();
               calendar.set(Calendar.HOUR_OF_DAY, Integer.valueOf(hr));
               calendar.set(Calendar.MINUTE, Integer.valueOf(mt));
               calendar.set(Calendar.SECOND, 0);
               Intent nIntent = new Intent(mContext, NotificationReciever.class);
               PendingIntent pendingIntent = PendingIntent.getBroadcast(mContext, 101,
nIntent, PendingIntent.FLAG_UPDATE_CURRENT);
               AlarmManager alarmManager = (AlarmManager)
mContext.getSystemService(ALARM_SERVICE);
               if (now.after(calendar)) {
                   alarmManager.setRepeating(AlarmManager.RTC_WAKEUP,
now.getTimeInMillis()+600000, 1000 * 60 * 60 * interval, pendingIntent);
               } else {
                   alarmManager.setRepeating(AlarmManager.RTC_WAKEUP,
calendar.getTimeInMillis(), 1000 * 60 * 60 * interval, pendingIntent);
               }}
    public static void stopNotificationsAlarm(Context mContext){
        AlarmManager alarmManager =
(AlarmManager)mContext.getSystemService(ALARM_SERVICE);
        Intent mIntent = new Intent(mContext,NotificationReciever.class);
        PendingIntent pendingIntent = PendingIntent.
                getBroadcast(mContext,101,mIntent, PendingIntent.FLAG_UPDATE_CURRENT);
        if(alarmManager!=null)
        {  alarmManager.cancel(pendingIntent);}    }
    public static void setCancelNotificationAlarm(Context context){
        SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
        String to = prefs.getString(PreferenceKey.TO_KEY, "20:0");
        String[] values = to.split(":");
        String hr = values[0];
        String mt = values[1];
        Calendar cal= Calendar.getInstance();
        cal.set(Calendar.HOUR_OF_DAY, Integer.valueOf(hr));
        cal.set(Calendar.MINUTE, Integer.valueOf(mt));
        cal.set(Calendar.SECOND, 0);
        Intent nIntent = new Intent(context, StopNotificationBroadcastReceiver.class);
        PendingIntent pendingIntent = PendingIntent.getBroadcast(context, 102, nIntent,
PendingIntent.FLAG_UPDATE_CURRENT);
        AlarmManager alarmManager = (AlarmManager)
context.getSystemService(ALARM_SERVICE);
            alarmManager.set(AlarmManager.RTC_WAKEUP,
cal.getTimeInMillis(),pendingIntent);    } }
```

7) BMI

```
package com.example.healthongo;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.text.TextUtils;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
public class BMI extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_bmi);
        getSupportActionBar().setTitle("BMI Calculator");
        final EditText e1 = (EditText) findViewById(R.id.et1);
        final EditText e2 = (EditText) findViewById(R.id.et2);
        final TextView tv4 = (TextView) findViewById(R.id.tv4);
        findViewById(R.id.ib1).setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String str1 = e1.getText().toString();
                String str2 = e2.getText().toString();
                int weightint = Integer.parseInt(str1);
                float heightint = Float.parseFloat(str2);
                if(TextUtils.isEmpty(str1)){
                    e1.setError("Please enter your weight");
                    e1.requestFocus();
                    return;              }
                if(TextUtils.isEmpty(str2)){
                    e2.setError("Please enter your height");
                    e2.requestFocus();
                    return;              }
                if ((weightint <= 30) || (weightint >= 130)) {
                    Toast.makeText(BMI.this, "Please enter a valid weight",
                            Toast.LENGTH_SHORT).show();
                    return;
                } else if ((heightint <= 4.8) || (heightint >= 6.8)) {
                    Toast.makeText(BMI.this, "Please enter a valid height",
                            Toast.LENGTH_SHORT).show();
                    return;      }
                float weight = Float.parseFloat(str1);
                float height = Float.parseFloat(str2)/100;
              float feetintoinches = height * 30.48f ;
                float bmiValue = calculateBMI(weight, feetintoinches);
                String bmiInterpretation = interpretBMI(bmiValue);
                tv4.setText(String.valueOf(bmiValue + "-" + bmiInterpretation));
            }       });    }
        private float calculateBMI (float weight, float height) {
        return (float) (weight / (height * height));}
    private String interpretBMI(float bmiValue) {
        if (bmiValue < 16) {
            return "Severely underweight";
        } else if (bmiValue < 18.5) {
            return "Underweight";
        } else if (bmiValue < 25) {
            return "Normal";
        } else if (bmiValue < 30) {
            return "Overweight";
        } else {
            return "Obese";
        }    }}
```

8) <u>CalorieSummary</u>

```
package com.example.healthongo;
import android.app.Activity;
import android.widget.TextView;
import java.util.Date;
import java.util.List;
public class CalorieSummary {
   private float totalcalories1;
   private int totalCalories;
   private float totalDays;
   private float averageCalories;
   private boolean entry;
   public CalorieSummary(List<LogEntry> logEntries) {
      calculateSummary(logEntries);}
   public void calculateSummary(List<LogEntry> logEntries) {
      totalCalories = 0;
      totalcalories1 = 0;
      totalDays = averageCalories = 0;
    for   ( LogEntry l : logEntries) {
       if (logEntries.size() <= 0) {
          totalcalories1 = 0;
       } else{ totalcalories1 = l.getTotalCalories();}
      for (LogEntry l : logEntries)
         totalCalories += l.getTotalCalories();
      if (logEntries.size() > 1) {
         Date max = getMaxDate(logEntries);
         Date min = getMinDate(logEntries);
         totalDays = ( max.getTime() - min.getTime() ) / ( 1000 * 60 * 60 * 24 );}
      if (logEntries.size() != 0)
         averageCalories = totalCalories / logEntries.size();}
public void display(Activity activity) {
      TextView textView = (TextView) activity.findViewById(R.id.total_cals);
      textView.setText("Total calorie consumption: "
            + Integer.toString(totalCalories) + " cal");
textView = (TextView) activity.findViewById(R.id.total_time);
      textView.setText("Total overall recording days: "
            + String.format("%.1f", totalDays) + " days");
    textView = (TextView) activity.findViewById(R.id.suggest);
    textView.setText("Your average consumption is: " + String.format("%.1f",
averageCalories))    }
public Date getMaxDate(List<LogEntry> logEntries) {
    Date max;
    if (logEntries.size() < 1)
      return null;
    max = logEntries.get(0).getDate();
    for (int i = 1; i < logEntries.size(); i++) {
      if (logEntries.get(i).getDate().compareTo(max) > 0)
        max = logEntries.get(i).getDate();}
    return max;    }
  public Date getMinDate(List<LogEntry> logEntries) {
    Date min;
    if (logEntries.size() < 1)
      return null;
    min = logEntries.get(0).getDate();
    for (int i = 1; i < logEntries.size(); i++) {
      if (logEntries.get(i).getDate().compareTo(min) < 0)
        min = logEntries.get(i).getDate();
    }
   return min;    }
  public float getTotalcalories1() {
    return totalcalories1    }
  public void setTotalcalories1(float totalcalories1) {
    this.totalcalories1 = totalcalories1;}
  public boolean isEntry() {
    return entry;    }
  public void setEntry(boolean entry) {
    this.entry = entry;    }
  public float getTotalCalories() {
    return totalCalories;    }
    public void setTotalCalories(int totalCalories) {
        this.totalCalories = totalCalories;}
    public float getTotalDays() {
        return totalDays;    }
    public void setTotalDays(float totalDays) {
        this.totalDays = totalDay;    }
    public float getAverageCalories() {
        return averageCalories;    }
    public void setAverageCalories(float averageCalories) {
        this.averageCalories = averageCalories;    }}
```

9) <u>ChartActivity</u>

```
package com.example.healthongo;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TabHost;
import android.widget.TextView;
import java.util.ArrayList;
import java.util.List;
public class ChartActivity extends AppCompatActivity {
    BarChart dayBarChart;
    BarChart weekBarChart;
    BarChart mothBarChart;
    BarChart yearBarChart;
    List<TimeLog> dayValues;
    List<DateLog> weekValues;
    List<DateLog> monthValues;
    List<DateLog> yearValues;
    DrinkDataSource db;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_chart);
        getSupportActionBar().setDisplayHomeAsUpEnabled(true);
        getSupportActionBar().setDisplayShowHomeEnabled(true);
        setTitle("Charts");
        db = new DrinkDataSource(this);
        db.open();
        dayValues = db.getDrinkByDay();
        weekValues = db.getDrinkByWeek();
        monthValues = db.getDrinkByMonth();
        yearValues = db.getDrinkByYear();
        TextView drinkInDay=(TextView) findViewById(R.id.textView);
        TextView drinkInWeek=(TextView) findViewById(R.id.textView2);
        TextView drinkInMonth=(TextView) findViewById(R.id.textView3);
        TextView drinkInYear=(TextView) findViewById(R.id.textView4);
        drinkInDay.setText("Total drink for today
:"+DateHandler.dayFormat(db.getCurrentDay()));
        drinkInWeek.setText("Total drink for last week");
        drinkInMonth.setText("Total drink from "+
DateHandler.dAndmFormat(db.getMonth())+"-
"+DateHandler.dAndmFormat(db.getCurrentDay()));
        drinkInYear.setText("Total drink from "+DateHandler.monthFormat(db.getYear())+"-
"+DateHandler.mAndYFormat(db.getCurrentDay()));
        dayBarChart = (BarChart) findViewById(R.id.day_chart);
        BarDataSet barDataSet = new BarDataSet(getYAxisValues(), "The consumed water in
ml");
        BarData barData = new BarData(getXAxisValues(), barDataSet);
        dayBarChart.setData(barData);
        dayBarChart.setDescription("");
        weekBarChart = (BarChart) findViewById(R.id.week_chart);
        BarDataSet weekBarDataSet = new BarDataSet(getYAxisWeekValues(), "The consumed
water in ml");
        BarData weekBarData = new BarData(getXAxisWeekValues(), weekBarDataSet);
```

```
        weekBarChart.setData(weekBarData);
        weekBarChart.setDescription("");
        mothBarChart = (BarChart) findViewById(R.id.month_chart);
        BarDataSet mBarDataSet = new BarDataSet(getYAxisMonthValues(), "The consumed water in ml");
        BarData mBarData = new BarData(getXAxisMonthValues(), mBarDataSet);
        mothBarChart.setData(mBarData);
        mothBarChart.setDescription("");
        yearBarChart = (BarChart) findViewById(R.id.year_chart);
        BarDataSet yBarDataSet = new BarDataSet(getYAxisYearValues(),"The consumed water in ml");
        BarData yBarData = new BarData(getXAxisYearValues(), yBarDataSet);
        yearBarChart.setData(yBarData);
        yearBarChart.setDescription("");
        yearBarChart.getXAxis().setDrawGridLines(false);
        yBarDataSet.setDrawValues(false);
        yearBarChart.getAxisRight().setDrawLimitLinesBehindData(false);
        yearBarChart.getAxisRight().setDrawAxisLine(false);
        yearBarChart.getAxisRight().setDrawAxisLine(false);
        yearBarChart.getAxisRight().setDrawGridLines(false);
        yearBarChart.getAxisLeft().setDrawAxisLine(false);
        yearBarChart.getAxisLeft().setDrawLimitLinesBehindData(false);
        yearBarChart.getAxisLeft().setDrawAxisLine(false);
        yearBarChart.getAxisLeft().setDrawGridLines(false);
        mothBarChart.getXAxis().setDrawGridLines(false);
        mBarDataSet.setDrawValues(false);
        mothBarChart.getAxisRight().setDrawAxisLine(false);
        mothBarChart.getAxisRight().setDrawLimitLinesBehindData(false);
        mothBarChart.getAxisRight().setDrawAxisLine(false);
        mothBarChart.getAxisRight().setDrawGridLines(false);
        mothBarChart.getAxisLeft().setDrawAxisLine(false);
        mothBarChart.getAxisLeft().setDrawLimitLinesBehindData(false);
```

```
    mothBarChart.getAxisLeft().setDrawAxisLine(false);
    mothBarChart.getAxisLeft().setDrawGridLines(false);
    weekBarChart.getXAxis().setDrawGridLines(false);
    weekBarDataSet.setDrawValues(false);
    weekBarChart.getAxisRight().setDrawAxisLine(false);
    weekBarChart.getAxisRight().setDrawLimitLinesBehindData(false);
    weekBarChart.getAxisRight().setDrawAxisLine(false);
    weekBarChart.getAxisRight().setDrawGridLines(false);
    weekBarChart.getAxisLeft().setDrawAxisLine(false);
    weekBarChart.getAxisLeft().setDrawLimitLinesBehindData(false);
    weekBarChart.getAxisLeft().setDrawAxisLine(false);
    weekBarChart.getAxisLeft().setDrawGridLines(false);
    dayBarChart.getXAxis().setDrawGridLines(false);
    barDataSet.setDrawValues(false);
    dayBarChart.getAxisRight().setDrawAxisLine(false);
    dayBarChart.getAxisRight().setDrawLimitLinesBehindData(false);
    dayBarChart.getAxisRight().setDrawAxisLine(false);
    dayBarChart.getAxisRight().setDrawGridLines(false);
    dayBarChart.getAxisLeft().setDrawAxisLine(false);
    dayBarChart.getAxisLeft().setDrawLimitLinesBehindData(false);
    dayBarChart.getAxisLeft().setDrawAxisLine(false);
    dayBarChart.getAxisLeft().setDrawGridLines(false);
    TabHost host = (TabHost) findViewById(R.id.tabHost);
    host.setup();
    TabHost.TabSpec spec = host.newTabSpec("Today");
    spec.setContent(R.id.linearLayout);
    spec.setIndicator("Today");
    host.addTab(spec);
spec = host.newTabSpec("week");
    spec.setContent(R.id.linearLayout2);
    spec.setIndicator(" week");
    host.addTab(spec);
```

```
spec = host.newTabSpec("month");
    spec.setContent(R.id.linearLayout3);
    spec.setIndicator("month");
    host.addTab(spec);
       spec = host.newTabSpec("year");
    spec.setContent(R.id.linearLayout4);
    spec.setIndicator("year");
    host.addTab(spec);    }
  private List<BarEntry> getYAxisYearValues() {
    ArrayList<BarEntry> yAxis = new ArrayList<>();
    for (int i = 0; i < yearValues.size(); i++) {
      BarEntry v1e1 = new BarEntry(yearValues.get(i).getWaterDrunk(), i);
      yAxis.add(v1e1);       }
    return yAxis;    }
  private List<String> getXAxisYearValues() {
    ArrayList<String> xAxis = new ArrayList<>();
    for (int i = 0; i < yearValues.size(); i++) {
      xAxis.add(DateHandler.monthFormat(yearValues.get(i).getDate()));}
    return xAxis;    }
  private List<String> getXAxisMonthValues() {
    ArrayList<String> xAxis = new ArrayList<>();
    for (int i = 0; i < monthValues.size(); i++) {
      xAxis.add(DateHandler.dayFormat(monthValues.get(i).getDate()));}
    return xAxis;}
  private List<BarEntry> getYAxisMonthValues() {
    ArrayList<BarEntry> yAxis = new ArrayList<>();
    for (int i = 0; i < monthValues.size(); i++) {
      BarEntry v1e1 = new BarEntry(monthValues.get(i).getWaterDrunk(), i);
      yAxis.add(v1e1);}
    return yAxis;    }
  private List<String> getXAxisWeekValues() {
    ArrayList<String> xAxis = new ArrayList<>();
```

```
        for (int i = 0; i < weekValues.size(); i++) {
            xAxis.add(DateHandler.dayFormat(weekValues.get(i).getDate()));}
        return xAxis;    }
    private List<BarEntry> getYAxisWeekValues() {
        ArrayList<BarEntry> yAxis = new ArrayList<>();
        for (int i = 0; i < weekValues.size(); i++) {
            BarEntry v1e1 = new BarEntry(weekValues.get(i).getWaterDrunk(), i);
            yAxis.add(v1e1);        }
        return yAxis;    }
    private ArrayList<String> getXAxisValues() {
        ArrayList<String> xAxis = new ArrayList<>();
        for (int i = 0; i < dayValues.size(); i++) {
            xAxis.add(dayValues.get(i).getTime().toString());}
        return xAxis;    }
    private ArrayList<BarEntry> getYAxisValues() {
        ArrayList<BarEntry> yAxis = new ArrayList<>();
        for (int i = 0; i < dayValues.size(); i++) {
            BarEntry v1e1 = new BarEntry(dayValues.get(i).getAmount(), i);
            yAxis.add(v1e1);
        } return yAxis;    }
    @Override
    public boolean onSupportNavigateUp() {
        onBackPressed();
        return true;    }}
```

11) Data_classes

```
package com.example.healthongo;
import androidx.appcompat.app.ActionBarDrawerToggle;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.widget.Toolbar;
import androidx.core.view.GravityCompat;
import androidx.drawerlayout.widget.DrawerLayout;
import android.content.Context;
import android.content.DialogInterface;
import android.content.Intent;
import android.os.Bundle;
import android.os.Handler;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.TextView;
import android.widget.Toast;
import java.text.SimpleDateFormat;
import java.util.Calendar;
import java.util.Date;
import java.util.List;
public class Data_Classes extends AppCompatActivity implements
NavigationView.OnNavigationItemSelectedListener  {
    TextView result1;
    boolean doubleBackToExitPressedOnce = false;
    private Context context;
    private List<LogEntry> logEntries;
    private DisplayLogActivity disp;
    private CalorieSummary calSum;
    private boolean entry1;
    private  double ototal = 0;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_data__classes);
        FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
        fab.setOnClickListener(new View.OnClickListener() {
            @Override
```

```
          public void onClick(View view) {
            Intent intent = new Intent(Data_Classes.this, AddNewEntryActivity.class);
            startActivity(intent);          }       });
        NavigationView navigationView = (NavigationView) findViewById(R.id.nav_view);
        navigationView.setNavigationItemSelectedListener(this);
        retrieveCalorieLog();
        displayCalorieSummary();
displaycal();
        SQLiteHandler db = new SQLiteHandler(getApplicationContext());
        Users user = db.getUser();
        String namevr = user.getName();
        String resulttext = user.getResult();
        result1 = (TextView) findViewById(R.id.resulttext);
        getSupportActionBar().setTitle("Welcome " + namevr + "!");
        result1.setText(resulttext);
        db.close();    }
    private void displaycal() {
        SQLiteHandler db = new SQLiteHandler(getApplicationContext());
        int flag = 0;
        Users user = db.getUser();
        float str1 = calSum.getTotalCalories();
        float str = calSum.getTotalcalories1();
        double total = (double) str;
        double ntotal = (double) str1;
        double result;
        double tcal = user.getCalories();
        double daily = user.getDaily();
        double dispCal = tcal;
        String date1 = user.getDates();
        Calendar calendar = Calendar.getInstance();
        SimpleDateFormat dateFormat = new SimpleDateFormat("yyyy-MM-dd");
        Date today = calendar.getTime();
        String date2 = dateFormat.format(today);
        if (user.getTempo() == ntotal && (date2.equals(user.getDates()))) {
            flag = 1;
        } else if (user.getTempo() == ntotal && (!date2.equals(user.getDates()))){
            flag = 2;
        } else if (user.getTempo() != ntotal && (date2.equals(user.getDates()))) {
            flag = 3;
        } else if (user.getTempo() != ntotal && (!date2.equals(user.getDates()))){
            flag = 4;
        }
        switch (flag) {
            case 1:        dispCal = user.getDaily();
                break;
            case 2:        dispCal = user.getCalories();
                break;
            case 3:        dispCal = user.getDaily() - total;
           break;
            case 4:
dispCal = user.getCalories() - total;
break;     }
        db.update_tempo(ntotal, user.getName());
        db.update_daily(dispCal, user.getName());
        db.update_Users(date2, user.getName());
        daily = user.getDaily();
        TextView textView = (TextView) findViewById(R.id.delete);
        if (daily < 0) {
            textView.setText( String.format( "%.1f",  Math.abs(daily)) + "\n" + "calories over");
        } else textView.setText( String.format( "%.1f",  daily ) + "\n" + "calories left");
db.close();   }
    private void retrieveCalorieLog() {
        LogManager.loadCalorieLog(this);}
```

