### INTRODUCTION

#### 1.1 Introduction to Android Application

Android Application is a software designed to run on an Android device or emulator. The term also refers to an APK file which stands for Android package. This file is a Zip archive containing app code, resources, and meta information.

Android applications are organized as a collection of components. There are four types of components, and applications can be composed of one or more of each type. A dynamic instance of a component corresponds to an application subset that can be executed independently of the others. So, in many ways, an Android application can be thought of as a collection of interacting components.

#### 1.2 Introduction to Android Studio

Android Studio is the official Integrated Development Environment (IDE) for Android app development, based on IntelliJ IDEA. On top of IntelliJ's powerful code editor and developer tools, Android Studio offers even more features that enhance your productivity when building Android apps, such as:

- Powerful code editor with smart editing and code re-factoring.
- Emulator to show your code output in various resolutions, including Nexus 4, Nexus 7, Nexus 10, and many other android phones.
- Gradle based build support.
- Maven Support.
- Template-based wizards.
- Dracula Theme Environment to enjoy your coding experience
- Lint tools to catch performance, usability, version compatibility, and other problems.
- C++ and NDK support.
- Built-in support for Google Cloud Platform, making it easy to integrate Google Cloud Messaging and App Engine.

### 1.3 Mini Project Description

This project is about managing workout routines designed to keep you fit and healthy. The aim of these apps is to make your lifestyle healthier by tracking your workout pattern. The application includes a set of exercises which is to be carried out for a particular duration. A timer keeps track of time for which the user performs the exercise. It consists of a BMI (Body Mass Index) calculator which takes both weight and height of the user and determines the amount of obesity the user possess. This mobile application displays the animations of exercises for user's convenience to carry out the exercise.

# REQUIREMENT SPECIFICATION

## 2.1 Hardware Requirements

• Processor: Minimum 1 GHz, or faster processor

• RAM: 2GB(recommend)

## 2.2 **Software Requirements**

• Operating System: Windows 10, Version 1909, OS Build 18363.719

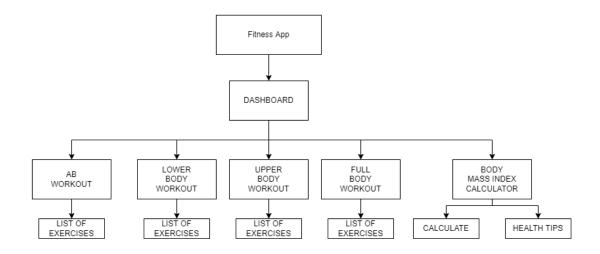
• Tool/IDE (with version) used: Android Studio 4.2.2

• Emulator Used: Android device.

• Language used: Java and XML

### **DESIGN**

### 3.1 Architectural Diagram of the Application



### **Explanation**

Application displays the dashboard to the user, the user is given several workout option based of muscle groups, user can choose particular workout like abs workout, lower body workout, upper body workout, and full body workout.

The dashboard also has an option to calculate users BMI (Body Mass Index), where the user has to enter current height and weight, and it displays if the user is healthy or obese. The BMI calculator section also has a health tips section, which gives some general tips to become healthy and fit.

#### 3.2XML Code

#### activity\_food\_activity.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout width="match parent"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:background="#FFFFFF"
  android:layout_height="match_parent">
  <ScrollView
    android:layout_width="match_parent"
    android:layout height="match parent">
    <LinearLayout
      android:layout_width="match_parent"
      android:layout_height="match_parent"
      android:gravity="center"
      android:orientation="vertical">
      <TextView
         android:id="@+id/textView"
         android:layout width="wrap content"
         android:layout_height="wrap_content"
         android:layout_marginTop="40dp"
         android:layout_marginBottom="0dp"
         android:text="BMI Calculator"
         android:textColor="#4B04CA"
         android:textSize="24sp"
         android:textStyle="bold"
         app:layout_constraintBottom_toTopOf="@id/height"
         app:layout constraintEnd toEndOf="parent"
         app:layout_constraintStart_toStartOf="parent"
         app:layout_constraintTop_toTopOf="parent" />
       <LinearLayout
         android:id="@+id/heightDetails"
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:layout margin="10dp"
         android:orientation="horizontal" >
         <TextView
           android:id="@+id/height"
           android:layout_width="106dp"
           android:layout_height="36dp"
           android:layout_marginStart="30dp"
           android:layout_marginTop="30dp"
           android:text="Height"
           android:textSize="22sp"
           android:textColor="@color/black"
           android:layout marginLeft="200dp"
           app:layout_constraintBottom_toTopOf="@id/weight"
           app:layout_constraintEnd_toStartOf="@id/heightInput"
```