```
private void displayCalorieSummary() {
    calSum = new CalorieSummary(LogManager.getLogEntries());
    calSum.display(this);    }
protected void onResume() {
    super.onResume();
    displayCalorieSummary();
    displaycal();
    displaycal();    }
@Override
public void onBackPressed() {
    DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer_layout);
    if (drawer.isDrawerOpen(GravityCompat.START)) {
        drawer.closeDrawer(GravityCompat.START);
    } else {
        if (doubleBackToExitPressedOnce) {
            super.onBackPressed();
            return;            }
        this.doubleBackToExitPressedOnce = true;
        Toast.makeText(this, "Please click back again to exit", Toast.LENGTH_SHORT).show();
        new Handler().postDelayed(new Runnable() {
            @Override
            public void run() {
                doubleBackToExitPressedOnce=false;
            }, 2000);}    }
public void reset(View view) {
    Context context = this;
    AlertDialog.Builder builder = new AlertDialog.Builder(context);
    builder.setMessage("Are you sure you want to reset your daily calorie?");
    builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
        public void onClick(DialogInterface dialog, int id) {
            dialog.dismiss();
            SQLiteHandler db = new SQLiteHandler(getApplicationContext());
```

```
      Users user = db.getUser();
      user.getCalories();
      db.update_daily(user.getCalories(), user.getName());
      displaycal();
      db.close();          }});
  builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
    public void onClick(DialogInterface dialog, int id) {
      dialog.dismiss();
    }     });
  AlertDialog alert = builder.create();
  alert.show();   }
@Override
public boolean onCreateOptionsMenu(Menu menu) {
  getMenuInflater().inflate(R.menu.data__classess, menu);
  return true;   }
@Override
public boolean onOptionsItemSelected(MenuItem item) {
  int id = item.getItemId();
  if (id == R.id.action_settings) {
    {Context context = this;
      AlertDialog.Builder builder = new AlertDialog.Builder(context);
      builder.setMessage("Are you sure you want to exit?");
      builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
        public void onClick(DialogInterface dialog, int id) {
          dialog.dismiss();
          finish();      }          });
      builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
        public void onClick(DialogInterface dialog, int id) {
          dialog.dismiss();             }          });
      AlertDialog alert = builder.create();
      alert.show();        }}
  else if (id == R.id.edit) {
        Context context = this;
        AlertDialog.Builder builder = new AlertDialog.Builder(context);
        builder.setMessage("Are you sure you want to remove and reenter your info?");
        builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
            public void onClick(DialogInterface dialog, int id) {
                dialog.dismiss();
                SQLiteHandler db = new SQLiteHandler(getApplicationContext());
                Intent intent = new Intent(Data_Classes.this, MainActivity.class);
                startActivity(intent);
                db.clear();
                finish();               }           });
        builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
            public void onClick(DialogInterface dialog, int id) {
                dialog.dismiss();               }       });
        AlertDialog alert = builder.create();
        alert.show();
    } else if (id == R.id.entry) {
        Intent intent = new Intent(this, AddNewEntryActivity.class);
        startActivity(intent);
    } else if (id == R.id.log) {
        Intent intent = new Intent(this, DisplayLogActivity.class);
        startActivity(intent);       }
    return super.onOptionsItemSelected(item);    }
@SuppressWarnings("StatementWithEmptyBody")
@Override
public boolean onNavigationItemSelected(MenuItem item)
    int id = item.getItemId();
   DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer_layout);
    drawer.closeDrawer(GravityCompat.START);
    return true;    }}
```

12)<u>Date Handler</u>

```
package com.example.healthongo;


import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.Locale;
public class DateHandler {
   public static String getCurrentDate(){
      return  new SimpleDateFormat( "yyyy-MM-dd HH:mm:ss").format(new Date());}
   public static String getCurrentTime() {
      SimpleDateFormat dateFormat = new SimpleDateFormat(
            "HH:mm a", Locale.getDefault());
      return dateFormat.format(new Date());    }
   public static String getDateFormat(String date)  {
      System.out.println(date);
      SimpleDateFormat fmt = new SimpleDateFormat("yyyy-MM-dd HH:mm:ss");
      Date d = null;
      try {
         d = fmt.parse(date);
      } catch (ParseException e) {
         e.printStackTrace();       }
  fmt = new SimpleDateFormat("yyyy-MM-dd");
      return fmt.format(d);}
   public static String getCurrentFormedDate(){
      return  new SimpleDateFormat( "yyyy-MM-dd").format(new Date());}
   public static String dayFormat(String date) {
      System.out.println(" date string: "+date);
      SimpleDateFormat fmt = new SimpleDateFormat("yyyy-MM-dd HH:mm:ss");
      Date d = null;
      try {
         d = fmt.parse(date);
```

```
    } catch (ParseException e) {
        e.printStackTrace();}
    fmt = new SimpleDateFormat("EEE");
    System.out.println(" date: "+fmt.format(d));
    return fmt.format(d);
}
public static String monthFormat(String date) {
    SimpleDateFormat fmt = new SimpleDateFormat("yyyy-MM-dd HH:mm:ss");
    Date d = null;
    try {
        d = fmt.parse(date);
    } catch (ParseException e) {
        e.printStackTrace();       }
    fmt = new SimpleDateFormat("MMM");
    return fmt.format(d);    }
public static String mAndYFormat(String date) {
    SimpleDateFormat fmt = new SimpleDateFormat("yyyy-MM-dd HH:mm:ss");
    Date d = null;
    try {
        d = fmt.parse(date);
    } catch (ParseException e) {
        e.printStackTrace();       }
    fmt = new SimpleDateFormat("MMM/yyyy");
    return fmt.format(d);}
public static String dAndmFormat(String date) {
    SimpleDateFormat fmt = new SimpleDateFormat("yyyy-MM-dd HH:mm:ss");
    Date d = null;
    try {
        d = fmt.parse(date);
    } catch (ParseException e) {
        e.printStackTrace();}
    fmt = new SimpleDateFormat("d MMM");
```

```
        return fmt.format(d);   }
    public static String dateFormat(String date) {
        SimpleDateFormat fmt = new SimpleDateFormat("yyyy-MM-dd HH:mm:ss");
        Date d = null;
        try {
            d = fmt.parse(date);
        } catch (ParseException e) {
            e.printStackTrace();    }
        fmt = new SimpleDateFormat("EEE, MMM d, ''yy");
        return fmt.format(d);
    }}
```

13) <u>DateLogActivity</u>

```
package com.example.healthongo;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ArrayAdapter;
import android.widget.ImageButton;
import android.widget.ListView;
import android.widget.TextView;
public class DateLogActivity extends AppCompatActivity {
    private DateLog dateLog;
    private TextView waterLog,dateTv;
    private CircleProgress circleProgress;
    static ListView listView;
    static List<DateLog> values ;
    static ArrayAdapter<DateLog> adapter;
    private static DrinkDataSource db;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```
    super.onCreate(savedInstanceState);
    getSupportActionBar().setDisplayHomeAsUpEnabled(true);
    getSupportActionBar().setDisplayShowHomeEnabled(true);
    setContentView(R.layout.activity_date_log);
    setTitle("History");
    db = new DrinkDataSource(this);
    db.open();
    dateLog= new DateLog();
    values = db.getAllDateLogs();
    listView = (ListView) findViewById(R.id.log_list);
    adapter = new myListAdapter();
    listView.setAdapter(adapter);    }
  @Override
  public boolean onSupportNavigateUp() {
    onBackPressed();
    return true;    }
  private class myListAdapter extends ArrayAdapter<DateLog> {
    public myListAdapter() {
      super(DateLogActivity.this, R.layout.date_log_raw, values);        }
    public View getView(final int position, View convertView, ViewGroup parent) {
      View itemView = convertView;
      if (itemView == null) {
        itemView = getLayoutInflater().inflate(
            R.layout.date_log_raw, parent, false);          }
      itemView.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
          Intent intent = new Intent(getApplicationContext(), TimeLogActivity.class);
          Bundle bundle = new Bundle();
bundle.putString(Commands.DateLogItem,DateHandler.getDateFormat(values.get(position)
.getDate()));
          intent.putExtras(bundle);
          startActivityForResult(intent, 0);              }           });
      ImageButton shareButton = (ImageButton) itemView.findViewById(R.id.forward);
      final int  waterNeed =values.get(position).getWaterNeed();
      final int waterDrank = values.get(position).getWaterDrunk();
      shareButton.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
          String text =  "I've just been reminded to drink "
+dateLog.getWaterInLiter(waterDrank)
              +  " of " + dateLog.getWaterInLiter(waterNeed) + "L by Daily Water
Tracker!";
          Intent sendIntent = new Intent();
          sendIntent.setAction(Intent.ACTION_SEND);
          sendIntent.putExtra(Intent.EXTRA_TEXT,text);
          sendIntent.setType("text/plain");
          startActivity(sendIntent);
        }          });
      circleProgress = (CircleProgress) itemView.findViewById(R.id.circle_progress);
      dateTv = (TextView) itemView.findViewById(R.id.date);
      dateTv.setText(DateHandler.dateFormat(values.get(position).getDate()));
      waterLog = (TextView) itemView.findViewById(R.id.water_drunk);
     waterLog.setText(dateLog.getWaterInLiter(waterDrank) + "/" +
          dateLog.getWaterInLiter(waterNeed) + " L");
      int prcValue= waterDrank*100/waterNeed;
      if(prcValue>=100)
        circleProgress.setProgress(100);
      else
        circleProgress.setProgress(prcValue);
      return itemView;}    }
  public static void reloadAdapter() {
    adapter.clear();
```

```
        adapter.addAll(db.getAllDateLogs());
        listView.setAdapter(adapter);}}
```

14) DisplayLogAdapter

```
package com.example.healthongo;
import android.annotation.SuppressLint;
import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.View.OnClickListener;
import android.view.ViewGroup;
import android.widget.BaseAdapter;
import android.widget.Button;
import android.widget.TextView;
public class DisplayLogAdapter extends BaseAdapter implements OnClickListener {
    private Context context;
    private List<LogEntry> logEntries;
    public DisplayLogAdapter(Context context, List<LogEntry> logEntries) {
        this.context = context;
        this.logEntries = logEntries;    }
    public int getCount() {
        return logEntries.size();    }
    public Object getItem(int position) {
        return logEntries.get(position);    }
    public long getItemId(int position) {
        return position;    }
    @SuppressLint("SimpleDateFormat")
    public View getView(int position, View convertView, ViewGroup viewGroup) {
        LogEntry entry = logEntries.get(position);
        if (convertView == null) {
            LayoutInflater inflater = (LayoutInflater) context
                    .getSystemService(Context.LAYOUT_INFLATER_SERVICE);
            convertView = inflater.inflate(R.layout.list_entry, null);
        }
        TextView tvDate = (TextView) convertView.findViewById(R.id.tvDate);
        tvDate.setText(new SimpleDateFormat("yyyy-MM-dd").format(entry.getDate()));
        TextView tvDescription = (TextView) convertView.findViewById(R.id.tvDescription);
        tvDescription.setText(entry.getDescription());
        TextView tvTotalCalories = (TextView) convertView.findViewById(R.id.tvTotalCalories);
        tvTotalCalories.setText(Integer.toString(entry.getTotalCalories()));
        if (entry.getCalPerWeight() > 0) {
            TextView tvCalPerWeight = (TextView)
convertView.findViewById(R.id.tvCalPerWeight);
            tvCalPerWeight.setText(String.format("%.1f", entry.getCalPerWeight()));
            TextView tvPerWeight = (TextView) convertView.findViewById(R.id.tvPerWeight);
            tvPerWeight.setText(String.format("%.1f", entry.getPerWeight()));
            TextView tvTotalWeightCon = (TextView)
convertView.findViewById(R.id.tvTotalWeightCon);
            tvTotalWeightCon.setText(String.format("%.1f", entry.getTotalWeightCon()));        }
        Button btnRemove = (Button) convertView.findViewById(R.id.btnRemove);
        btnRemove.setFocusableInTouchMode(false);
        btnRemove.setFocusable(false);
        btnRemove.setOnClickListener(this);
        btnRemove.setTag(entry);
        return convertView;    }
    @Override
    public void onClick(View view) {
        LogEntry entry = (LogEntry) view.getTag();
        logEntries.remove(entry);
        LogManager.writeToCalorieLog(logEntries, context);
        notifyDataSetChanged();    }}
```

15) Feedback

```
package com.example.healthongo;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.Menu;
import android.view.View;
public class Feedback extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_feedback);
        findViewById(R.id.btn_feedback).setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                sendFeedback();      }       });    }
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.menu_main, menu);
        return true;    }
   private void sendFeedback() {
        final Intent _Intent = new Intent(android.content.Intent.ACTION_SEND);
        _Intent.setType("text/html");
        _Intent.putExtra(android.content.Intent.EXTRA_EMAIL, new String[]{
getString(R.string.mail_feedback_email) });
        _Intent.putExtra(android.content.Intent.EXTRA_SUBJECT,
getString(R.string.mail_feedback_subject));
        _Intent.putExtra(android.content.Intent.EXTRA_TEXT,
getString(R.string.mail_feedback_message));
      startActivity(Intent.createChooser(_Intent, getString(R.string.title_send_feedback)));  }}
```

16) Footstep

```
package com.example.healthongo;
import androidx.appcompat.app.AppCompatActivity;
import android.hardware.Sensor;
import android.hardware.SensorEvent;
import android.hardware.SensorEventListener;
import android.hardware.SensorManager;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class Footstep extends AppCompatActivity implements SensorEventListener,
StepListener {
  private TextView textView , TvSteps;
  private StepDetector simpleStepDetector;
  private SensorManager sensorManager;
  private Sensor accel;
  private static final String TEXT_NUM_STEPS = "Number of Steps: ";
  private int numSteps;
  Button BtnStart ,BtnStop;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_footstep);
    getSupportActionBar().setTitle("Pedometer");
    sensorManager = (SensorManager) getSystemService(SENSOR_SERVICE);
    accel = sensorManager.getDefaultSensor(Sensor.TYPE_ACCELEROMETER);
    simpleStepDetector = new StepDetector();
    simpleStepDetector.registerListene((this);
    TvSteps = (TextView) findViewById(R.id.tv_steps);
    BtnStart = (Button) findViewById(R.id.btn_start);
    BtnStop = (Button) findViewById(R.id.btn_stop);
```

```
        BtnStart.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View arg0) {
                numSteps = 0;
                sensorManager.registerListener(Footstep.this, accel,
SensorManager.SENSOR_DELAY_FASTEST);            }        });
        BtnStop.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View arg0) {
                sensorManager.unregisterListener(Footstep.this);            }        });    }
    @Override
    public void step(long timeNs) {
        numSteps++;
        TvSteps.setText(TEXT_NUM_STEPS + numSteps);    }
    @Override
    public void onAccuracyChanged(Sensor sensor, int accuracy) {    }
    @Override
    public void onSensorChanged(SensorEvent event) {
        if (event.sensor.getType() == Sensor.TYPE_ACCELEROMETER) {
            simpleStepDetector.updateAccel(
                    event.timestamp, event.values[0], event.values[1], event.values[2]);}}}
```

17)FragmentPrefs

```
package com.example.healthongo;
import android.annotation.TargetApi;
import android.app.Activity;
import android.app.TimePickerDialog;
import android.content.Context;
import android.content.SharedPreferences;
import android.net.Uri;
import android.os.Build;
import android.os.Bundle;
import androidx.fragment.app.Fragment;
import android.preference.Preference;
import android.preference.PreferenceFragment;
import android.preference.PreferenceManager;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.TimePicker;
public class FragmentPrefs extends PreferenceFragment
    implements Preference.OnPreferenceChangeListener,
SharedPreferences.OnSharedPreferenceChangeListener{
  private SettingsActivity mActivity;
  private Context context;
  private Preference glassSizePref, bottleSizePref, intervalPref, soundPref,
      notiEnablePref,fromTimePrf, toTimePref,weightPref,trainingPref,waterNeedPref;
  private Calendar fromC = Calendar.getInstance();
  private Calendar toC = Calendar.getInstance();
  @Override
  public void onCreate(final Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    context =mActivity.getApplicationContext();
    addPreferencesFromResource(R.xml.fragment_prefs);
    notiEnablePref= findPreference(PreferenceKey.PREF_IS_ENABLED);
    soundPref= findPreference(PreferenceKey.PREF_SOUND);
    intervalPref=findPreference(PreferenceKey.PREF_INTERVAL);
    fromTimePrf =  findPreference(PreferenceKey.PREF_START_TIME);
    toTimePref= findPreference(PreferenceKey.PREF_EBD_TIME);
    weightPref =findPreference(PreferenceKey.PREF_WEIGHT_NUMBER);
    trainingPref= findPreference(PreferenceKey.PREF_TRAINING);
    waterNeedPref = findPreference(PreferenceKey.PREF_WATER_NEED);
    glassSizePref =  findPreference(PreferenceKey.PREF_GLASS_SIZE);
    bottleSizePref =  findPreference(PreferenceKey.PREF_BOTTLE_SIZE);
    trainingPref.setOnPreferenceChangeListener(this);
    weightPref.setOnPreferenceChangeListener(this);
    toTimePref.setOnPreferenceChangeListener(this);
    waterNeedPref.setOnPreferenceChangeListener(this);
    notiEnablePref.setOnPreferenceChangeListener(this);
    intervalPref.setOnPreferenceChangeListener(this);
    soundPref.setOnPreferenceChangeListener(this);
    glassSizePref.setOnPreferenceChangeListener(this);
    bottleSizePref.setOnPreferenceChangeListener(this);
    initSummaries();
    fromTimePrf.setOnPreferenceClickListener(new Preference.OnPreferenceClickListener()
{       @TargetApi(Build.VERSION_CODES.HONEYCOMB)
      @Override
      public boolean onPreferenceClick(Preference preference) {
        int hour = fromC.get(Calendar.HOUR_OF_DAY);
        int minutes = fromC.get(Calendar.MINUTE);
        TimePickerDialog datePickerDialog =
            new TimePickerDialog(getActivity(),timeFrom ,hour,minutes, true);
        datePickerDialog.show();
        return false;       }     });
    toTimePref.setOnPreferenceClickListener(new Preference.OnPreferenceClickListener()
      @TargetApi(Build.VERSION_CODES.HONEYCOMB)
      @Override
      public boolean onPreferenceClick(Preference preference) {
        int hour = toC.get(Calendar.HOUR_OF_DAY);
        int minutes = toC.get(Calendar.MINUTE);
        TimePickerDialog datePickerDialog =
            new TimePickerDialog(getActivity(),timeTo ,hour,minutes, true);
        datePickerDialog.show();
```

```
            return false;       }       });    }
    @SuppressWarnings("deprecation")
    @Override
    public void onAttach(Activity activity) {
        super.onAttach(activity);
        if(activity!=null) {
            mActivity=(SettingsActivity)activity;       }    }
    private void initSummaries() {
        boolean isNotifEnabled =
getPreferenceManager().getSharedPreferences().getBoolean(PreferenceKey.PREF_IS_ENAB
LED, false);
        boolean isSoundEnabled =
getPreferenceManager().getSharedPreferences().getBoolean(PreferenceKey.PREF_SOUND,
false);
        int intervalNum =
getPreferenceManager().getSharedPreferences().getInt(PreferenceKey.PREF_INTERVAL,2);
        int weight =
getPreferenceManager().getSharedPreferences().getInt(PreferenceKey.PREF_WEIGHT_NUM
BER, 0);
        boolean training=
getPreferenceManager().getSharedPreferences().getBoolean(PreferenceKey.PREF_TRAININ
G,false);
        int water_reco=
getPreferenceManager().getSharedPreferences().getInt(PreferenceKey.PREF_WATER_NEED,
0);
        String glassSize =
getPreferenceManager().getSharedPreferences().getString(PreferenceKey.PREF_GLASS_SIZE
,"");
        String bottleSize =
getPreferenceManager().getSharedPreferences().getString(PreferenceKey.PREF_BOTTLE_SIZ
E,"");
        SharedPreferences sharedPreferences =
PreferenceManager.getDefaultSharedPreferences(context);
        String from = sharedPreferences.getString(PreferenceKey.FROM_KEY,"8:0");
        String to = sharedPreferences.getString(PreferenceKey.TO_KEY,"20:0");
        if(weight!=0)
            weightPref.setSummary(Integer.toString(weight)+" kg");
        trainingPref.setSummary(getString(training));
        waterNeedPref.setSummary(Integer.toString(water_reco)+" ml");
        glassSizePref.setSummary(glassSize+ " ml");
        bottleSizePref.setSummary(bottleSize+ " ml");
        fromTimePrf.setSummary(from);
        toTimePref.setSummary(to);
        notiEnablePref.setSummary(getString(isNotifEnabled));
        enableNotificationsPrefs(isNotifEnabled);
        soundPref.setSummary(getString(isSoundEnabled));
        intervalPref.setSummary(Integer.toString(intervalNum)+" hour/s");    }
    TimePickerDialog.OnTimeSetListener timeFrom = new
TimePickerDialog.OnTimeSetListener() {
        @Override
        public void onTimeSet(TimePicker view, int hourOfDay, int minute) {
            fromC.set(Calendar.HOUR_OF_DAY,hourOfDay);
            fromC.set(Calendar.MINUTE,minute);
            fromTimePrf.setSummary(String.valueOf(hourOfDay)+":"+String.valueOf(minute));
setTimePref(PreferenceKey.FROM_KEY,String.valueOf(hourOfDay)+":"+String.valueOf(minut
e));      }   };
    TimePickerDialog.OnTimeSetListener timeTo = new TimePickerDialog.OnTimeSetListener()
{
        @Override
        public void onTimeSet(TimePicker view, int hourOfDay, int minute) {
            toC.set(Calendar.HOUR_OF_DAY,hourOfDay);
            toC.set(Calendar.MINUTE,minute);
            toTimePref.setSummary(String.valueOf(hourOfDay)+":"+String.valueOf(minute));
```

```
setTimePref(PreferenceKey.TO_KEY,String.valueOf(hourOfDay)+":"+String.valueOf(minute);
}    };
private  String getString(boolean b){
    if (b)
      return "ON";
    return "OFF";    }
  @Override
  public void onSharedPreferenceChanged(SharedPreferences sharedPreferences, String
key) {    }
  @Override
  public boolean onPreferenceChange(Preference preference, Object newValue) {
    switch (preference.getKey()) {
      case PreferenceKey.PREF_WEIGHT_NUMBER:
        handleWeightPref( newValue.toString(), preference);
        return true;
      case PreferenceKey.PREF_TRAINING:
        handleTrainingPrefs(newValue.toString(),preference);
        return true;
      case PreferenceKey.PREF_WATER_NEED:
        preference.setSummary(newValue.toString()+ " ml");
        return true;
      case  PreferenceKey.PREF_GLASS_SIZE:
        preference.setSummary(newValue.toString()+ " ml");
        return true;
      case  PreferenceKey.PREF_BOTTLE_SIZE:
        preference.setSummary(newValue.toString()+ " ml");
        return true;
      case PreferenceKey.PREF_IS_ENABLED:
        enableNotificationsPrefs(newValue);
        setSwitchPrefSummaries(newValue.toString(), preference);
        return true;
      case PreferenceKey.PREF_SOUND:
```

```
      setSwitchPrefSummaries(newValue.toString(), preference);
      return true;
    case PreferenceKey.PREF_INTERVAL:
      preference.setSummary(newValue.toString()+" hour/s");
      return true;       }
  return true;    }
private void enableNotificationsPrefs(Object newValue) {
  if(newValue.equals(true))
  {
    intervalPref.setEnabled(true);
    fromTimePrf.setEnabled(true);
    toTimePref.setEnabled(true);
  }
  else{
    intervalPref.setEnabled(false);
    fromTimePrf.setEnabled(false);
    toTimePref.setEnabled(false);
  }   }
private void handleTrainingPrefs(String s, Preference preference) {
  boolean value = Boolean.valueOf(s);
  setTrainingToPref(value);
  int waterNeedValue =calculateWaterReco();
  setWaterNeedToPref(waterNeedValue);
  preference.setSummary(getString(value));
  waterNeedPref.setSummary(String.valueOf(waterNeedValue) +" ml");    }
private void handleWeightPref(String s, Preference preference) {
  setWeightToPref(Integer.valueOf(s));
  int value =calculateWaterReco();
  setWaterNeedToPref(value);
  preference.setSummary(s+" kg");
  waterNeedPref.setSummary(String.valueOf(value) +" ml");
}
```

```
  private void setSwitchPrefSummaries(String newValue, Preference preference) {
    if(newValue.equals("true"))
    {  preference.setSummary("ON ");
    }
    else
      preference.setSummary("OFF ");}
  private void setTrainingToPref(Boolean aBoolean) {
    SharedPreferences prefs = PreferenceManager
        .getDefaultSharedPreferences(getActivity().getApplicationContext());
    SharedPreferences.Editor editor = prefs.edit();
    editor.putBoolean(PreferenceKey.PREF_TRAINING, aBoolean);
    editor.apply();    }
  private void setWeightToPref(int v) {
    SharedPreferences prefs = PreferenceManager
        .getDefaultSharedPreferences(getActivity().getApplicationContext());
    SharedPreferences.Editor editor = prefs.edit();
    editor.putInt(PreferenceKey.PREF_WEIGHT_NUMBER, v);
    editor.apply();    }
  private void setWaterNeedToPref(int v) {
    SharedPreferences prefs = PreferenceManager
        .getDefaultSharedPreferences(getActivity().getApplicationContext());
    SharedPreferences.Editor editor = prefs.edit();
    editor.putInt(PreferenceKey.PREF_WATER_NEED, v);
    editor.apply();    }
  private void setTimePref(String command, String str){
    SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
    SharedPreferences.Editor editor = prefs.edit();
    editor.putString(command, str);
    editor.commit();    }
  private int calculateWaterReco() {
    int weight =
getPreferenceManager().getSharedPreferences().getInt(PreferenceKey.PREF_WEIGHT_NUM
BER, 0);
        boolean training=
getPreferenceManager().getSharedPreferences().getBoolean(PreferenceKey.PREF_TRAININ
G,false);
        double waterNeed= weight/ 0.030 ;
        if (training)
            waterNeed= waterNeed+300;
        return (int)waterNeed;    }
}
```

19)<u>Home</u>

```
package com.example.healthongo;
import androidx.annotation.NonNull;
import androidx.appcompat.app.ActionBarDrawerToggle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.drawerlayout.widget.DrawerLayout;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentTransaction;
import com.google.android.material.navigation.NavigationView;
import com.google.firebase.auth.FirebaseAuth;
public class home extends AppCompatActivity {
    DrawerLayout Drawerlayout;
    ActionBarDrawerToggle nToggle;
    FragmentTransaction fragmentTransaction;
    NavigationView navigationView;
    FirebaseAuth auth;
    TextView bmi, calorie , footstep , water ,suggestion;
    Fragment fragment = null;
    FirebaseAuth mAuth;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_home);
        Drawerlayout = (DrawerLayout) findViewById(R.id.drawerLayout);
        nToggle = new ActionBarDrawerToggle(this, Drawerlayout, R.string.open,
R.string.close);
        Drawerlayout.addDrawerListener(nToggle);
        nToggle.syncState();
        getSupportActionBar().setDisplayHomeAsUpEnabled(true);
getSupportActionBar().setTitle("Home Page");
        navigationView = (NavigationView) findViewById(R.id.navigation_view);
        navigationView.setNavigationItemSelectedListener(new
NavigationView.OnNavigationItemSelectedListener() {
            @Override
            public boolean onNavigationItemSelected(@NonNull MenuItem menuItem) {
                switch (menuItem.getItemId()) {
                    case R.id.logout:
                        Intent myIntent2 = new Intent(home.this,
                                LogOut.class);
                        startActivity(myIntent2);
                        break;
                   case R.id.Aboutus:
                        Intent myIntent = new Intent(Intent.ACTION_SEND);
                       myIntent.setType("text/plain");
                        String share ="go share this app with your friends and known one let them
know about it";
                        myIntent.putExtra(Intent.EXTRA_SUBJECT,share);
                        startActivity(Intent.createChooser(myIntent , "Share USing"));
                        break;


                    case R.id.contact:
                        Intent browserIntent = new Intent(Intent.ACTION_VIEW,
Uri.parse("http://www.google.com"));
```

```
                startActivity(browserIntent);
break;      }
          return true;
          }        });
        bmi = (TextView) findViewById(R.id.BMI);
        bmi.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View v) {
            startActivity(new Intent(home.this, BMI.class));
          }
        });
        calorie = (TextView) findViewById(R.id.textView2);
        calorie.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View v) {
            SQLiteHandler db = new SQLiteHandler(getApplicationContext());
            if (!db.isUserEmpty()) {
              Intent i = new Intent(home.this, Data_Classes.class);
              startActivity(i);
            } else {
              Intent mainIntent = new Intent(home.this, MainActivity.class);
              home.this.startActivity(mainIntent);             }}});
        footstep = (TextView) findViewById(R.id.textView3);
        footstep.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View v) {
            startActivity(new Intent(home.this, Footstep.class));     }       });
        water = (TextView) findViewById(R.id.textView4);
        water.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View v) {
            startActivity(new Intent(home.this, Water.class));          }       });
        suggestion = (TextView) findViewById(R.id.textView5);
        suggestion.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(home.this,Feedback.class));            }        });    }
    @Override
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        if (nToggle.onOptionsItemSelected(item)) {
            return true;        }
        return super.onOptionsItemSelected(item);    }

    public void onBackPressed() {
        finishAffinity();    }}
```

20) login

```
package com.example.healthongo;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.Bundle;
import android.text.TextUtils;
import android.text.method.HideReturnsTransformationMethod;
import android.text.method.PasswordTransformationMethod;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.CompoundButton;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.TextView;
import android.widget.Toast;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;

public class login extends AppCompatActivity {
    private EditText loginEmailId, logInpasswd;
    private FirebaseAuth firebaseAuth;
    private ProgressBar progressBar;
    private Button  btnLogIn;
    TextView signup , forgot;
    CheckBox showPass;
    private ProgressDialog progressDialog;
    private FirebaseAuth.AuthStateListener authStateListener;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login);
        firebaseAuth = FirebaseAuth.getInstance();
        loginEmailId = findViewById(R.id.loginEmail);
        logInpasswd = findViewById(R.id.loginpaswd);
        btnLogIn = findViewById(R.id.btnLogIn);
        signup = findViewById(R.id.TVSignIn);
        forgot =findViewById(R.id.forgot);
        showPass=findViewById(R.id.passwordshow);
        progressBar = (ProgressBar) findViewById(R.id.progressBar);
        progressDialog = new ProgressDialog(this);
        authStateListener = new FirebaseAuth.AuthStateListener() {
            @Override
            public void onAuthStateChanged(@NonNull FirebaseAuth firebaseAuth) {
                FirebaseUser user = firebaseAuth.getCurrentUser();
                if (user != null) {
                    Toast.makeText(login.this, "User logged in ", Toast.LENGTH_SHORT).show();
                    Intent I = new Intent(login.this, home.class);
```

```
              startActivity(I);
            } else {
              Toast.makeText(login.this, "Login to continue", Toast.LENGTH_SHORT).show();
         }           }        };
        signup.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View view) {
            Intent I = new Intent(login.this, SignUp.class);
            startActivity(I);   }        });
        forgot.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View view) {
            startActivity(new Intent(login.this, Reset.class));
}});
        btnLogIn.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View view) {
            String userEmail = loginEmailId.getText().toString();
            String userPaswd = logInpasswd.getText().toString();
            if (userEmail.isEmpty()) {
              loginEmailId.setError("Provide your Email first!");
              loginEmailId.requestFocus();
            } else if (userPaswd.isEmpty()) {
              logInpasswd.setError("Enter Password!");
              logInpasswd.requestFocus();
            } else if (userEmail.isEmpty() && userPaswd.isEmpty()) {
              Toast.makeText(login.this, "Fields Empty!", Toast.LENGTH_SHORT).show();
            } else if (!(userEmail.isEmpty() && userPaswd.isEmpty()))
            {
              firebaseAuth.signInWithEmailAndPassword(userEmail,
userPaswd).addOnCompleteListener(login.this, new OnCompleteListener() {
                @Override
                public void onComplete(@NonNull Task task) {
                  if (!task.isSuccessful()) {
                    Toast.makeText(login.this, "Not sucessfull",
Toast.LENGTH_SHORT).show();
                    progressBar.setVisibility(View.GONE);
                  } else {
                    startActivity(new Intent(login.this, home.class));
                  }          }});          }
            else {
              Toast.makeText(login.this, "Error", Toast.LENGTH_SHORT).show();
              progressBar.setVisibility(View.GONE);        }
            progressBar.setVisibility(View.VISIBLE);
            progressDialog.setMessage("Logging in Please Wait...");
            progressDialog.show();     }    });
        progressDialog.dismiss();
        showPass.setOnCheckedChangeListener(new
CompoundButton.OnCheckedChangeListener() {
          @Override
         public void onCheckedChanged(CompoundButton compoundButton, boolean value) {
            if (value)
            {
logInpasswd.setTransformationMethod(HideReturnsTransformationMethod.getInstance(   }
else{logInpasswd.setTransformationMethod(PasswordTransformationMethod.getInstance()
);}}});}
  @Override
  protected void onStart() {
        super.onStart();
        firebaseAuth.addAuthStateListener(authStateListener);
  }}
```

21)<u>**Log Manager**</u>

```
package com.example.healthongo;
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.ObjectInputStream;
import java.io.ObjectOutputStream;
import java.util.ArrayList;
import java.util.List;
public class LogManager {
    private static final String LOG_PATH = "calorieslog.sav";
    private static List<LogEntry> logEntries;
    @SuppressWarnings("unchecked")
    public static void loadCalorieLog(Context ctx) {
        logEntries = new ArrayList<LogEntry>();
        try {
            FileInputStream fis = ctx.openFileInput(LOG_PATH);
            ObjectInputStream in = new ObjectInputStream(fis);
            logEntries = (ArrayList<LogEntry>) in.readObject();
            in.close();
        } catch (FileNotFoundException e) {
            e.printStackTrace();
        } catch (IOException e) {
            e.printStackTrace();
        } catch (ClassNotFoundException e) {
            e.printStackTrace(); }    }
    public static void writeToCalorieLog(LogEntry logEntry, Context ctx) {
        try {
            logEntries.add(logEntry);
            FileOutputStream fos = ctx.openFileOutput(LOG_PATH, Context.MODE_PRIVATE);
            ObjectOutputStream out = new ObjectOutputStream(fos);
            out.writeObject(logEntries);
            out.close();
        } catch (FileNotFoundException e) {
            e.printStackTrace();
        } catch (IOException e) {
            e.printStackTrace();        }    }
    public static void writeToCalorieLog(List<LogEntry> le, Context ctx) {
        try {
            logEntries = le;
            FileOutputStream fos = ctx.openFileOutput(LOG_PATH, Context.MODE_PRIVATE);
            ObjectOutputStream out = new ObjectOutputStream(fos);
            out.writeObject(logEntries);
            out.close();
        } catch (FileNotFoundException e) {
            e.printStackTrace();
        } catch (IOException e) {
            e.printStackTrace();        }}
    public static List<LogEntry> getLogEntries() {
        return logEntries;    }}
```

22) <u>Main2Activity</u>

```
package com.example.healthongo;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import com.google.firebase.auth.FirebaseAuth;
public class Main2Activity extends AppCompatActivity {
Button log,register;
FirebaseAuth mAuth ;
    @Override
```

```
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main2);
startUpTasks();
      log = (Button)findViewById(R.id.button);
      register=(Button)findViewById(R.id.button2);
      log.setOnClickListener(new View.OnClickListener() {
         public void onClick(View arg0) {
            Intent myIntent = new Intent(Main2Activity.this,
                  login.class);
            startActivity(myIntent); }       });
      register.setOnClickListener(new View.OnClickListener() {
         public void onClick(View arg0) {
            Intent myIntent = new Intent(Main2Activity.this,
                  SignUp.class);
            startActivity(myIntent);          }});}
   private void startUpTasks() {
      Boolean isFirstRun = getSharedPreferences("PREFERENCE", MODE_PRIVATE)
            .getBoolean("isFirstRun", true);
      if (isFirstRun) {
         Intent i = new Intent(Main2Activity.this, login.class);
         startActivity(i);
         getSharedPreferences("PREFERENCE", MODE_PRIVATE).edit()
               .putBoolean("isFirstRun", false).commit();
      } else {
         Intent myIntent = new Intent(Main2Activity.this, home.class);
         Main2Activity.this.startActivity(myIntent);
      }   } }
```

23) <u>MainActivity</u>