```
app:layout_constraintTop_toBottomOf="@id/textView"/>
  <EditText
    android:id="@+id/heightInput"
    android:layout_width="175dp"
    android:layout height="wrap content"
    android:ems="10"
    android:text=""
    android:hint="in cm"
    android:layout marginStart="30dp"
    android:layout_marginTop="30dp"
    app:layout_constraintBottom_toTopOf="@id/weightInput"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout constraintStart toEndOf="@id/height"
    app:layout_constraintTop_toBottomOf="@id/textView"/>
  </LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:layout_margin="10dp"
  android:orientation="horizontal" >
  <TextView
    android:id="@+id/weight"
    android:layout_width="106dp"
    android:layout_height="36dp"
    android:layout_marginStart="30dp"
    android:layout_marginTop="30dp"
    android:layout_marginBottom="30dp"
    android:text="Weight"
    android:textSize="22sp"
    android:textColor="@color/black"
    app:layout constraintBottom toTopOf="@id/bmiBtn"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/height" />
   <EditText
    android:id="@+id/weightInput"
    android:layout width="175dp"
    android:layout_height="wrap_content"
    android:ems="10"
    android:text=""
    android:hint="in kg"
    android:layout_marginStart="30dp"
    android:layout_marginTop="30dp"
    app:layout constraintBottom toTopOf="@id/bmiBtn"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@id/weight"
    app:layout constraintTop toBottomOf="@id/heightInput"/>
</LinearLayout>
  <Button
    android:id="@+id/bmiBtn"
    android:layout_width="wrap_content"
```

```
android:layout_height="50dp"
    android:textColor="@color/white"
    android:backgroundTint="#6504DD"
    android:text="Compute BMI" />
<LinearLayout
  android:layout width="fill parent"
  android:layout_height="wrap_content"
  android:layout margin="10dp"
  android:orientation="horizontal" >
<TextView
    android:id="@+id/bmi"
    android:layout_width="106dp"
    android:layout height="36dp"
    android:layout_marginStart="40dp"
    android:layout_marginTop="30dp"
    android:layout marginBottom="30dp"
    android:text="Your BMI"
    android:textColor="@color/black"
    android:textSize="20sp"
    app:layout_constraintEnd_toStartOf="@id/bmiOutput"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/bmi"
    tools:layout_editor_absoluteX="13dp"
    tools:layout_editor_absoluteY="355dp" />
<TextView
    android:id="@+id/bmiOutput"
    android:layout_width="106dp"
    android:layout height="36dp"
    android:layout_marginStart="40dp"
    android:layout_marginTop="30dp"
    android:layout marginBottom="30dp"
    android:text=""
    android:hint="in metrics"
    android:textColor="@color/black"
    android:textSize="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@id/bmi"
    app:layout_constraintTop_toBottomOf="@id/bmiBtn"
    tools:layout_editor_absoluteX="13dp"
    tools:layout_editor_absoluteY="355dp" />
</LinearLayout>
<TextView
    android:id="@+id/result"
    android:layout_width="wrap_content"
    android:layout_height="36dp"
    android:layout_marginBottom="30dp"
    android:text="BMI Category"
    android:textColor="@color/black"
    android:textSize="20sp"
    android:textAlignment="center"
    app:layout constraintEnd toStartOf="parent"
    app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toBottomOf="@id/bmi" tools:layout_editor_absoluteX="13dp" tools:layout_editor_absoluteY="355dp" />
<Button
    android:id="@+id/nutriBtn"
    android:layout_width="wrap_content"
    android:layout_height="50dp"
    android:textColor="@color/white"
    android:backgroundTint="#6504DD"
    android:text="Health Tips" />
    </LinearLayout>
</RelativeLayout>
```

#### activity main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  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:background="#22f1eaea"
  android:orientation="vertical"
  tools:context="com.example.fitnessapp.MainActivity">
  <androidx.appcompat.widget.Toolbar
    android:id="@+id/toolBar"
    android:layout_width="match_parent"
    android:layout_height="?attr/actionBarSize"
    android:background="@color/purple_700"
    android:textAlignment="textEnd"
    android:theme="@style/Theme.AppCompat.DayNight.DarkActionBar"
    app:title="Fitness App"
    app:titleTextColor="#FFF"
    android:gravity="end" />
 <ScrollView
   android:layout width="fill parent"
   android:layout_height="fill_parent"
   android:scrollbars="none" >
   <LinearLayout
     android:layout_width="fill_parent"
     android:layout_height="wrap_content"
     android:layout_marginTop="10dp"
     android:orientation="vertical">
     <LinearLayout
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:layout margin="10dp"
        android:layout marginTop="15.0dp"
        android:background="@drawable/backgroundcrop"
```

```
android:orientation="vertical" >
<LinearLayout
  android:onClick="abworkout"
  android:layout width="fill parent"
  android:layout height="150.0dp"
  android:layout_gravity="center"
  android:gravity="center"
  android:orientation="horizontal">
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout weight="1.0"
    android:orientation="vertical">
    <TextView
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:fontFamily="monospace"
       android:padding="5dp"
       android:text="Ab workout"
       android:textColor="#FF000000"
       android:textSize="20dp"
       android:textStyle="bold" />
    <TextView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:fontFamily="serif"
       android:padding="5.0dp"
       android:text=" 21 Days"
       android:textSize="20dp"
       android:textStyle="bold"/>
    <TextView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:padding="5dp"
       android:text="Desgined to increase core strength and reduce belly fat"
       android:textColor="#2D5A56"
       android:textStyle="italic" />
  </LinearLayout>
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout weight="2.>
    <ImageView
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:padding="2dp"
       android:src="@drawable/abs"/>
  </LinearLayout>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```
android:layout_weight="0.0" >
       <ImageView
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:padding="5.0dp"
         android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
    </LinearLayout>
  </LinearLayout>
  <Button
    android:id="@+id/startab"
    android:layout_width="fill_parent"
    android:layout height="wrap content"
    android:background="@drawable/btn"
    android:text="GET STARTED"
    android:textColor="#FFF"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:layout_margin="10dp"
  android:layout_marginTop="15.0dp"
  android:background="@drawable/backgroundcrop"
  android:orientation="vertical" >
  <LinearLayout
    android:onClick="lowerbody"
    android:layout_width="fill_parent"
    android:layout height="150.0dp"
    android:layout_gravity="center"
    android:gravity="center"
    android:orientation="horizontal">
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_weight="1.0"
       android:orientation="vertical">
       <TextView
         android:layout_width="wrap_content"
         android:layout height="wrap content"
         android:fontFamily="monospace"
         android:padding="5dp"
         android:text="Lower Body Workout"
         android:textColor="#FF000000"
         android:textSize="20dp"
         android:textStyle="bold" />
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:fontFamily="serif"
         android:padding="5.0dp"
         android:text=" 15 Days"
         android:textSize="20dp"
```

```
android:textStyle="bold" />
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:padding="5dp"
         android:text="Desgined to strengthen and tone glutes and legs"
         android:textColor="#2D5A56"
         android:textStyle="italic" />
    </LinearLayout>
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout height="wrap content"
       android:layout_weight="2.0">
       <ImageView
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:padding="2dp"
         android:src="@drawable/leg2"/>
    </LinearLayout>
    <LinearLayout
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout_weight="0.0" >
       <ImageView
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:padding="5.0dp"
         android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
    </LinearLayout>
  </LinearLayout>
  <Button
    android:id="@+id/startlower"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:background="@drawable/btn"
    android:text="GET STARTED"
    android:textColor="#FFF"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:layout margin="10dp"
  android:layout_marginTop="15.0dp"
  android:background="@drawable/backgroundcrop"
  android:orientation="vertical" >
  <LinearLayout
    android:onClick="upperbody"
    android:layout_width="fill_parent"
    android:layout height="150.0dp"
    android:layout_gravity="center"
    android:gravity="center"
```

```
android:orientation="horizontal">
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout weight="1.0"
    android:orientation="vertical">
    <TextView
       android:layout width="wrap content"
       android:layout_height="wrap_content"android:fontFamily="monospace"
       android:padding="5dp"
       android:text="Upper Body Workout"
       android:textColor="#FF000000"
       android:textSize="20dp"
       android:textStyle="bold"/>
    <TextView
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:fontFamily="serif"
       android:padding="5.0dp"
       android:text=" 15 Days"
       android:textSize="20dp"
       android:textStyle="bold" />
    <TextView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:padding="5dp"
       android:text="Desgined for toning and strengthening the upper body"
       android:textColor="#2D5A56"
       android:textStyle="italic" />
  </LinearLayout>
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_weight="2.0">
    <ImageView
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:padding="2dp"
       android:src="@drawable/arms2"/>
  </LinearLayout>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:layout_weight="0.0" >
    <ImageView
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:padding="5.0dp"
       android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
  </LinearLayout>
</LinearLayout>
<Button
```

```
android:id="@+id/startupper"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:background="@drawable/btn"
    android:text="GET STARTED"
    android:textColor="#FFF"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:layout_margin="10dp"
  android:layout_marginTop="15.0dp"
  android:background="@drawable/backgroundcrop"
  android:orientation="vertical">
  <LinearLayout
    android:onClick="fullbody"
    android:layout_width="fill_parent"
    android:layout height="150.0dp"
    android:layout_gravity="center"
    android:gravity="center"
    android:orientation="horizontal"
    android:baselineAligned="false">
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_weight="1.0"
       android:orientation="vertical">
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:fontFamily="monospace"
         android:padding="5dp"
         android:text="Full Body Workout"
         android:textColor="#FF000000"
         android:textSize="20dp"
         android:textStyle="bold" />
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:fontFamily="serif"
         android:padding="5.0dp"
         android:text=" 30 Days"
         android:textSize="20dp"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:padding="5dp"
         android:text="Desgined for weight loss and to tone the body"
         android:textColor="#2D5A56"
         android:textStyle="italic" />
    </LinearLayout>
```

```
<LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_weight="2.0">
       <ImageView
         android:layout width="fill parent"
         android:layout_height="wrap_content"
         android:padding="2dp"
         android:src="@drawable/full2"/>
    </LinearLayout>
    <LinearLayout
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:layout_weight="0.0" >
       <ImageView
         android:layout width="fill parent"
         android:layout_height="wrap_content"
         android:padding="5.0dp"
         android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
    </LinearLayout>
  </LinearLayout>
  <Button
    android:id="@+id/startfull"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:background="@drawable/btn"
    android:text="GET STARTED"
    android:textColor="#FFF"/>
</LinearLayout>
<LinearLayout
  android:onClick="food"
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:layout_margin="10dp"
  android:layout_marginTop="15dp"
  android:background="@drawable/backgroundcrop"
  android:orientation="vertical" >
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="150dp"
    android:layout_gravity="center"
    android:gravity="center"
    android:orientation="horizontal" >
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_weight="1.0"
       android:orientation="vertical">
       <TextView
         android:id="@+id/nutrition"
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
```

```
android:fontFamily="monospace"
              android:padding="5.0dp"
              android:text="Body Mass Index Calculator"
              android:textColor="#ff000000"
              android:textSize="20dp"
              android:textStyle="bold" />
            <TextView
              android:layout width="wrap content"
              android:layout_height="wrap_content"
              android:padding="5.0dp"
              android:text="Suggestions"
              android:textStyle="bold"/>
          </LinearLayout>
          <LinearLayout
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:layout_weight="2.0">
            <ImageView
              android:layout_width="fill_parent"
              android:layout_height="wrap_content"
              android:src="@drawable/nutrition"/>
          </LinearLayout>
          <LinearLayout
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="0.0">
            <ImageView
              android:layout width="fill parent"
              android:layout_height="wrap_content"
              android:padding="10.0dp"
              android:src="@drawable/ic baseline keyboard arrow right 24"/>
          </LinearLayout>
       </LinearLayout>
       <Button
          android:id="@+id/checkBmi"
          android:layout_width="fill_parent"
          android:layout_height="wrap_content"
          android:background="@drawable/btn"
          android:text="CHECK BMI"
          android:textColor="#FFF"/>
     </LinearLayout>
   </LinearLayout>
 </ScrollView>
</LinearLayout>
```