```
package com.example.healthongo;
import android.content.Intent;
import android.os.Bundle;
import android.text.TextUtils;
import android.view.View;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Spinner;
import android.widget.TextView;
import android.widget.Toast;
import java.text.DateFormat;
import java.text.SimpleDateFormat;
import java.util.Calendar;
import java.util.Date;
   public class MainActivity extends AppCompatActivity {
   EditText weight, height, age, name;
   double bmi;
   double bmr;
   RadioButton radioGender;
   RadioButton stars;
   int selectedId;
   int radioId;
   private String resulttext;
   private TextView txtresult;
   Spinner spgoals;
   String sgoals;
   String goals[] = { "Maintain Weight", "Gain 0.5kg per week", "Gain 1kg per week", "Lose
0.5kg per week",
         "Lose 1kg per week" };
   ArrayAdapter<String> adaptergoals;
   @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        getSupportActionBar().setTitle("Calorie Counter ");
        spgoals = (Spinner) findViewById(R.id.spinner);
        adaptergoals = new ArrayAdapter<String>(this,
                android.R.layout.simple_spinner_item, goals);
adaptergoals.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item
);
  spgoals.setAdapter(adaptergoals);
        Button one= (Button) findViewById(R.id.calc);
        one.setOnClickListener(new View.OnClickListener() {
            public void onClick(View v) {
                weight = (EditText) findViewById(R.id.weight);
                height = (EditText) findViewById(R.id.height);
                age = (EditText) findViewById(R.id.age);
                name = (EditText) findViewById(R.id.namevar);
                String ass;
                int Gender, starss;
                RadioGroup rg = (RadioGroup) findViewById(R.id.radioGroup);
                RadioButton male = (RadioButton) findViewById(R.id.Male);
                RadioButton female = (RadioButton) findViewById(R.id.Female);
                selectedId = rg.getCheckedRadioButtonId();
                radioGender = (RadioButton) findViewById(selectedId);
                if (male.isChecked()) {
                    Gender = 1;
                } else {
                    Gender = 2;        }
if (TextUtils.isEmpty(name.getText().toString())) {
                    name.setError("Please enter your name");
                    Toast.makeText(MainActivity.this, "Please enter your name",
                            Toast.LENGTH_LONG).show();
                    return; }
                if (TextUtils.isEmpty(weight.getText().toString())) {
                    weight.setError("Please enter your weight");
                    return;  }
                if (TextUtils.isEmpty(height.getText().toString())) {
                    height.setError("Please enter your height");
                    return;  }
                if (TextUtils.isEmpty(age.getText().toString())) {
                    age.setError("Please enter your age");
                    return;    }
                Intent i = new Intent(MainActivity.this, Data_Classes.class);
                String namevr = name.getText().toString();
                double weightvr = Double.parseDouble(weight.getText().toString());
                double feets = Double.parseDouble(height.getText().toString());
                double heightvr = feets * 30.48 ;
                int agevr = Integer.parseInt(age.getText().toString());
                if ((weightvr <= 30) || (weightvr >= 130)) {
                    Toast.makeText(MainActivity.this, "Please enter a valid weight",
                            Toast.LENGTH_SHORT).show();
                    return;
                } else if ((feets < 4.8) || (feets > 6.8)) {
                    Toast.makeText(MainActivity.this, "Please enter a valid height",
                            Toast.LENGTH_SHORT).show();
                    return;
                } else if ((agevr <= 0) || (agevr >= 100)) {
                    Toast.makeText(MainActivity.this, "Please enter a valid age",
                            Toast.LENGTH_SHORT).show();
                    return;
                } else {
                    if (selectedId == R.id.Male) {
                        bmr = (((weightvr * 10) + (heightvr * 6.25)) - (5 * agevr)) + 5;
                    } else {
```

```
                    bmr = (((weightvr * 10) + (heightvr * 6.25)) - (5 * agevr)) - 161;
                }
                RadioGroup rg1 = (RadioGroup) findViewById(R.id.radioGroup1);
                radioId = rg1.getCheckedRadioButtonId();
                stars = (RadioButton) findViewById(radioId);
                RadioButton r1 = (RadioButton) findViewById(R.id.r1);
                RadioButton r2 = (RadioButton) findViewById(R.id.r2);
                RadioButton r3 = (RadioButton) findViewById(R.id.r3);
                RadioButton r4 = (RadioButton) findViewById(R.id.r4);
                RadioButton r5 = (RadioButton) findViewById(R.id.r5);
                if (r1.isChecked()) {
                    starss = 1;
                } else if (r2.isChecked()) {
                    starss = 2;
                } else if (r3.isChecked()) {
                    starss = 3;
                } else if (r4.isChecked()) {
                    starss = 4;
                } else {
                    starss = 5;    }
                if (radioId == R.id.r1) {
                    bmr = bmr * 1.2;
                } else if (radioId == R.id.r2) {
                    bmr = bmr * 1.375;
                } else if (radioId == R.id.r3) {
                    bmr = bmr * 1.55;
                } else if (radioId == R.id.r4) {
                    bmr = bmr * 1.725;
                } else {
                    bmr = bmr * 1.9; }
                bmi = (float) (weightvr / ((heightvr / 100) * (heightvr / 100)));
if (bmi < 16) {
    ass = "Severely underweight";
} else if (bmi < 18.5) {
    ass = "Underweight";
} else if (bmi < 25) {
    ass = "Normal";
} else if (bmi < 30) {
    ass = "Overweight";
} else {
    ass = "Obese";
}
sgoals= spgoals.getSelectedItem().toString();
if (sgoals == "Maintain Weight"){
    bmr = bmr;
} else if (sgoals == "Gain 0.5kg per week") {
    bmr = bmr + 500;
} else if (sgoals == "Gain 1kg per week") {
    bmr = bmr + 1000;
} else if (sgoals == "Lose 0.5kg per week") {
    bmr = bmr - 500;
} else if (sgoals == "Lose 1kg per week") {
    bmr = bmr - 1000;
}
txtresult = (TextView) findViewById(R.id.result1);
resulttext = "Your BMI is: " + String.format("%.2f", bmi) + "\nYou are " + ass;
double daily = bmr;
String results = resulttext;
double calories = bmr;
double tempo = 0.0;
Calendar calendar = Calendar.getInstance();
DateFormat dateFormat = new SimpleDateFormat("yyyy-MM-dd");
Date today = calendar.getTime();
String dates = dateFormat.format(today);
```

```
               SQLiteHandler db = new SQLiteHandler(getApplicationContext());
               db.addUser(namevr, Gender, agevr, weightvr, heightvr, starss, results, calories,
dates, daily, tempo);
               db.close();
               startActivity(i);
               finish();            }          }       });    }    }
```

24) NotificationReciever

```
package com.example.healthongo;
import android.app.Notification;
import android.app.NotificationManager;
import android.app.PendingIntent;
import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;
import android.preference.PreferenceManager;
public class NotificationReciever extends BroadcastReceiver {
   @Override
   public void onReceive(Context context, Intent intent) {
      Intent repeatingIntent = new Intent(context, Water.class);
      repeatingIntent.setFlags(Intent.FLAG_ACTIVITY_CLEAR_TOP);
      PendingIntent pendingIntent = PendingIntent.getActivity(context,100,repeatingIntent,
PendingIntent.FLAG_UPDATE_CURRENT);
      NotificationManager notificationManager = (NotificationManager)
context.getSystemService(Context.NOTIFICATION_SERVICE);
      Notification.Builder builder =setupNotification(context);
      builder.setContentIntent(pendingIntent);
      notificationManager.notify(100, builder.build());
   }
   private  Notification.Builder setupNotification(Context context) {
       Notification.Builder builder = new Notification.Builder(context);
```

```
    builder.setSmallIcon( R.drawable.drop_notification_icon).setContentTitle("Water
Tracker")
        .setContentText("It is time to drink water")
        .setContentInfo("add a drink!").setAutoCancel(true);
    SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
    boolean soundEnable= prefs.getBoolean(PreferenceKey.PREF_SOUND,false);
    if(soundEnable)
    {   builder.setDefaults(Notification.DEFAULT_SOUND);}
    return builder;    }}
```

25) NumberPickerPreference

```
package com.example.healthongo;
import android.content.Context;
import android.content.res.TypedArray;
import android.preference.DialogPreference;
import android.util.AttributeSet;
import android.view.Gravity;
import android.view.View;
import android.view.ViewGroup;
import android.widget.FrameLayout;
import android.widget.NumberPicker;
public class NumberPickerPreference extends DialogPreference {
  public static final int DEFAULT_MAX_VALUE = 100;
  public static final int DEFAULT_MIN_VALUE = 0;
  public static final boolean DEFAULT_WRAP_SELECTOR_WHEEL = true;
  private final int minValue;
  private final int maxValue;
  private final boolean wrapSelectorWheel;
  private NumberPicker picker;
  private int value;
  public NumberPickerPreference(Context context, AttributeSet attrs) {
        this(context, attrs, android.R.attr.dialogPreferenceStyle);    }
    public NumberPickerPreference(Context context, AttributeSet attrs, int defStyleAttr) {
        super(context, attrs, defStyleAttr);
        final TypedArray a = context.obtainStyledAttributes(attrs,
R.styleable.NumberPickerPreference);
        minValue = a.getInteger(R.styleable.NumberPickerPreference_minValue,
DEFAULT_MIN_VALUE);
        maxValue = a.getInteger(R.styleable.NumberPickerPreference_maxValue,
DEFAULT_MAX_VALUE);
        wrapSelectorWheel =
a.getBoolean(R.styleable.NumberPickerPreference_wrapSelectorWheel,
DEFAULT_WRAP_SELECTOR_WHEEL);
        a.recycle();    }
    @Override
    protected View onCreateDialogView() {
        FrameLayout.LayoutParams layoutParams = new
FrameLayout.LayoutParams(ViewGroup.LayoutParams.WRAP_CONTENT,
ViewGroup.LayoutParams.WRAP_CONTENT);
        layoutParams.gravity = Gravity.CENTER;
        picker = new NumberPicker(getContext());
        picker.setLayoutParams(layoutParams);
        FrameLayout dialogView = new FrameLayout(getContext());
        dialogView.addView(picker);
        return dialogView;    }
    @Override
    protected void onBindDialogView(View view) {
        super.onBindDialogView(view);
        picker.setMinValue(minValue);
        picker.setMaxValue(maxValue);
        picker.setWrapSelectorWheel(wrapSelectorWheel);
        picker.setValue(getValue());    }
    @Override
    protected void onDialogClosed(boolean positiveResult) {
        if (positiveResult) {
            picker.clearFocus();
            int newValue = picker.getValue();
            if (callChangeListener(newValue)) {
                setValue(newValue);
            }       }   }

    @Override
    protected Object onGetDefaultValue(TypedArray a, int index) {
        return a.getInt(index, minValue);    }
    @Override
    protected void onSetInitialValue(boolean restorePersistedValue, Object defaultValue) {
        setValue(restorePersistedValue ? getPersistedInt(minValue) : (Integer) defaultValue);   }
    public void setValue(int value) {
        this.value = value;
        persistInt(this.value);    }
    public int getValue() {
        return this.value;    }}
```

26) <u>OutlineActivity</u>

```
package com.example.healthongo;
import android.app.Fragment;
import android.app.FragmentManager;
import android.os.Bundle;
import android.widget.TextView;
import androidx.viewpager.widget.ViewPager;
import androidx.viewpager.widget.PagerAdapter;
public class OutlineActivity extends AppCompatActivity {
    private TextView pageMun;
    private PagerAdapter pagerAdapter;
    @Override
```

```
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_outline);
    getSupportActionBar().setDisplayHomeAsUpEnabled(true);
    getSupportActionBar().setDisplayShowHomeEnabled(true);
    pageMun = (TextView) findViewById(R.id.pageNum);

    ViewPager pager = (ViewPager) findViewById(R.id.pager);
    pagerAdapter = new MyPagerAdapter(getFragmentManager());
    pager.setAdapter(pagerAdapter);
    pager.addOnPageChangeListener(new ViewPager.OnPageChangeListener() {
      @Override
     public void onPageScrolled(int position, float positionOffset, int positionOffsetPixels){}
      @Override
      public void onPageSelected(int position) {
        pageMun.setText(((position + 1) + "/" + pagerAdapter.getCount()) );          }

      @Override
      public void onPageScrollStateChanged(int state) {   }
    });   }
  private class MyPagerAdapter extends FragmentPagerAdapter {
    Fragment[] fragments = new Fragment[6];
    public MyPagerAdapter(FragmentManager fm) {
      super(fm);
      fragments[0] = adviceFragment.create(R.string.wake_up_review,
R.drawable.wakeup);
      fragments[1] = adviceFragment.create( R.string.sleep_review, R.drawable.sleep);
      fragments[2] = adviceFragment.create( R.string.shower_review, R.drawable.shower);
      fragments[3] = adviceFragment.create( R.string.meal_review, R.drawable.eat);
      fragments[4] = adviceFragment.create( R.string.lose_weight,
R.drawable.lose_weight);
      fragments[5] = adviceFragment.create( R.string.lack_water, R.drawable.pheart);   }
    @Override
    public Fragment getItem(int position) {
      return fragments[position];       }
    @Override
    public int getCount() {
      return fragments.length;       }    }
  @Override
  public boolean onSupportNavigateUp() {
    onBackPressed();
    return true;    }}
```

27) <u>PreferenceKey</u>

```
package com.example.healthongo;
public class PreferenceKey {
  public final static String PREF_START_TIME = "key_from_time";
  public final static String PREF_EBD_TIME = "key_to_time";
  public final static String PREF_GLASS_SIZE = "key_glass";
  public final static String PREF_BOTTLE_SIZE="key_bottle";
  public final static String PREF_INTERVAL="key_notif_interval_time";
  public final static String PREF_IS_ENABLED="key_notif_enable";
  public final static String PREF_SOUND="key_notif_sound";
  public final static String PREF_WEIGHT_NUMBER = "key_weight_number";
  public final static String PREF_TRAINING="key_training";
  public final static String PREF_WATER_NEED="key_water_recommendation";
  public final static String FROM_KEY= "from";
  public final static String TO_KEY= "to";
}
```

28) <u>PrefsHelper</u>

```
package com.example.healthongo;
import android.content.Context;
import android.content.SharedPreferences;
import android.preference.PreferenceManager;
public class PrefsHelper {
    public static int getWaterNeedPrefs(Context context){
        SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
        return prefs.getInt(PreferenceKey.PREF_WATER_NEED,2500);    }
    public static boolean getNotificationsPrefs(Context context) {
        SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
        return  prefs.getBoolean(PreferenceKey.PREF_IS_ENABLED,true);    }
    public static boolean getSoundsPrefs(Context context){
        SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
        return prefs.getBoolean(PreferenceKey.PREF_SOUND,false);    }
    public static String getGlassSizePrefs(Context context){
        SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
         return prefs.getString(PreferenceKey.PREF_GLASS_SIZE,"250");    }
    public static String getBottleSizePrefs(Context context){
        SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);
          return  prefs.getString(PreferenceKey.PREF_BOTTLE_SIZE, "1500");    }
    public static boolean getFirstTimeRunPrefs(Context context){
        SharedPreferences pref = PreferenceManager.getDefaultSharedPreferences(context);
      return pref.getBoolean("first_time_run", true) ;    }
    public static void setFirstTimeRunPrefs(Context context, boolean b) {
        SharedPreferences pref = PreferenceManager.getDefaultSharedPreferences(context);
        SharedPreferences.Editor editor = pref.edit();
        editor.putBoolean("first_time_run", b);
        editor.commit();    }}
```

29) Reset

```
package com.example.healthongo;
import android.os.Bundle;
import android.text.TextUtils;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.Toast;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.FirebaseAuth;
public class Reset extends AppCompatActivity {
    private EditText inputEmail;
    private Button btnReset, btnBack;
    private FirebaseAuth auth;
    private ProgressBar progressBar;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_reset);
        inputEmail = (EditText) findViewById(R.id.email);
        btnReset = (Button) findViewById(R.id.btn_reset_password);
        btnBack = (Button) findViewById(R.id.btn_back);
        auth = FirebaseAuth.getInstance();
        btnBack.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                finish();           }       });
        btnReset.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String email = inputEmail.getText().toString().trim();
                if (TextUtils.isEmpty(email)) {
                    Toast.makeText(getApplication(), "Enter your registered email id",
Toast.LENGTH_SHORT).show();
```

```
                return;             }
            auth.sendPasswordResetEmail(email)
                    .addOnCompleteListener(new OnCompleteListener<Void>() {
                        @Override
                        public void onComplete(@NonNull Task<Void> task) {
                            if (task.isSuccessful()) {
                                Toast.makeText(Reset.this, "We have sent you instructions to reset your
password!", Toast.LENGTH_SHORT).show();
                            } else {
                                Toast.makeText(Reset.this, "Failed to send reset email!",
Toast.LENGTH_SHORT).show();                         }
                            progressBar.setVisibility(View.GONE);
                        }                   });         }     });        } }
```

30) SensorFilter

```
package com.example.healthongo;
public class SensorFilter {
    private SensorFilter() {
    }
    public static float sum(float[] array) {
        float retval = 0;
        for (int i = 0; i < array.length; i++) {
            retval += array[i];       }
        return retval;    }
    public static float[] cross(float[] arrayA, float[] arrayB) {
        float[] retArray = new float[3];
        retArray[0] = arrayA[1] * arrayB[2] - arrayA[2] * arrayB[1];
        retArray[1] = arrayA[2] * arrayB[0] - arrayA[0] * arrayB[2];
        retArray[2] = arrayA[0] * arrayB[1] - arrayA[1] * arrayB[0];
        return retArray;    }
    public static float norm(float[] array) {
        float retval = 0;
        for (int i = 0; i < array.length; i++) {
            retval += array[i] * array[i];        }
        return (float) Math.sqrt(retval);    }
    public static float dot(float[] a, float[] b) {
        float retval = a[0] * b[0] + a[1] * b[1] + a[2] * b[2];
        return retval;    }
    public static float[] normalize(float[] a) {
        float[] retval = new float[a.length];
        float norm = norm(a);
        for (int i = 0; i < a.length; i++) {
            retval[i] = a[i] / norm;        }
        return retval;    }}
```

31) <u>Settings</u>

```
package com.example.healthongo;
import android.content.DialogInterface;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.Toast;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;

public class Settings extends AppCompatActivity {
    private Button btnChangeEmail, btnChangePassword, btnSendResetEmail,
btnRemoveUser,
            changeEmail, changePassword, sendEmail, remove, signOut;
    private EditText oldEmail, newEmail, password, newPassword;
    private ProgressBar progressBar;
    private FirebaseAuth.AuthStateListener authListener;
    private FirebaseAuth auth;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_log_out);
        getSupportActionBar().setTitle("Settings");
        auth = FirebaseAuth.getInstance();
        final FirebaseUser user = FirebaseAuth.getInstance().getCurrentUser();
        authListener = new FirebaseAuth.AuthStateListener() {
            @Override
            public void onAuthStateChanged(@NonNull FirebaseAuth firebaseAuth) {
                FirebaseUser user = firebaseAuth.getCurrentUser();
                if (user == null) {
                    startActivity(new Intent(Settings.this, login.class));
                    finish();     }}    };
        btnChangeEmail = (Button) findViewById(R.id.change_email_button);
        btnChangePassword = (Button) findViewById(R.id.change_password_button);
        btnSendResetEmail = (Button) findViewById(R.id.sending_pass_reset_button);
        btnRemoveUser = (Button) findViewById(R.id.remove_user_button);
        changeEmail = (Button) findViewById(R.id.changeEmail);
        changePassword = (Button) findViewById(R.id.changePass);
        sendEmail = (Button) findViewById(R.id.send);
        remove = (Button) findViewById(R.id.remove);
        signOut = (Button) findViewById(R.id.sign_out);
        oldEmail = (EditText) findViewById(R.id.old_email);
        newEmail = (EditText) findViewById(R.id.new_email);
        password = (EditText) findViewById(R.id.password);
        newPassword = (EditText) findViewById(R.id.newPassword);
```

```
oldEmail.setVisibility(View.GONE);
newEmail.setVisibility(View.GONE);
password.setVisibility(View.GONE);
newPassword.setVisibility(View.GONE);
changeEmail.setVisibility(View.GONE);
changePassword.setVisibility(View.GONE);
sendEmail.setVisibility(View.GONE);
remove.setVisibility(View.GONE);
progressBar = (ProgressBar) findViewById(R.id.progressBar);
if (progressBar != null) {
   progressBar.setVisibility(View.GONE);       }
btnChangeEmail.setOnClickListener(new View.OnClickListener() {
   @Override
   public void onClick(View v) {
      oldEmail.setVisibility(View.GONE);
      newEmail.setVisibility(View.VISIBLE);
      password.setVisibility(View.GONE);
      newPassword.setVisibility(View.GONE);
      changeEmail.setVisibility(View.VISIBLE);
      changePassword.setVisibility(View.GONE);
      sendEmail.setVisibility(View.GONE);
      remove.setVisibility(View.GONE);          }       });
changeEmail.setOnClickListener(new View.OnClickListener() {
   @Override
   public void onClick(View v) {
      progressBar.setVisibility(View.VISIBLE);
      if (user != null && !newEmail.getText().toString().trim().equals("")) {
         user.updateEmail(newEmail.getText().toString().trim())
               .addOnCompleteListener(new OnCompleteListener<Void>() {
                  @Override
                  public void onComplete(@NonNull Task<Void> task) {
                     if (task.isSuccessful()) {
```

```
                    Toast.makeText(Settings.this, "Email address is updated. Please sign
in with new email id!", Toast.LENGTH_LONG).show();
                    signOut();
                    progressBar.setVisibility(View.GONE);
                  } else {
                    Toast.makeText(Settings.this, "Failed to update email!",
Toast.LENGTH_LONG).show();
                    progressBar.setVisibility(View.GONE);    }  }     });
          } else if (newEmail.getText().toString().trim().equals("")) {
            newEmail.setError("Enter email");
            progressBar.setVisibility(View.GONE);      }  }    });
    btnChangePassword.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
        oldEmail.setVisibility(View.GONE);
        newEmail.setVisibility(View.GONE);
        password.setVisibility(View.GONE);
        newPassword.setVisibility(View.VISIBLE);
        changeEmail.setVisibility(View.GONE);
        changePassword.setVisibility(View.VISIBLE);
        sendEmail.setVisibility(View.GONE);
        remove.setVisibility(View.GONE);    }       });
    changePassword.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
        progressBar.setVisibility(View.VISIBLE);
        if (user != null && !newPassword.getText().toString().trim().equals("")) {
          if (newPassword.getText().toString().trim().length() < 6) {
            newPassword.setError("Password too short, enter minimum 6 characters");
            progressBar.setVisibility(View.GONE);
          } else {
            user.updatePassword(newPassword.getText().toString().trim())
```

```
                .addOnCompleteListener(new OnCompleteListener<Void>() {
                  @Override
                  public void onComplete(@NonNull Task<Void> task) {
                    if (task.isSuccessful()) {
                      Toast.makeText(Settings.this, "Password is updated, sign in with
new password!", Toast.LENGTH_SHORT).show();
                      signOut();
                      progressBar.setVisibility(View.GONE);
                    } else {
                      Toast.makeText(Settings.this, "Failed to update password!",
Toast.LENGTH_SHORT).show();
                      progressBar.setVisibility(View.GONE);
                    }}});}
        } else if (newPassword.getText().toString().trim().equals("")) {
          newPassword.setError("Enter password");
          progressBar.setVisibility(View.GONE);
        }  }  });
    btnSendResetEmail.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
        oldEmail.setVisibility(View.VISIBLE);
        newEmail.setVisibility(View.GONE);
        password.setVisibility(View.GONE);
        newPassword.setVisibility(View.GONE);
        changeEmail.setVisibility(View.GONE);
        changePassword.setVisibility(View.GONE);
        sendEmail.setVisibility(View.VISIBLE);
        remove.setVisibility(View.GONE);
      }     });
    sendEmail.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
        progressBar.setVisibility(View.VISIBLE);
        if (!oldEmail.getText().toString().trim().equals("")) {
          auth.sendPasswordResetEmail(oldEmail.getText().toString().trim())
              .addOnCompleteListener(new OnCompleteListener<Void>() {
                @Override
                public void onComplete(@NonNull Task<Void> task) {
                  if (task.isSuccessful()) {
                    Toast.makeText(Settings.this, "Reset password email is sent!",
Toast.LENGTH_SHORT).show();
                    progressBar.setVisibility(View.GONE);
                  } else {
                    Toast.makeText(Settings.this, "Failed to send reset email!",
Toast.LENGTH_SHORT).show();
                    progressBar.setVisibility(View.GONE);
                  }    }    });
        } else {
          oldEmail.setError("Enter email");
          progressBar.setVisibility(View.GONE);
        }          }       });
    btnRemoveUser.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
        progressBar.setVisibility(View.VISIBLE);
        AlertDialog.Builder builder = new AlertDialog.Builder(Settings.this);
        builder.setMessage("Are you sure you want to delete yout account?");
        builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
          public void onClick(DialogInterface dialog, int id) {
            dialog.dismiss();
            if (user != null) {
              user.delete()
                  .addOnCompleteListener(new OnCompleteListener<Void>() {
                    @Override
                    public void onComplete(@NonNull Task<Void> task) {
                      if (task.isSuccessful()) {
                        Toast.makeText(Settings.this, "Your profile is deleted:( Create a
account now!", Toast.LENGTH_SHORT).show();
                        startActivity(new Intent(Settings.this, SignUp.class));
                        finish();
                        progressBar.setVisibility(View.GONE);
                      } else {
                        Toast.makeText(Settings.this, "Failed to delete your account!",
Toast.LENGTH_SHORT).show();
progressBar.setVisibility(View.GONE);    }
                    } });                    }}  });
        builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
          public void onClick(DialogInterface dialog, int id) {
            dialog.dismiss();}});
        AlertDialog alert = builder.create();
        alert.show();}});
    signOut.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
        AlertDialog.Builder builder = new AlertDialog.Builder(Settings.this);
        builder.setMessage("Are you sure you want to exit?");
        builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
          public void onClick(DialogInterface dialog, int id) {
            dialog.dismiss();
            signOut();                  }              });
        builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
          public void onClick(DialogInterface dialog, int id) {
            dialog.dismiss();                  }              });
        AlertDialog alert = builder.create();
        alert.show();
      }       });    }
  public void signOut() {
    auth.signOut();    }
  @Override
  protected void onResume() {
    super.onResume();
    progressBar.setVisibility(View.GONE);    }
  @Override
  public void onStart() {
    super.onStart();
    auth.addAuthStateListener(authListener);    }
  @Override
  public void onStop() {
    super.onStop();
    if (authListener != null) {
      auth.removeAuthStateListener(authListener);        }    }}
```

32) SettingsActivity

```
package com.example.healthongo;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.widget.Toolbar;
import android.os.Bundle;
import android.preference.PreferenceActivity;
import android.view.LayoutInflater;
import android.view.View;
import android.widget.FrameLayout;
import android.widget.LinearLayout;
public class SettingsActivity extends PreferenceActivity {
static Toolbar bar ;
@Override
    protected void onCreate(final Bundle savedInstanceState) {
```

```
    super.onCreate(savedInstanceState);
    LinearLayout root =
(LinearLayout)findViewById(android.R.id.list).getParent().getParent().getParent();
    bar = (Toolbar) LayoutInflater.from(this).inflate(R.layout.settings_toolbar, root, false);
    root.addView(bar, 0);
bar.setNavigationOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
        finish();}});
    FrameLayout frameLayout = (FrameLayout)
LayoutInflater.from(this).inflate(R.layout.seetings_fragment, root, false);
    root.addView(frameLayout,1);
    getFragmentManager().beginTransaction().replace(R.id.content_frame, new
FragmentPrefs()).commit();}}
```

33) SignUp

```
package com.example.healthongo;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.Bundle;
import android.text.TextUtils;
import android.util.Patterns;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.Toast;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
```

```
public class SignUp extends AppCompatActivity {
    EditText inputEmail, inputPassword,inputName,inputPassword2,mobile;
    FirebaseAuth auth;
    private ProgressDialog progressDialog;
    Button btnSignUp,btnSignIn;
    ProgressBar progressBar;
    private AwesomeValidation awesomeValidation;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_sign_up);
        auth = FirebaseAuth.getInstance();
        btnSignUp = (Button) findViewById(R.id.button3);
        inputEmail = (EditText) findViewById(R.id.email2);
        inputPassword = (EditText) findViewById(R.id.password2);
        inputName = (EditText) findViewById(R.id.name1);
        btnSignIn = (Button) findViewById(R.id.link_login);
        mobile= (EditText)findViewById(R.id.mobile);
        progressBar = (ProgressBar) findViewById(R.id.progressBar);
        awesomeValidation = new AwesomeValidation(ValidationStyle.BASIC);
        progressDialog = new ProgressDialog(this);
        btnSignIn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(SignUp.this, login.class));
            }  });
        btnSignUp.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                checkDataEntered();
                String email = inputEmail.getText().toString();
                String password = inputPassword.getText().toString();
               String inmobile=mobile.getText().toString();
                String name = inputName.getText().toString().trim();
                if (email.isEmpty()) {
                  inputEmail.setError("Enter Email");
                }
                if (password.isEmpty()) {
                   inputPassword.setError("ENter password");
                }
               if (name.isEmpty()) {
                   Toast.makeText(getApplicationContext(), "Enter name!",
Toast.LENGTH_SHORT).show();
                   return;
                }
                if (inmobile.isEmpty())
                {
                   Toast.makeText(getApplicationContext(),"Enter phone
no",Toast.LENGTH_SHORT).show();
                   return;
                }
                progressDialog.setMessage("Registering Please Wait...");
                progressDialog.show();
                progressBar.setVisibility(View.VISIBLE);
                auth.createUserWithEmailAndPassword(email, password)
                       .addOnCompleteListener(SignUp.this, new
OnCompleteListener<AuthResult>(){
                      @Override
public void onComplete(@NonNull Task<AuthResult> task) {
                          Toast.makeText(SignUp.this, "createUserWithEmail:onComplete:" +
task.isSuccessful(), Toast.LENGTH_SHORT).show();
                          progressBar.setVisibility(View.GONE);
                          progressDialog.dismiss();
                            if (!task.isSuccessful()) {
                              Toast.makeText(SignUp.this, "Authentication failed." +
task.getException(),
 Toast.LENGTH_SHORT).show();                              }
                            else {
                              startActivity(new Intent(SignUp.this, login.class));
                              finish();   }  }   });    });   }
    boolean isEmail(EditText text) {
        CharSequence email = text.getText().toString();
        return (!TextUtils.isEmpty(email) &&
Patterns.EMAIL_ADDRESS.matcher(email).matches());
    boolean isEmpty(EditText text) {
        CharSequence str = text.getText().toString();
        return TextUtils.isEmpty(str);
    boolean isNumber(EditText text){
        CharSequence number = text.getText().toString();
        return (!TextUtils.isEmpty(number) && Patterns.PHONE.matcher(number).matches();  }
    void checkDataEntered()
            {
                if (isEmail(inputEmail) == false) {
                    inputEmail.setError("Enter valid email!");                }
                if (inputPassword.length() < 6) {
                    inputPassword.setError("Enter password should be more than 6 ");                }
                if (isEmpty(inputName)) {
                    inputName.setError(" name is required!");                }
                if (isNumber(mobile) == false) {
                    mobile.setError("Enter valid number!");                }          }
    @Override
    protected void onResume() {
        super.onResume();
        progressBar.setVisibility(View.GONE);
        progressDialog.dismiss();    }    }
```

34)<u>StepsDetector</u>

```
package com.example.healthongo;
public class StepDetector {
  private static final int ACCEL_RING_SIZE = 50;
   private static final int VEL_RING_SIZE = 10;
   private static final float STEP_THRESHOLD = 25f;
   private static final int STEP_DELAY_NS = 250000000;
   private int accelRingCounter = 0;
   private float[] accelRingX = new float[ACCEL_RING_SIZE];
   private float[] accelRingY = new float[ACCEL_RING_SIZE];
   private float[] accelRingZ = new float[ACCEL_RING_SIZE];
   private int velRingCounter = 0;
   private float[] velRing = new float[VEL_RING_SIZE];
   private long lastStepTimeNs = 0;
   private float oldVelocityEstimate = 0;
   private StepListener listener;
   public void registerListener(StepListener listener) {
      this.listener = listener;
   }
   public void updateAccel(long timeNs, float x, float y, float z) {
      float[] currentAccel = new float[3];
      currentAccel[0] = x;
      currentAccel[1] = y;
      currentAccel[2] = z;
      accelRingCounter++;
      accelRingX[accelRingCounter % ACCEL_RING_SIZE] = currentAccel[0];
      accelRingY[accelRingCounter % ACCEL_RING_SIZE] = currentAccel[1];
      accelRingZ[accelRingCounter % ACCEL_RING_SIZE] = currentAccel[2];
      float[] worldZ = new float[3];
      worldZ[0] = SensorFilter.sum(accelRingX) / Math.min(accelRingCounter,
ACCEL_RING_SIZE);
      worldZ[1] = SensorFilter.sum(accelRingY) / Math.min(accelRingCounter,
ACCEL_RING_SIZE);
      worldZ[2] = SensorFilter.sum(accelRingZ) / Math.min(accelRingCounter,
ACCEL_RING_SIZE);
      float normalization_factor = SensorFilter.norm(worldZ);
      worldZ[0] = worldZ[0] / normalization_factor;
      worldZ[1] = worldZ[1] / normalization_factor;
      worldZ[2] = worldZ[2] / normalization_factor;
      float currentZ = SensorFilter.dot(worldZ, currentAccel) - normalization_factor;
      velRingCounter++;
      velRing[velRingCounter % VEL_RING_SIZE] = currentZ;
      float velocityEstimate = SensorFilter.sum(velRing);
      if (velocityEstimate > STEP_THRESHOLD && oldVelocityEstimate <= STEP_THRESHOLD
          && (timeNs - lastStepTimeNs > STEP_DELAY_NS)) {
        listener.step(timeNs);
        lastStepTimeNs = timeNs; }
      oldVelocityEstimate = velocityEstimate;    }}
```

35)<u>TimeLogActivity</u>