### activity\_second.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"</pre>
```

```
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="fill_parent"
android:layout_height="fill_parent"
android:background="#FFF"
android:orientation="vertical"
tools:context=".SecondActivity">
<androidx.appcompat.widget.Toolbar
  android:id="@+id/toolBar"
  android:layout height="?attr/actionBarSize"
  android:layout_width="match_parent"
  android:background="@color/purple_700"
  android:textAlignment="textEnd"
  android:theme="@style/Theme.AppCompat.DayNight.DarkActionBar"
  app:title="Fitness App"
  app:titleTextColor="#FFF" />
<LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="fill_parent"
  android:layout_weight="1.0"
  android:orientation="vertical" >
  <ScrollView
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:layout_weight="1.0"
    android:scrollbars="none">
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout height="fill parent"
       android:orientation="vertical">
       <LinearLayout
         android:layout width="fill parent"
         android:layout_height="100dp"
         android:layout_gravity="center"
         android:gravity="center"
         android:orientation="vertical"
         <LinearLayout
           android:onClick="Imagebuttonclicked"
           android:id="@+id/mountain_pose"
            android:layout width="fill parent"
           android:layout_height="wrap_content"
           android:layout margin="10dp"
           android:orientation="horizontal" >
            <LinearLayout
              android:layout_width="fill_parent"
              android:layout_height="wrap_content"
              android:layout_margin="10dp"
              android:layout_weight="1.0"
              android:orientation="vertical"
              <TextView
                android:layout width="wrap content"
                android:layout_height="wrap_content"
                android:fontFamily="monospace"
```

```
android:text="MOUNTAIN CLIMBER"
         android:textColor="#ff000000"
         android:textSize="15dp"
         android:textStyle="bold"/>
       <TextView
         android:layout width="wrap content"
         android:layout_height="wrap_content"
         android:text="3x30 reps"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="00:30 SEC"
         android:textColor="#790E8C"
         android:textStyle="bold"/>
    </LinearLayout>
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_weight="2.0" >
       <pl><pl.droidsonroids.gif.GifImageView</p>
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:src="@drawable/exersice 1"/>
    </LinearLayout>
    <LinearLayout
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:layout_gravity="center"
       android:gravity="center"
       android:layout weight="0.0" >
       <ImageView
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:layout_margin="5.0dp"
         android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
    </LinearLayout>
  </LinearLayout>
  <TableRow
    android:layout_width="fill_parent"
    android:layout_height="1.0dp"
    android:background="#ffaaa9a9"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="100dp"
  android:layout_gravity="center"
  android:gravity="center"
  android:orientation="vertical" >
  <LinearLayout
    android:onClick="Imagebuttonclicked"
    android:id="@+id/crunch_pose"
```

```
android:layout width="fill parent"
  android:layout_height="wrap_content"
  android:layout_margin="10dp"
  android:orientation="horizontal" >
  <LinearLayout
     android:layout width="fill parent"
     android:layout_height="wrap_content"
     android:layout margin="10dp"
     android:layout weight="1.0"
     android:orientation="vertical" >
     <TextView
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:fontFamily="monospace"
       android:text="CRUNCHES"
       android:textColor="#ff000000"
       android:textSize="15dp"
       android:textStyle="bold"/>
     <TextView
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:text="3x30 reps"
       android:textStyle="bold"/>
     <TextView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:text="00:30 SEC"
       android:textColor="#790E8C"
       android:textStyle="bold"/>
  </LinearLayout>
  <LinearLayout
     android:layout_width="fill_parent"
     android:layout_height="wrap_content"
     android:layout_weight="2.0" >
     <pl><pl.droidsonroids.gif.GifImageView</p>
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:src="@drawable/exersice_2"
  </LinearLayout>
  <LinearLayout
     android:layout_width="wrap_content"
     android:layout_height="wrap_content"
     android:layout gravity="center"
     android:gravity="center"
     android:layout_weight="0.0" >
     <ImageView
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_margin="5.0dp"
       android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
  </LinearLayout>
</LinearLayout>
```

```
<TableRow
    android:layout_width="fill_parent"
    android:layout_height="1.0dp"
    android:background="#ffaaa9a9"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout height="100dp"
  android:layout_gravity="center"
  android:gravity="center"
  android:orientation="vertical" >
  <LinearLayout
    android:onClick="Imagebuttonclicked"
    android:id="@+id/cycle_pose"
    android:layout_width="fill_parent"
    android:layout height="wrap content"
    android:layout_margin="10dp"
    android:orientation="horizontal"
    <LinearLayout
       android:layout_width="fill_parent"
      android:layout_height="wrap_content"
      android:layout_margin="10dp"
       android:layout_weight="1.0"
       android:orientation="vertical"
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:fontFamily="monospace"
         android:text="BYCYCLE CRUNCHES"
         android:textColor="#ff000000"
         android:textSize="15dp"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="3x30 reps"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="00:30 SEC"
         android:textColor="#790E8C"
         android:textStyle="bold"/>
    </LinearLayout>
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_weight="2.0" >
       <pl><pl.droidsonroids.gif.GifImageView</p>
         android:layout width="fill parent"
         android:layout_height="wrap_content"
         android:src="@drawable/exersice_4"
```