```
package com.example.healthongo;
import android.app.Dialog;
import android.app.DialogFragment;
import android.content.Context;
import android.view.MenuItem;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.ListView;
import android.widget.NumberPicker;
import android.widget.TextView;
import android.widget.TimePicker;
import java.text.SimpleDateFormat;
import java.util.Calendar;
import java.util.List;
import java.util.Locale;
public class TimeLogActivity extends AppCompatActivity implements View.OnClickListener,
NumberPicker.OnValueChangeListener , TimePickerFragment.OnTimePickedListener {
    private List<TimeLog> values;
    private ArrayAdapter<TimeLog> adapter;
    private ListView listView;
    private DrinkDataSource db;
    TextView waterLog, dateTv;
    NumberPicker numberPicker,updateNumberPicker;
    Dialog addDrinkdialog, updateDrinkDialog,
numberpickerDialog,updateNumberPickerDialog;
    Button otherSize, cancel, glassButton, bottleButton,
setButton,setButtonInUpdateDialog,updateToOtherSize, cancelUpdateDialog,
glassButtonInUpdateDialog, bottleButtonInUpdateDialog;
    TimePicker timePicker;
    private int glassSize;
    private int bottleSize;
    private String containerTyp=null;
    private int removedValue=0;
    private int ID=0;
    private int pickerValue;
    private String sortBy;
    private int amountToInsert=0;
    private String date;
    private boolean soundEnable;
    private MediaPlayer mediaPlayer;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        getSupportActionBar().setDisplayHomeAsUpEnabled(true);
        getSupportActionBar().setDisplayShowHomeEnabled(true);
        setContentView(R.layout.time_log_activity);
        Bundle bundle = getIntent().getExtras();
        date = bundle.get(Commands.DateLogItem).toString();
        setTitle(date);
        db = new DrinkDataSource(this);
        db.open();
        values = db.getAllTimeLogs( db.sortByTimeDesc(),date);
        listView = (ListView) findViewById(R.id.time_log_list);
        adapter = new myListAdapter(this);
        adapter.notifyDataSetChanged();
        listView.setAdapter(adapter);
        mediaPlayer= MediaPlayer.create(this, R.raw.splash_water);
       addDrinkdialog = new Dialog(this);
        updateDrinkDialog = new Dialog(this);
        numberpickerDialog = new Dialog(this);
        updateNumberPickerDialog = new Dialog(this);
        initializeViews();
        loadContainerSizePrefs();
        loadSoundsPrefs();
    }
    private void loadSoundsPrefs() {
        SharedPreferences prefs =
PreferenceManager.getDefaultSharedPreferences(getApplicationContext());
        soundEnable = prefs.getBoolean(PreferenceKey.PREF_SOUND, false);
    }
    private void loadContainerSizePrefs() {
        SharedPreferences prefs =
PreferenceManager.getDefaultSharedPreferences(getApplicationContext());
        String glassSizeV=  prefs.getString(PreferenceKey.PREF_GLASS_SIZE,"250");
        String bottleSizeV=  prefs.getString(PreferenceKey.PREF_BOTTLE_SIZE, "1500");
        glassSize = Integer.valueOf(glassSizeV);
        bottleSize = Integer.valueOf(bottleSizeV);
        glassButton.setText(glassSizeV+ " ml");
        bottleButton.setText(bottleSizeV+ " ml");
        glassButtonInUpdateDialog.setText(glassSizeV+ " ml");
        bottleButtonInUpdateDialog.setText(bottleSizeV+ " ml");  }
    @Override
    public boolean onSupportNavigateUp() {
        onBackPressed();
        return true;    }
    private void setNumberPickerFormat() {
        NumberPicker.Formatter formatter = new NumberPicker.Formatter() {
            @Override
            public String format(int value) {
                value = value * 5;
                return value + " ml";           }       };
        numberPicker.setMaxValue(300);
        numberPicker.setMinValue(0);
        numberPicker.setWrapSelectorWheel(false);
        numberPicker.setOnValueChangedListener(this); }
    private void setNumberPickerFormatInUpdateDialog() {
        NumberPicker.Formatter formatter = new NumberPicker.Formatter() {
            @Override
            public String format(int value) {
                value = value * 5;
                return value + " ml";           }       };
        updateNumberPicker.setMaxValue(300);
        updateNumberPicker.setMinValue(1);
        updateNumberPicker.setWrapSelectorWheel(false);
        updateNumberPicker.setOnValueChangedListener(this);    }
    @Override
    public void onValueChange(NumberPicker picker, int oldVal, int newVal) {
        pickerValue=picker.getValue()*5;    }
    @Override
    public void onClick(View view) {
        int id = view.getId();
        switch (id) {
            case R.id.water_bottle_button:
                addBottle();
                break;
            case R.id.water_bottle_button2:
                updateToBottle();
                break;
            case R.id.water_glass_button:
                addGlass();
                break;
            case R.id.water_glass_button2:
                updateToGlass();
                break;
            case R.id.cancel_button:
                addDrinkdialog.dismiss();
                break;
            case R.id.cancel_button2:
                updateDrinkDialog.dismiss();
                break;
            case R.id.other_size_button:
                addDrinkdialog.dismiss();
                showNumberPickerDialog();
                break;
            case R.id.other_size_button2:
                updateDrinkDialog.dismiss();
                showNumberPickerDialogToUpdate();
                break;
            case R.id.set_button:
                addFromNumberPiker();
                break;
            case R.id.set_button2:
                updateFromNumberPiker();
                break;    }    }
    private void  addFromNumberPiker() {
        amountToInsert=pickerValue;
        containerTyp="other";
        numberpickerDialog.dismiss();
        showTimePickerDialog();    }
    private void addGlass(){
        amountToInsert=glassSize;
        containerTyp="glass";
        addDrinkdialog.dismiss();
        showTimePickerDialog();    }
    private void addBottle() {
        amountToInsert=bottleSize;
        containerTyp="bottle";
        addDrinkdialog.dismiss();
        showTimePickerDialog();    }
    private void  updateFromNumberPiker() {
        db.updateConsumedWaterInDateLog( - removedValue,date);
        db.updateTimeLog(ID,pickerValue,"other");
        db.updateConsumedWaterInDateLog(pickerValue,date);
        playSound();
        updateNumberPickerDialog.dismiss();
        updateViews();
    }
    private void updateToGlass(){
        db.updateConsumedWaterInDateLog(-removedValue,date);
        db.updateTimeLog(ID,glassSize,"glass");
        db.updateConsumedWaterInDateLog( glassSize,date);
        playSound();
        updateDrinkDialog.dismiss();
        updateViews();    }
    private void updateToBottle() {
        int v=  db.updateConsumedWaterInDateLog(- removedValue,date);
        db.updateTimeLog(ID,bottleSize,"bottle");
        db.updateConsumedWaterInDateLog( bottleSize,date);
        playSound();
        updateDrinkDialog.dismiss();
        updateViews();    }
    private void showAddDrinkDialog() {
        addDrinkdialog.setTitle("Select container");
        addDrinkdialog.show();    }
    private void showUpdateDrinkDialog() {
        updateDrinkDialog.setTitle("Select container");
        updateDrinkDialog.show();    }
    private void showNumberPickerDialog() {
        numberpickerDialog.setTitle("select size");
        numberpickerDialog.show();    }
    private void showNumberPickerDialogToUpdate() {
        updateNumberPickerDialog.setTitle("select size");
        updateNumberPickerDialog.show();    }
    public void showTimePickerDialog() {
        Integer hour =  0;
        Integer minute = 0;
        Integer layoutId=R.layout.time_picker_dialog;
        Bundle bundle = new Bundle();
        bundle.putInt("layoutId", layoutId);
        bundle.putInt("hour", hour);
        bundle.putInt("minute", minute);
        DialogFragment fragment = new TimePickerFragment();
        fragment.setArguments(bundle);
        fragment.show(getFragmentManager(), Integer.toString(layoutId));
    }
    @Override
    public void onTimePicked(int textId, int hour, int minute) {
        Calendar calendar = Calendar.getInstance();
        calendar.setTimeInMillis(System.currentTimeMillis());
        calendar.set(Calendar.HOUR_OF_DAY, hour);
        calendar.set(Calendar.MINUTE, minute);
        SimpleDateFormat dateFormat = new SimpleDateFormat("HH:mm aa",
    Locale.getDefault());
        Calendar now = Calendar.getInstance();
        if(date.equals(DateHandler.getCurrentFormedDate())&&calendar.after(now)){
          AlertDialog alertDialog = new AlertDialog.Builder(TimeLogActivity.this).create();
          alertDialog.setTitle("Error!");
          alertDialog.setMessage("This chosen time is after the current time, please chose a
    valid time!");
          alertDialog.setButton(AlertDialog.BUTTON_NEUTRAL, "OK",
              new DialogInterface.OnClickListener() {
                public void onClick(DialogInterface dialog, int which) {
                  dialog.dismiss();
                }          });
          alertDialog.show();     }
        else {
          String addedTime = dateFormat.format(calendar.getTime());
          db.createTimeLog(amountToInsert,containerTyp, date, addedTime);
          db.updateConsumedWaterInDateLog( amountToInsert, date);
          playSound();
          updateViews();
          amountToInsert = 0;     }   }
    private class myListAdapter extends ArrayAdapter<TimeLog> {
     public myListAdapter(Context context) {
          super(context, R.layout.time_log_raw, values);     }
        public View getView(final int position, View convertView, ViewGroup parent) {
         View itemView = convertView;
          if (itemView == null) {
            itemView = getLayoutInflater().inflate(
                R.layout.time_log_raw, parent, false);          }
          dateTv = (TextView) itemView.findViewById(R.id.time);
          dateTv.setText(values.get(position).getTime());
          ImageView typ = (ImageView) itemView.findViewById(R.id.containerTyp);
          if(values.get(position).getContainerTyp().equals("glass"))
            typ.setImageDrawable(getResources().getDrawable(R.drawable.water_glass,null));
          if (values.get(position).getContainerTyp().equals("bottle"))
           typ.setImageDrawable(getResources().getDrawable(R.drawable.water_bottle,null));
          if (values.get(position).getContainerTyp().equals("other"))
       typ.setImageDrawable(getResources().getDrawable(R.drawable.icon_water_drop,null));
    waterLog = (TextView) itemView
              .findViewById(R.id.amount);
          waterLog.setText(values.get(position).getAmount() + " ml");
          itemView.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
              AlertDialog.Builder builder = new AlertDialog.Builder(TimeLogActivity.this);
              builder.setMessage("Select action");
              builder.setPositiveButton("Update", new DialogInterface.OnClickListener() {
                @Override
                public void onClick(DialogInterface dialog, int which) {
                  removedValue=  values.get(position).getAmount();
                  ID= (int) values.get(position).getID();
                  showUpdateDrinkDialog();
                }               });
              builder.setNegativeButton("Delete", new DialogInterface.OnClickListener() {
                @Override
                public void onClick(DialogInterface dialog, int which) {
```

```
       TimeLog time = values.get(position);
       int removedAmount= - time.getAmount();
       db.updateConsumedWaterInDateLog(removedAmount,date);
       db.deleteTimeLog(time);
       updateViews();
      }   });
     AlertDialog alert = builder.create();
     alert.show();
    } });
   return itemView;     }  }
 @Override
 public boolean onCreateOptionsMenu(Menu menu) {
  getMenuInflater().inflate(R.menu.menu_time_log, menu);
  return true;   }
@Override
 public boolean onOptionsItemSelected(MenuItem item) {
  switch (item.getItemId()) {
   case R.id.add_drink:
    showAddDrinkDialog();
    return true;
   case R.id.sort_by_amount_asc:
    sortBy= db.sortByAmountAsc();
    break;
   case R.id.sort_by_amount_desc:
    sortBy=  db.sortByAmountDesc();
    break;
   case R.id.sort_by_time_ASC:
    sortBy=   db.sortByTimeAsc();
    break;
   case R.id.sort_by_time_desc:
    sortBy=   db.sortByTimeDesc();
    break;      }
```

```
        reloadAdapter();
        return super.onOptionsItemSelected(item);    }
    private void reloadAdapter() {
        adapter.clear();
        adapter.addAll(db.getAllTimeLogs(sortBy,date));
        listView.setAdapter(adapter);
    }
    private void updateViews(){
        int preValue = db.getConsumedPercentage();
        Water.circleProgress.setProgress(preValue);
   Water.choosenAmountTv.setText(String.valueOf(db.geConsumedWaterForToadyDateLog()
               +" out of "+ PrefsHelper.getWaterNeedPrefs(getApplicationContext()))+" ml");
        adapter.clear();
        adapter.addAll(db.getAllTimeLogs(db.sortByTimeDesc(),date));
        listView.setAdapter(adapter);
        DateLogActivity.reloadAdapter();    }
    private void initializeViews() {
        addDrinkdialog.setContentView(R.layout.add_drink_dialog);
        updateDrinkDialog.setContentView(R.layout.update_drink_dialog);
        numberpickerDialog.setContentView(R.layout.number_picker_dialog);
        numberPicker = (NumberPicker)
numberpickerDialog.findViewById(R.id.numberPicker2);
        updateNumberPickerDialog.setContentView(R.layout.number_picker_dialog_update);
        updateNumberPicker = (NumberPicker)
updateNumberPickerDialog.findViewById(R.id.numberPicker);
        timePicker = (TimePicker) findViewById(R.id.timePicker);
        setButton = (Button) numberpickerDialog.findViewById(R.id.set_button);
        setButtonInUpdateDialog = (Button)
updateNumberPickerDialog.findViewById(R.id.set_button2);
        otherSize = (Button) addDrinkdialog.findViewById(R.id.other_size_button);
        cancel = (Button) addDrinkdialog.findViewById(R.id.cancel_button);
        bottleButton = (Button) addDrinkdialog.findViewById(R.id.water_bottle_button);
        glassButton = (Button) addDrinkdialog.findViewById(R.id.water_glass_button);
        updateToOtherSize = (Button)
updateDrinkDialog.findViewById(R.id.other_size_button2);
        cancelUpdateDialog = (Button) updateDrinkDialog.findViewById(R.id.cancel_button2);
        bottleButtonInUpdateDialog = (Button)
updateDrinkDialog.findViewById(R.id.water_bottle_button2);
        glassButtonInUpdateDialog = (Button)
updateDrinkDialog.findViewById(R.id.water_glass_button2);
        bottleButton.setOnClickListener(this);
        glassButton.setOnClickListener(this);
        cancel.setOnClickListener(this);
        setButton.setOnClickListener(this);
        setButtonInUpdateDialog.setOnClickListener(this);
        otherSize.setOnClickListener(this);
        bottleButtonInUpdateDialog.setOnClickListener(this);
        glassButtonInUpdateDialog.setOnClickListener(this);
        cancelUpdateDialog.setOnClickListener(this);
        updateToOtherSize.setOnClickListener(this);
    }
    private void playSound() {
        if (soundEnable)
          mediaPlayer.start();    }}
```

36)<u>TimePickerFragment</u>

```
package com.example.healthongo;
import android.app.Activity;
import android.app.Dialog;
import android.app.DialogFragment;
import android.app.TimePickerDialog;
import android.os.Bundle;
import android.text.format.DateFormat;
import android.widget.TimePicker;
```

```
public class TimePickerFragment extends DialogFragment implements
TimePickerDialog.OnTimeSetListener{
   OnTimePickedListener mCallback;
   Integer mLayoutId = null;
   public interface OnTimePickedListener {
      public void onTimePicked(int textId, int hour, int minute);    }
@Override
   public void onAttach(Activity activity) {
      super.onAttach(activity);
      try {
         mCallback = (OnTimePickedListener)activity;
      } catch (ClassCastException e) {
         throw new ClassCastException(activity.toString() + " must implement
OnTimePickedListener.");       }    }
@Override
   public Dialog onCreateDialog(Bundle savedInstanceState) {
      mCallback = (OnTimePickedListener)getActivity();
      Bundle bundle = this.getArguments();
      mLayoutId = bundle.getInt("layoutId");
      int hour = bundle.getInt("hour");
      int minute = bundle.getInt("minute");
      return new TimePickerDialog(getActivity(), this, hour, minute,
DateFormat.is24HourFormat(getActivity()));
   }
   public void onTimeSet(TimePicker view, int hour, int minute) {
      if(mCallback != null)
      {
         mCallback.onTimePicked(mLayoutId, hour, minute);
      }   }}
```

37)Water

```
package com.example.healthongo;
import androidx.appcompat.app.AppCompatActivity;
import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import android.content.IntentFilter;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;
public class Water extends AppCompatActivity   implements View.OnClickListener {
  private ImageButton logButton, chartButton, settingButton,outlinesButton;
  private Button addDrinkButton;
  private LinearLayout mainLayout;
  public static DonutProgress circleProgress;
  public static TextView choosenAmountTv;
  private DrinkDataSource db;
  private BroadcastReceiver updateUIReciver;
  private Context context ;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_water);
    db= new DrinkDataSource(this);
    db.open();
    context=getApplicationContext();
    checkAppFirstTimeRun();
    AlarmHelper.setDBAlarm(context);
    mainLayout= (LinearLayout) findViewById(R.id.main_view);
    circleProgress = (DonutProgress) findViewById(R.id.donut_progress);
    initializeViews();
    updateView();
    registerUIBroadcastReceiver();    }
private void checkAppFirstTimeRun() {
    if (PrefsHelper.getFirstTimeRunPrefs(context)) {
        db.createDateLog(0,PrefsHelper.getWaterNeedPrefs(context),
                DateHandler.getCurrentDate());
        //   AlarmHelper.setDBAlarm(context);
        startActivityForResult(new Intent(getBaseContext(), SettingsActivity.class),0);
        PrefsHelper.setFirstTimeRunPrefs(context,false);
    }   }
@Override
protected void onDestroy(){
    unregisterReceiver(updateUIReciver);
    super.onDestroy();    }
@Override
protected void onActivityResult(int requestCode, int resultCode, Intent result) {
    switch (requestCode) {
        case 0:
            db.updateWaterNeedForTodayDateLog(PrefsHelper.getWaterNeedPrefs(context));
            updateView();
            loadNotificationsPrefs();
            break;       }    }
private void loadNotificationsPrefs() {
    boolean isEnable= PrefsHelper.getNotificationsPrefs(context);
    if (isEnable)
    {
        AlarmHelper.setNotificationsAlarm(context);
        AlarmHelper.setCancelNotificationAlarm(context);
    }
    else
```

```
        {
            AlarmHelper.stopNotificationsAlarm(context);
        }   }
    public void onClick(View v) {
        int id = v.getId();
        switch (id){
            case R.id.log_button:
                goToLogActivity();
                break;
            case R.id.chart_button:
                goTolChartActivity();
                break;
            case R.id.outlines_button:
                goToOutlineActivity();
                break;
            case R.id.setting_button:
                goToSettingActivity();
                break;
            case R.id.add_drink_button:
                showAddDialog();
                break;       }   }
    private void  updateView(){
        int perValue= db.getConsumedPercentage();
        circleProgress.setProgress(perValue);
        choosenAmountTv.setText(String.valueOf(db.geConsumedWaterForToadyDateLog()+"
out of "+
                PrefsHelper.getWaterNeedPrefs(getApplicationContext())+" ml"));   }
    private void showAddDialog() {
        AddDialog a = new AddDialog(this, db);
        a.show();   }
    private void goToSettingActivity() {
        startActivityForResult(new Intent(this, SettingsActivity.class),0);   }
```