```
</LinearLayout>
        <LinearLayout
           android:layout_width="wrap_content"
           android:layout_height="wrap_content"
           android:layout_gravity="center"
           android:gravity="center"
           android:layout_weight="0.0" >
           <ImageView
             android:layout_width="fill_parent"
             android:layout_height="wrap_content"
             android:layout_margin="5.0dp"
             android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
        </LinearLayout>
      </LinearLayout>
      <TableRow
        android:layout width="fill parent"
        android:layout_height="1.0dp"
        android:background="#ffaaa9a9"/>
</LinearLayout>
   <LinearLayout
      android:layout_width="fill_parent"
      android:layout_height="100dp"
      android:layout_gravity="center"
      android:gravity="center"
      android:orientation="vertical" >
      <LinearLayout
        android:onClick="Imagebuttonclicked"
        android:id="@+id/leg pose"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:layout margin="10dp"
        android:orientation="horizontal"
        <LinearLayout
           android:layout_width="fill_parent"
           android:layout_height="wrap_content"
           android:layout_margin="10dp"
           android:layout_weight="1.0"
           android:orientation="vertical" >
           <TextView
             android:layout_width="wrap_content"
             android:layout_height="wrap_content"
             android:fontFamily="monospace"
             android:text="DOUBLE LEG RAISES"
             android:textColor="#ff000000"
             android:textSize="15dp"
             android:textStyle="bold"/>
           <TextView
             android:layout_width="wrap_content"
             android:layout_height="wrap_content"
             android:text="3x30 reps"
             android:textStyle="bold"/>
           <TextView
```

```
android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="00:30 SEC"
         android:textColor="#790E8C"
         android:textStyle="bold"/>
    </LinearLayout>
    <LinearLayout
       android:layout width="fill parent"
       android:layout_height="wrap_content"
       android:layout_weight="2.0" >
       <pl><pl.droidsonroids.gif.GifImageView</p>
         android:layout_width="fill_parent"
         android:layout height="wrap content"
         android:src="@drawable/exersice_5"
    </LinearLayout>
    <LinearLayout
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout_gravity="center"
       android:gravity="center"
       android:layout_weight="0.0"
       <ImageView
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:layout_margin="5.0dp"
         android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
    </LinearLayout>
  </LinearLayout>
  <TableRow
    android:layout_width="fill_parent"
    android:layout height="1.0dp"
    android:background="#ffaaa9a9"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout height="100dp"
  android:layout_gravity="center"
  android:gravity="center"
  android:orientation="vertical" >
  <LinearLayout
    android:onClick="Imagebuttonclicked"
    android:id="@+id/heel_pose"
    android:layout width="fill parent"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:orientation="horizontal" >
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout margin="10dp"
       android:layout weight="1.0"
       android:orientation="vertical" >
```

```
<TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:fontFamily="monospace"
         android:text="ALTERNATE HEEL TOUCHES"
         android:textColor="#ff000000"
         android:textSize="15dp"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="3x30 reps"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="00:30 SEC"
         android:textColor="#790E8C"
         android:textStyle="bold"/>
     </LinearLayout>
     <LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_weight="2.0" >
       <pl><pl.droidsonroids.gif.GifImageView</p>
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:src="@drawable/exersice 6" />
     </LinearLayout>
     <LinearLayout
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:layout_gravity="center"
       android:gravity="center"
       android:layout_weight="0.0"
       <ImageView
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:layout margin="5.0dp"
         android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
     </LinearLayout>
  </LinearLayout>
  <TableRow
     android:layout_width="fill_parent"
     android:layout_height="1.0dp"
     android:background="#ffaaa9a9"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout height="100dp"
  android:layout_gravity="center"
  android:gravity="center"
```

```
android:orientation="vertical" >
<LinearLayout
  android:onClick="Imagebuttonclicked"
  android:id="@+id/ek_pose"
  android:layout width="fill parent"
  android:layout height="wrap content"
  android:layout_margin="10dp"
  android:orientation="horizontal" >
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:layout weight="1.0"
    android:orientation="vertical" >
    <TextView
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:fontFamily="monospace"
       android:text="ELBOW-KNEE CRUNCH"
       android:textColor="#ff000000"
       android:textSize="15dp"
       android:textStyle="bold"/>
    <TextView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:text="3x30 reps"
       android:textStyle="bold"/>
    <TextView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:text="00:30 SEC"
       android:textColor="#790E8C"
       android:textStyle="bold"/>
  </LinearLayout>
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_weight="2.0"
    <pl><pl.droidsonroids.gif.GifImageView</p>
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:src="@drawable/exersice_7"
  </LinearLayout>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:gravity="center"
    android:layout_weight="0.0"
    <ImageView
       android:layout width="fill parent"
       android:layout_height="wrap_content"
```

```
android:layout_margin="5.0dp"
           android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
      </LinearLayout>
    </LinearLayout>
   <TableRow
      android:layout_width="fill_parent"
      android:layout_height="1.0dp"
      android:background="#ffaaa9a9"/>
</LinearLayout>
 <LinearLayout
   android:layout_width="fill_parent"
   android:layout_height="100dp"
   android:layout gravity="center"
   android:gravity="center"
   android:orientation="vertical"
    <LinearLayout
      android:onClick="Imagebuttonclicked"
      android:id="@+id/situp pose"
      android:layout_width="fill_parent"
      android:layout_height="wrap_content"
      android:layout_margin="10dp"
      android:orientation="horizontal"
      <LinearLayout
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:layout_margin="10dp"
        android:layout_weight="1.0"
        android:orientation="vertical"
        <TextView
           android:layout width="wrap content"
           android:layout height="wrap content"
           android:fontFamily="monospace"
           android:text="CRUNCH SIT-UPS"
           android:textColor="#ff000000"
           android:textSize="15dp"
           android:textStyle="bold"/>
        <TextView
           android:layout_width="wrap_content"
           android:layout height="wrap content"
           android:text="3x30 reps"
           android:textStyle="bold"/>
        <TextView
           android:layout width="wrap content"
           android:layout_height="wrap_content"
           android:text="00:30 SEC"
           android:textColor="#790E8C"
           android:textStyle="bold"/>
      </LinearLayout>
      <LinearLayout
        android:layout width="fill parent"
        android:layout_height="wrap_content"
        android:layout_weight="2.0"
```

```
<pl><pl.droidsonroids.gif.GifImageView</p>
          android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:src="@drawable/exersice_8"
                                                  />
     </LinearLayout>
     <LinearLayout
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:layout_gravity="center"
       android:gravity="center"
       android:layout_weight="0.0"
       <ImageView
          android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:layout_margin="5.0dp"
          android:src="@drawable/ic baseline keyboard arrow right 24"/>
     </LinearLayout>
  </LinearLayout>
  <TableRow
     android:layout_width="fill_parent"
     android:layout_height="1.0dp"
     android:background="#ffaaa9a9"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="100dp"
  android:layout_gravity="center"
  android:gravity="center"
  android:orientation="vertical"
  <LinearLayout
     android:onClick="Imagebuttonclicked"
     android:id="@+id/scissor_pose"
     android:layout_width="fill_parent"
     android:layout_height="wrap_content"
     android:layout_margin="10dp"
     android:orientation="horizontal"
     <LinearLayout
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:layout_margin="10dp"
       android:layout weight="1.0"
       android:orientation="vertical"
       <TextView
          android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:fontFamily="monospace"
          android:text="ALTERNATE SCISSORS"
          android:textColor="#ff000000"
          android:textSize="15dp"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
         android:text="3x30 reps"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout height="wrap content"
         android:text="00:30 SEC"
         android:textColor="#790E8C"
         android:textStyle="bold"/>
    </LinearLayout>
    <LinearLayout
       android:layout_width="fill_parent"
       android:layout height="wrap content"
       android:layout weight="2.0" >
       <pl><pl.droidsonroids.gif.GifImageView</p>
         android:layout width="fill parent"
         android:layout_height="wrap_content"
         android:src="@drawable/exersice 9"
    </LinearLayout>
    <LinearLayout
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout_gravity="center"
       android:gravity="center"
       android:layout_weight="0.0"
       <ImageView
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:layout_margin="5.0dp"
         android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
    </LinearLayout>
  </LinearLayout>
  <TableRow
    android:layout_width="fill_parent"
    android:layout_height="1.0dp"
    android:background="#ffaaa9a9"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="100dp"
  android:layout_gravity="center"
  android:gravity="center"
  android:orientation="vertical" >
  <LinearLayout
    android:onClick="Imagebuttonclicked"
    android:id="@+id/legraise_pose"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:orientation="horizontal"
    <LinearLavout
       android:layout_width="fill_parent"
```