```
 private void goToOutlineActivity() {
    Intent intent2 = new Intent(getApplicationContext(), OutlineActivity.class);
    startActivity(intent2);    }
 private void goTolChartActivity() {
    Intent intent3 = new Intent(getApplicationContext(), ChartActivity.class);
    startActivity(intent3);    }
 private void goToLogActivity() {
    Intent intent4 = new Intent(getApplicationContext(), DateLogActivity.class);
    startActivity(intent4);    }
public void  initializeViews(){
    logButton =(ImageButton)findViewById(R.id.log_button);
    chartButton =(ImageButton)findViewById(R.id.chart_button);
    settingButton =(ImageButton)findViewById(R.id.setting_button);
    outlinesButton =(ImageButton)findViewById(R.id.outlines_button);
    choosenAmountTv=(TextView) findViewById(R.id.choosen_drink_text);
    addDrinkButton = (Button) findViewById(R.id.add_drink_button);
    logButton.setOnClickListener(this);
    chartButton.setOnClickListener(this);
    settingButton.setOnClickListener(this);
    outlinesButton.setOnClickListener(this);
    addDrinkButton.setOnClickListener(this);    }
 private void registerUIBroadcastReceiver() {
    IntentFilter filter = new IntentFilter();
    filter.addAction("com.update.view.action");
    updateUIReciver = new BroadcastReceiver() {
        @Override
        public void onReceive(Context context, Intent intent) {
            updateView();          }       };
    registerReceiver(updateUIReciver,filter);    }}
```

4.1 DATA DICTIONARY

TIME TABLE

SR NO	Column name	Datatype	Size	Constraint
1	ID	Primary key		Int
2	WaterNeed			Int
3	Waterdrunk			Int
4	DATE			DATETIME

DATE TABLE

SR NO	Column name	Datatype	Size	Constraint
1	ID	Primary key		Int
2	ContainerTy	varchar	20	
3	WaterdrunkOnce			Int
4	DATE			DATETIME
5	Time			DATETIME

USER TABLE FOR CALORIE COUNTER

SR NO	Column name	Datatype	Size	Constraint
1	Gender	varchar		Int
2	name	Varchar	20	
3	age			Int
4	weight			Int
5	height			Int
6	stars			Int
7	result	varchar		
8	calories			DATETIME
9	dates			Int
10	daiy			Int
11	tempo			Int

4.2 PROGRAMMING DESCRIPTION

SR.NO	Form Name	Description
1.	Main2Activity	This page allows user to get to login and register page
2.	Login	User can login using email address and password
3.	Register	User have to login using email ,password name and mobile no
4	BMI	User can calculate using Height and weight
5.	Data_classes	This class takes input from users for calorie counter for their food consumed and store in it database.
6	NotificationReceiver	Gives notification to drink water.
7	Footstep	Calculates footstep by implementing stepListenerInterface.
8	TimeLogActivity	Displays time log of the time when the water was dranked.
9	Chart	Displays the chart of the amount and time of water consumed.
10.	Dialog	Dialog shows dialog boxes for on completing the tack , on selection of amount of water.
11.	TimepickerFragment	For choosing time.
12.	Feedback	For sending feedback by the user.

4.3 NAMING CONVENTIONS

1.	BarChart	dayBarChart weekBarChart mothBarChart yearBarChart
2.	List<TimeLog>	dayValues weekValues monthValues yearValues;
3.	DrinkDataSource	Db

4	Context	context;
5	DrawerLayout	Drawerlayout;
6	ActionBarDrawerToggle	nToggle;
7	FragmentTransaction	fragmentTransaction
8	NavigationView	navigationView
9	MediaPlayer	mediaPlayer;
	TextView	bmi, calorie , footstep , water ,suggestion signup , forgot;
10	Button	log,register, btnLogIn, otherSize, cancel, glassButton, bottleButton, setButton,setButtonInUpdateDialog,updateToOtherSize, cancelUpdateDialog, glassButtonInUpdateDialog, bottleButtonInUpdateDialog
11	private EditText	loginEmailId, logInpasswd, inputEmail, inputPassword,inputName,inputPassword2,mobile
12	CheckBox	showPass;

13	EditText;
	FirebaseAuth auth;	

14	Dialog	addDrinkdialog, updateDrinkDialog, numberpickerDialog,updateNumberPickerDialog;
15	ArrayAdapter<TimeLog>	adapter;

4.4 VALIDATIONS

Sr.no	**Controls**	**Name**
1	Required	Email,password,mobile,name,height, weight,age required field
2	Verification	Done on basis of email and password
3.	Range	Height should be between 4.8 to 6.4 Weight should be between 30 to 130 Age should be between 1 to 100

PROGRAM

LISTING

4.5 COST ESTIMATION

COCOMO Model

Cocomo (Constructive Cost Model) is a regression model based on LOC, i.e **number of Lines of Code**. It is a procedural cost estimate model for software projects and often used as a process of reliably predicting the various parameters associated with making a project such as size, effort, cost, time and quality. It was proposed by Barry Boehm in 1970 and is based on the study of 63 projects, which make it one of the best-documented models.

The key parameters which define the quality of any software products, which are also an outcome of the Cocomo are primarily Effort & Schedule:

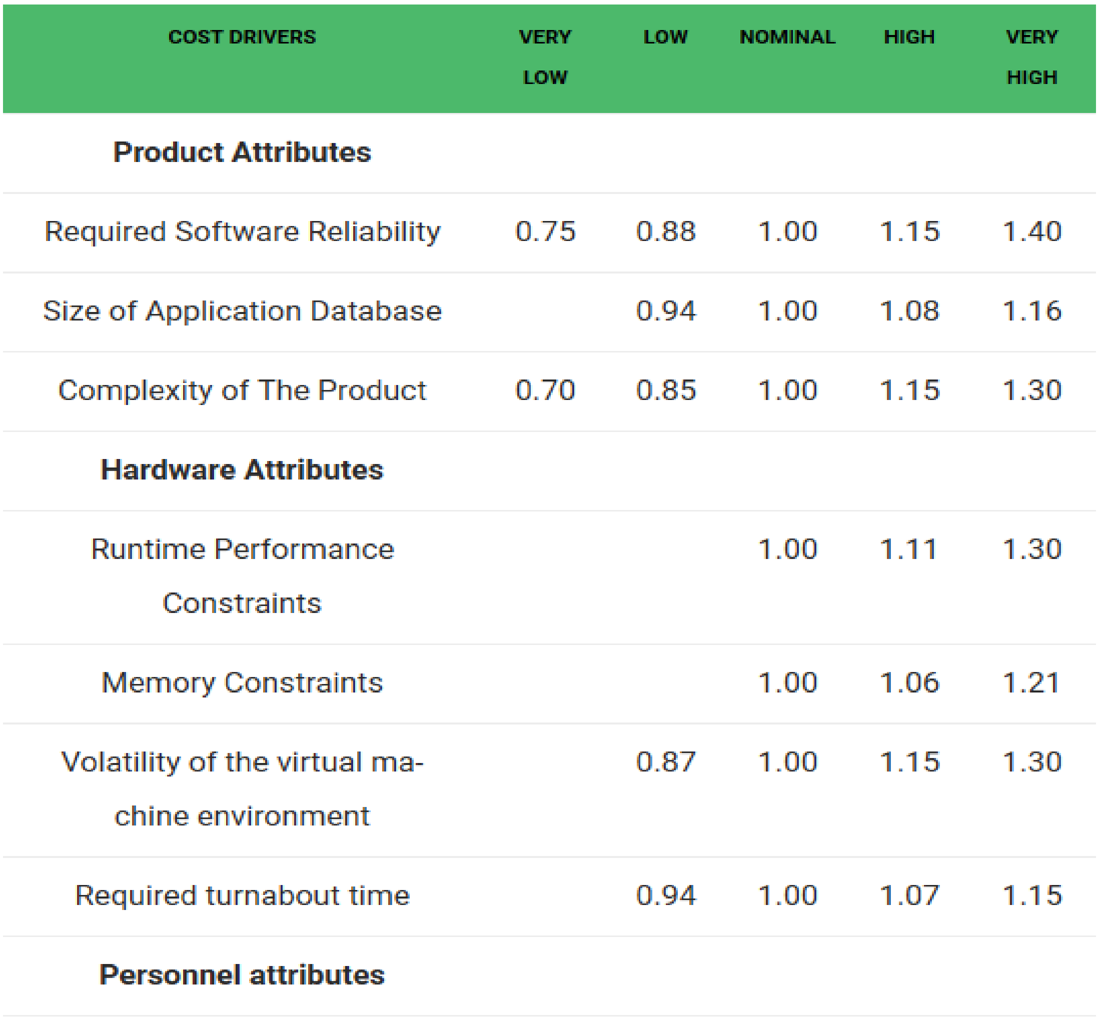
- **Effort:** Amount of labor that will be required to complete a task. It is measured in person-months units.
- **Schedule:** Simply means the amount of time required for the completion of the job, which is, of course, proportional to the effort put. It is measured in the units of time such as weeks, months.

Different models of Cocomo have been proposed to predict the cost estimation at different levels, based on the amount of accuracy and correctness required. All of these models can be applied to a variety of projects, whose characteristics determine the value of constant to be used in subsequent calculations. These characteristics pertaining to different system types are mentioned below.

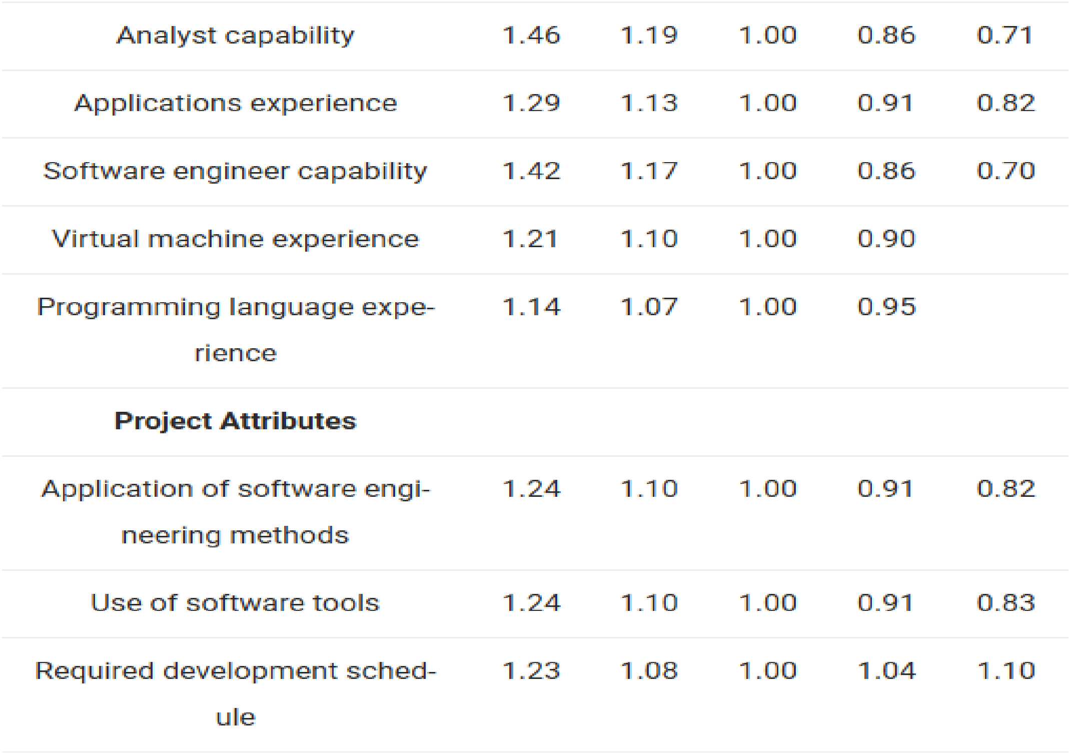
Boehm's definition of organic, semidetached, and embedded systems:

1. **Organic –** A software project is said to be an organic type if the team size required is adequately small, the problem is well understood and has been solved in the past and also the team members have a nominal experience regarding the problem.
2. **Semi-detached –** A software project is said to be a Semi-detached type if the vital characteristics such as team-size, experience, knowledge of the various programming environment lie in between that of organic and Embedded. The projects classified as Semi-Detached are comparatively less familiar and difficult to develop compared to the organic ones and require more experience and better guidance and creativity. Eg: Compilers or different Embedded Systems can be considered of Semi-Detached type.

3. **Embedded** – A software project with requiring the highest level of complexity, creativity, and experience requirement fall under this category. Such software requires a larger team size than the other two models and also the developers need to be sufficiently experienced and creative to develop such complex models.



COST DRIVERS	VERY LOW	LOW	NOMINAL	HIGH	VERY HIGH
Product Attributes					
Required Software Reliability	0.75	0.88	1.00	1.15	1.40
Size of Application Database		0.94	1.00	1.08	1.16
Complexity of The Product	0.70	0.85	1.00	1.15	1.30
Hardware Attributes					
Runtime Performance Constraints			1.00	1.11	1.30
Memory Constraints			1.00	1.06	1.21
Volatility of the virtual machine environment		0.87	1.00	1.15	1.30
Required turnabout time		0.94	1.00	1.07	1.15
Personnel attributes					



Analyst capability	1.46	1.19	1.00	0.86	0.71
Applications experience	1.29	1.13	1.00	0.91	0.82
Software engineer capability	1.42	1.17	1.00	0.86	0.70
Virtual machine experience	1.21	1.10	1.00	0.90	
Programming language experience	1.14	1.07	1.00	0.95	
Project Attributes					
Application of software engineering methods	1.24	1.10	1.00	0.91	0.82
Use of software tools	1.24	1.10	1.00	0.91	0.83
Required development schedule	1.23	1.08	1.00	1.04	1.10

Calculations:

	a	B	c	D
Organic	2.4	1.05	2.5	0.38
Semi-Detached	3.0	1.12	2.5	0.35
Embedded	3.6	1.20	2.5	0.35

Formulae:

Effort = a(KLOC)^{b} person-month

Development = c(KLOC)^{d} months

Average Staff Cycle = Effort/Development persons

Productivity = (KLOC/Effort) * 1000 no. of lines of code

No. of lines of code = 5708 = 5.708KLOC

- Organic

  Effort = 2.4 * (5.078)$^{1.05}$ = 14.94 person-month

Development = 2.5 * $(5.078)^{0.38}$ = 4.5 months

Average Staff Cycle = 3.1125 persons

Productivity = (5.708/ 14.94) * 1000 =382 no. of lines of code

- Semi- Detached

  Effort = 3.0 * $(5.708)^{1.12}$ = 18.68 person-month

  Development = 2.5 * $(5.708)^{0.35}$ =4.599 months

  Average Staff Cycle = 18.68/4.599 =4.061 persons

  Productivity = (5.708/18.68) * 1000 = 305 no. of lines of code

- Embedded

  Effort = 3.6 * $(5.708)^{1.20}$ = 29 person-month

  Development = 2.5 * $(5.708)^{0.35}$ = 4.59 months

  Average Staff Cycle = 29/4.59 = 6.31 persons

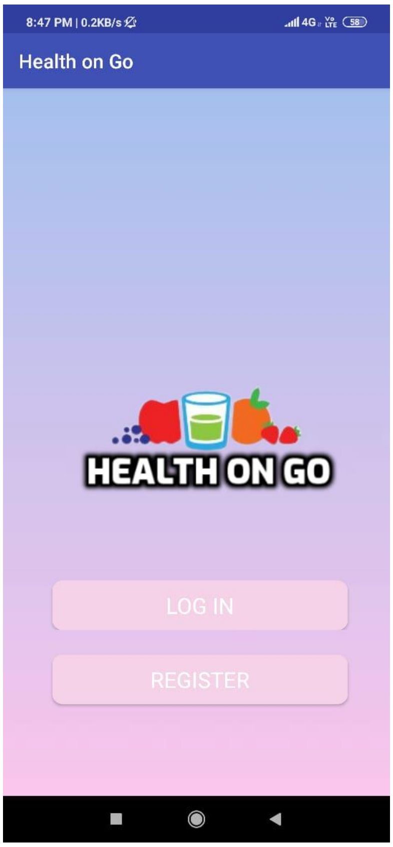
  Productivity = (5.708 / 29) * 1000 = 196no. of lines of code

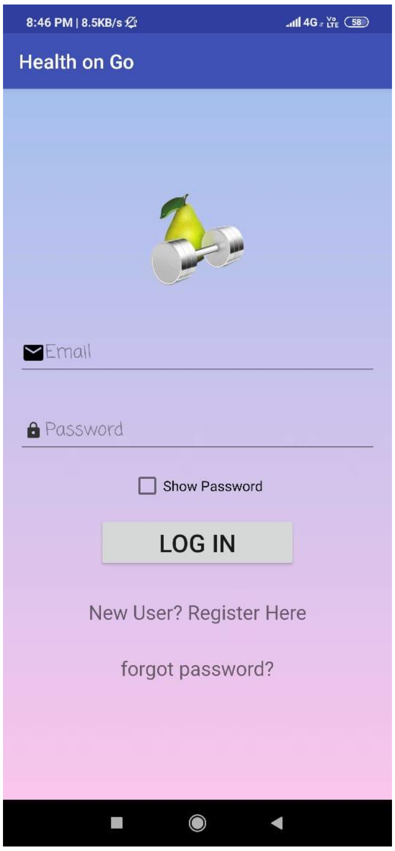
	Organic	**Semi-Detached**	**Embedded**
Effort	14.94 person-month	18.68 person-month	29 person-month
Development	4.5 months	4.599 months	4.59months
Average Staff Cycle	3.1125persons	4.061 persons	6.31 persons
Productivity	382 no. of lines of code	305 no. of lines of code	196 no. of lines of code

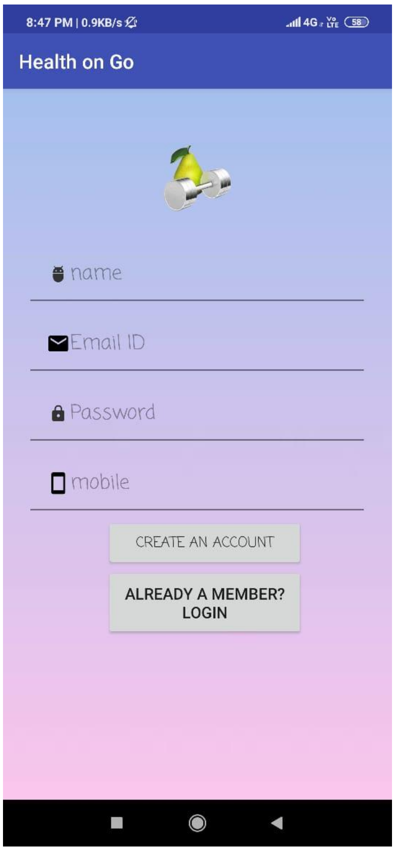
4.6 TEST CASES

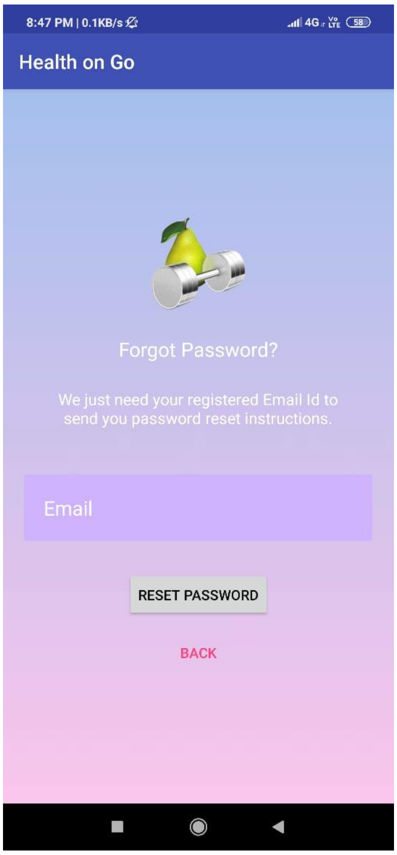
Test Conditions	Input Specified	Expected Result	Actual Result
User SignUp	Name =”” Email =”” Password =”” Mobile =””	Tells the user to signup and register the account	Tells the user to signup and register the account
User Log in	Email = “” Password =””	Tells the user to give proper detail	Tells the user to give proper detail
	Email : abc@gmail.com Password :123456	If details are proper redirect to home page	If details are proper redirect to home page
Forgot Password	Username = “” Password =””	Invalid	Invalid
	Email Id = “” New Password : “”	Sends the email and reset a new password.	Sends the email and reset a new password.
BMI	Height : “” Weight : “”	Tells the user to give proper values	Tells the user to give proper values

4.7 USER MANUAL WITH SCREENSHOTS

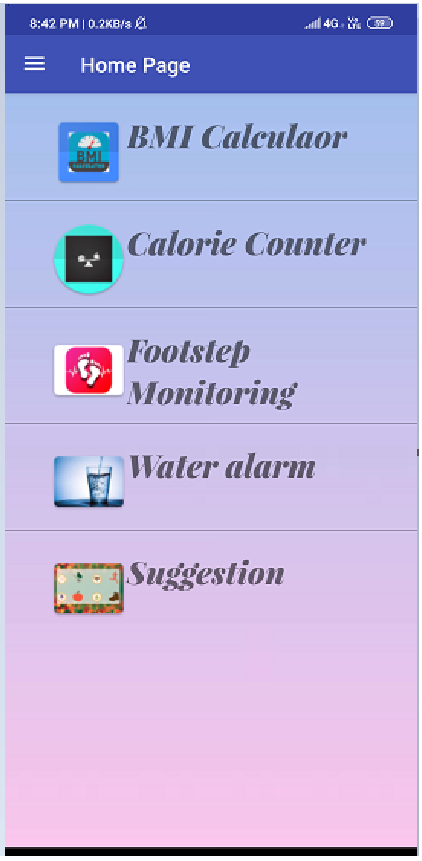


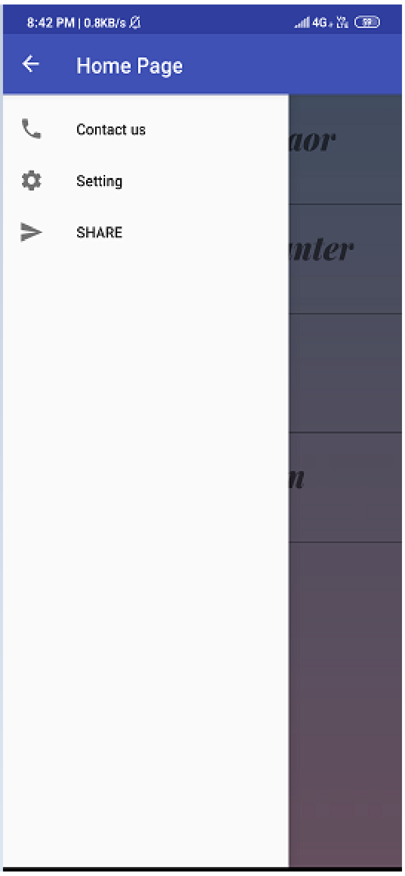


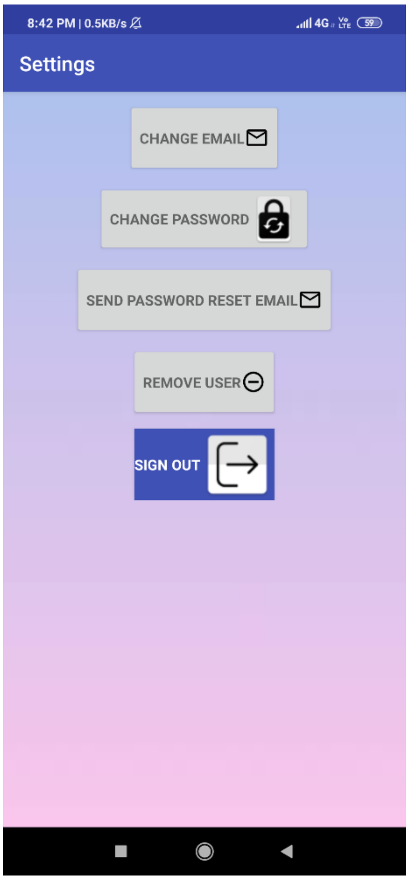




We just need your registered Email Id to send you password reset instructions.







8:42 PM | 0.5KB/s

Settings

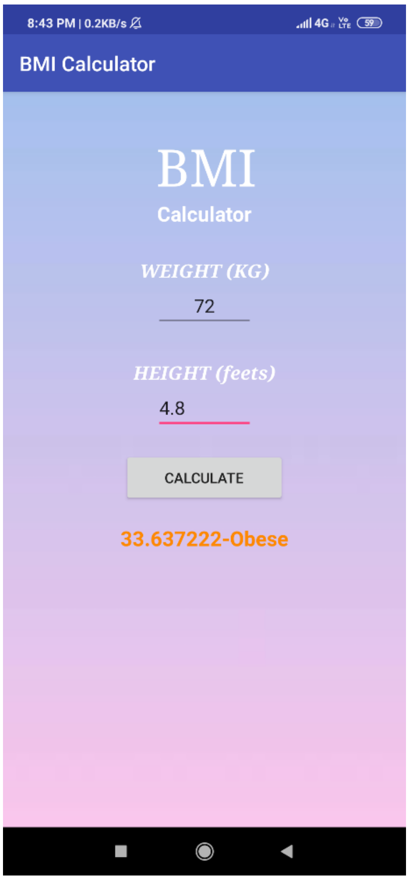
CHANGE EMAIL ✉

CHANGE PASSWORD

SEND PASSWORD RESET EMAIL ✉

REMOVE USER ⊖

SIGN OUT



8:43 PM | 0.2KB/s

BMI Calculator

BMI

Calculator

WEIGHT (KG)

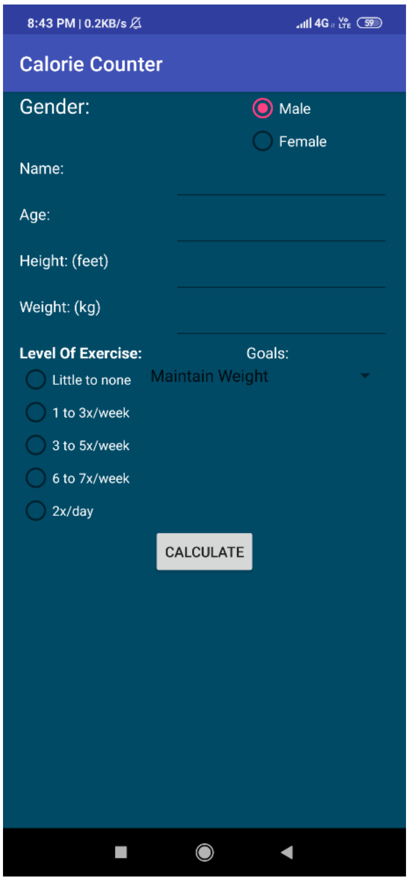
72

HEIGHT (feets)

4.8

CALCULATE

33.637222-Obese



8:43 PM | 0.2KB/s

Calorie Counter

Gender: ● Male ○ Female

Name:

Age:

Height: (feet)

Weight: (kg)

Level Of Exercise: Goals: Maintain Weight

○ Little to none

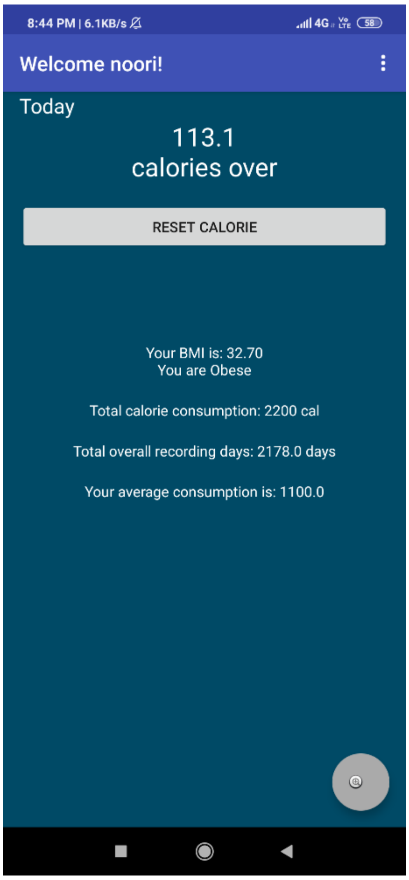
○ 1 to 3x/week

○ 3 to 5x/week

○ 6 to 7x/week

○ 2x/day

CALCULATE



8:44 PM | 6.1KB/s

Welcome noori!

Today

113.1
calories over

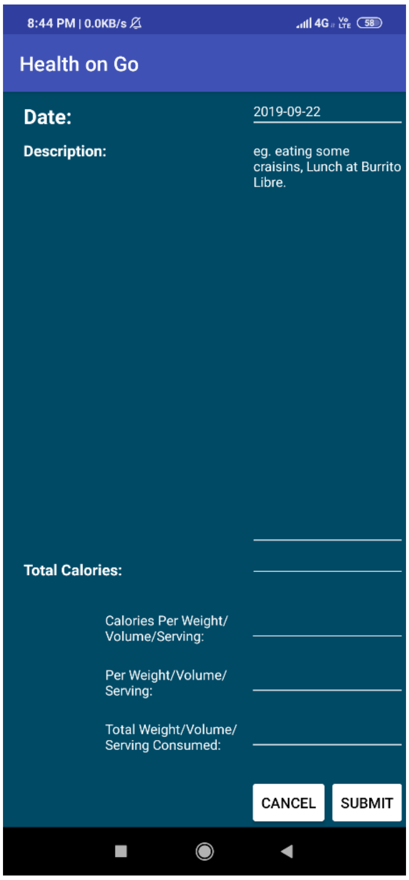
RESET CALORIE

Your BMI is: 32.70
You are Obese

Total calorie consumption: 2200 cal

Total overall recording days: 2178.0 days

Your average consumption is: 1100.0



8:44 PM | 0.0KB/s

Health on Go

Date: 2019-09-22

Description: eg. eating some craisins, Lunch at Burrito Libre.

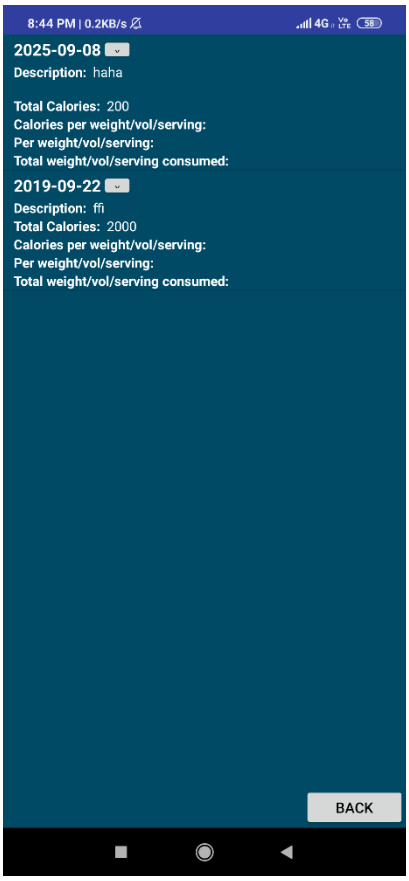
Total Calories:

Calories Per Weight/ Volume/Serving:

Per Weight/Volume/ Serving:

Total Weight/Volume/ Serving Consumed:

CANCEL SUBMIT



8:44 PM | 0.2KB/s

2025-09-08

Description: haha

Total Calories: 200

Calories per weight/vol/serving:

Per weight/vol/serving:

Total weight/vol/serving consumed:

2019-09-22

Description: ffi

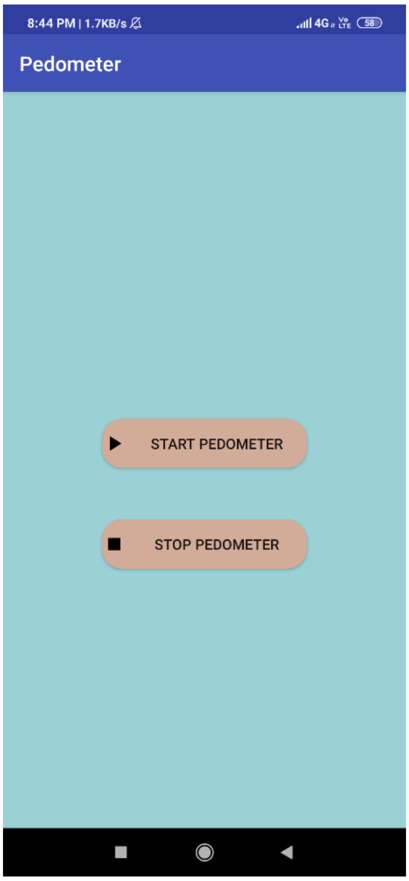
Total Calories: 2000

Calories per weight/vol/serving:

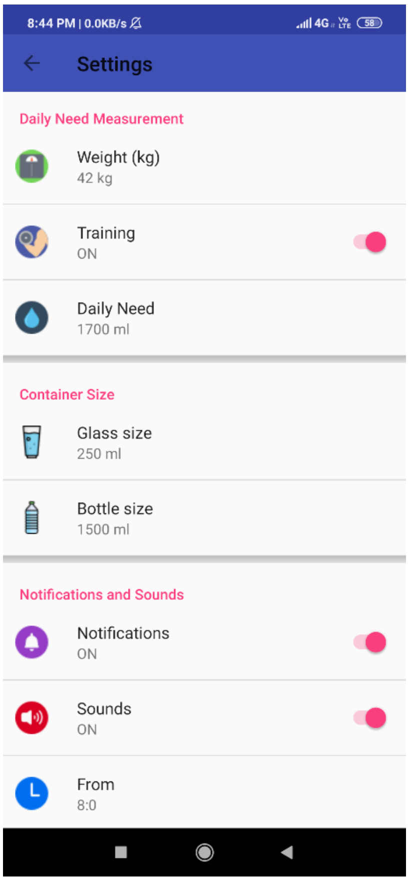
Per weight/vol/serving:

Total weight/vol/serving consumed:

BACK



Pedometer



Settings

Daily Need Measurement

Weight (kg)
42 kg

Training
ON

Daily Need
1700 ml

Container Size

Glass size
250 ml

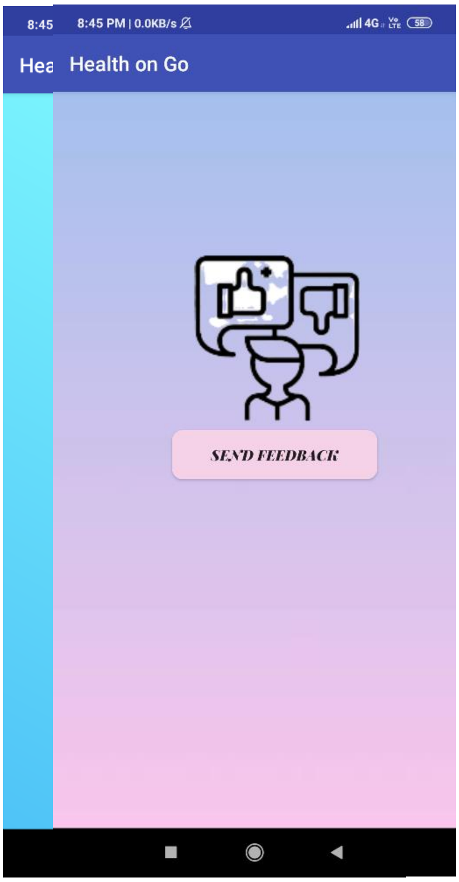
Bottle size
1500 ml

Notifications and Sounds

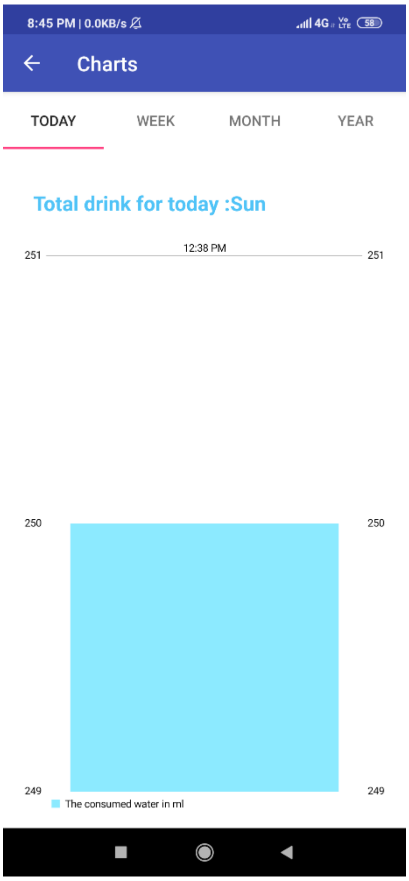
Notifications
ON

Sounds
ON

From
8:0

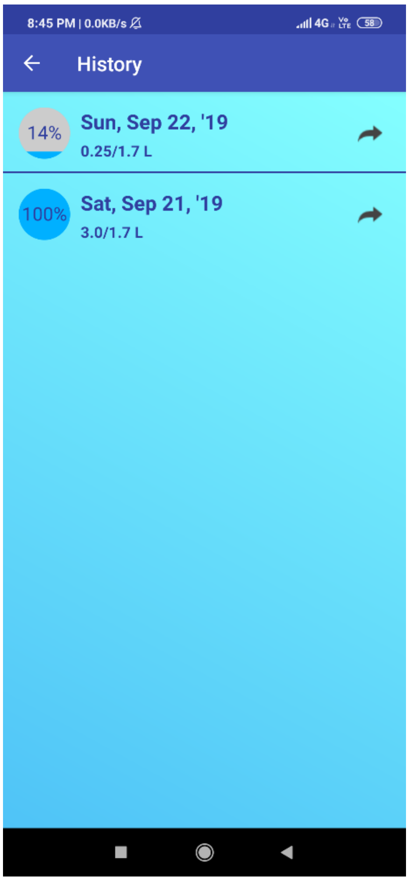


Health on Go



Charts

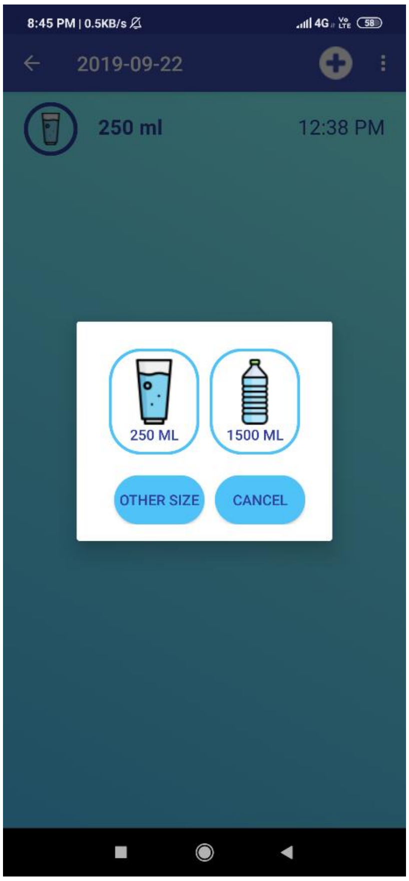
Total drink for today :Sun



History

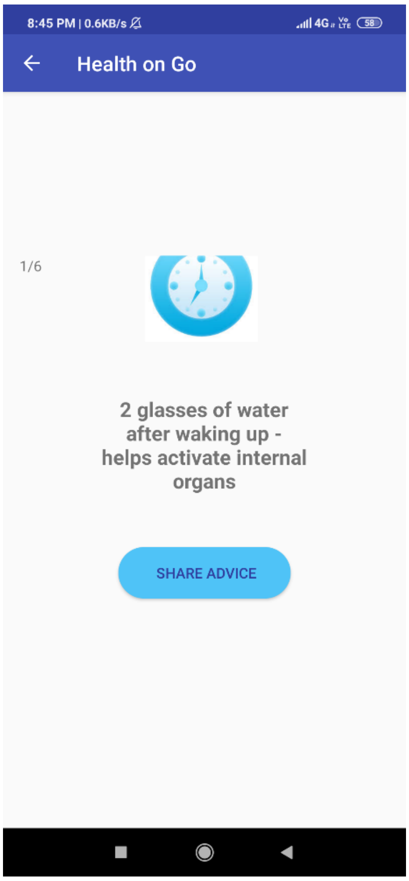
14% Sun, Sep 22, '19
0.25/1.7 L

100% Sat, Sep 21, '19
3.0/1.7 L



2019-09-22

250 ml 12:38 PM



2 glasses of water after waking up - helps activate internal organs

FUTURE ENHANCEMENT

Now a days where people are more concern about their health we want that this application helps them in the eaiest way .

In this application the user has to enter the details of the food items manually to count their calories in future we want to implement that the the user gets the amount of calorie directly from the database.

We would like to make the app more automated so that the it is easier for users and instead of entering data manually user can get data itself.

We would like to make a goal table where user can keep track of their goal and achieve their goal.

Our app focuses on developing health, and keeping track of their health and live a health life.

Bibliography :

https://developer.android.com/training/tv/playback/onboarding

https://stackoverflow.com/questions/28815769/android-studio-creating-landscape-layouts

https://medium.com/google-developers/controlling-data-access-using-firebase-auth-custom-claims-88b3c2c9352a

https://forum.xda-developers.com/tools/android-studio/unable-to-resolve-dependencies-android-t3702670

https://www.google.com/search?q=benefits+of+fitness+app&oq=benefits+of+fitness+app&aqs=chrome.0.0l6.7388j0j7&sourceid=chrome&ie=UTF-8

https://code.tutsplus.com/tutorials/image-upload-to-firebase-in-android-application--cms-29934

https://github.com/j4velin/Pedometer