```
android:layout_height="wrap_content"
             android:layout_margin="10dp"
             android:layout_weight="1.0"
             android:orientation="vertical"
             <TextView
               android:layout width="wrap content"
               android:layout_height="wrap_content"
               android:fontFamily="monospace"
               android:text="PLANK ALTERNATE LEG RAISE"
               android:textColor="#ff000000"
               android:textSize="15dp"
               android:textStyle="bold"/>
             <TextView
               android:layout_width="wrap_content"
               android:layout_height="wrap_content"
               android:text="3x30 reps"
               android:textStyle="bold"/>
             <TextView
               android:layout_width="wrap_content"
               android:layout_height="wrap_content"
               android:text="00:30 SEC"
               android:textColor="#790E8C"
               android:textStyle="bold"/>
          </LinearLayout>
          <LinearLayout
             android:layout_width="fill_parent"
             android:layout_height="wrap_content"
             android:layout_weight="2.0" >
             <pl><pl.droidsonroids.gif.GifImageView</p>
               android:layout width="fill parent"
               android:layout height="wrap content"
               android:src="@drawable/exersice_11"
                                                      />
          </LinearLayout>
           <LinearLayout
             android:layout_width="wrap_content"
             android:layout_height="wrap_content"
             android:layout_gravity="center"
             android:gravity="center"
             android:layout weight="0.0"
             <ImageView
               android:layout width="fill parent"
               android:layout_height="wrap_content"
               android:layout margin="5.0dp"
               android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
           </LinearLayout>
        </LinearLayout>
        <TableRow
          android:layout_width="fill_parent"
          android:layout_height="1.0dp"
          android:background="#ffaaa9a9"/>
</LinearLayout>
      <LinearLayout
                                           18CSMP68
```

```
android:layout_width="fill_parent"
android:layout_height="100dp"
android:layout_gravity="center"
android:gravity="center"
android:orientation="vertical" >
<LinearLayout
  android:onClick="Imagebuttonclicked"
  android:id="@+id/twist pose"
  android:layout width="fill parent"
  android:layout_height="wrap_content"
  android:layout_margin="10dp"
  android:orientation="horizontal"
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout margin="10dp"
    android:layout_weight="1.0"
    android:orientation="vertical"
    <TextView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:fontFamily="monospace"
       android:text="RUSSIAN TWISTS"
       android:textColor="#ff000000"
       android:textSize="15dp"
       android:textStyle="bold"/>
     <TextView
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:text="3x30 reps"
       android:textStyle="bold"/>
     <TextView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:text="00:30 SEC"
       android:textColor="#790E8C"
       android:textStyle="bold"/>
  </LinearLayout>
  <LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_weight="2.0" >
    <pl><pl.droidsonroids.gif.GifImageView</p>
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:src="@drawable/exersice_12"/>
  </LinearLayout>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:layout_gravity="center"
    android:gravity="center"
```

```
android:layout weight="0.0" >
       <ImageView
         android:layout_width="fill_parent"
         android:layout_height="wrap_content"
         android:layout margin="5.0dp"
         android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
     </LinearLayout>
  </LinearLayout>
  <TableRow
    android:layout_width="fill_parent"
    android:layout_height="1.0dp"
    android:background="#ffaaa9a9"/>
</LinearLayout>
<LinearLayout
  android:layout_width="fill_parent"
  android:layout height="100dp"
  android:layout_gravity="center"
  android:gravity="center"
  android:orientation="vertical"
  <LinearLayout
    android:onClick="Imagebuttonclicked"
    android:id="@+id/toe_pose"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:orientation="horizontal"
    <LinearLayout
       android:layout width="fill parent"
       android:layout_height="wrap_content"
       android:layout_margin="10dp"
       android:layout weight="1.0"
       android:orientation="vertical"
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:fontFamily="monospace"
         android:text="RAISED TOE TOUCHES"
         android:textColor="#ff000000"
         android:textSize="15dp"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout height="wrap content"
         android:text="3x30 reps"
         android:textStyle="bold"/>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="00:30 SEC"
         android:textColor="#790E8C"
         android:textStyle="bold"/>
    </LinearLayout>
```

```
<LinearLayout
                android:layout_width="fill_parent"
                android:layout_height="wrap_content"
                android:layout_weight="2.0"
                <pl><pl.droidsonroids.gif.GifImageView</p>
                  android:layout width="fill parent"
                  android:layout_height="wrap_content"
                  android:src="@drawable/exersice 14"
                                                            />
              </LinearLayout>
              <LinearLayout
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout gravity="center"
                android:gravity="center"
                android:layout_weight="0.0"
                <ImageView
                  android:layout_width="fill_parent"
                  android:layout_height="wrap_content"
                  android:layout_margin="5.0dp"
                  android:src="@drawable/ic_baseline_keyboard_arrow_right_24"/>
              </LinearLayout>
           </LinearLayout>
           <TableRow
              android:layout_width="fill_parent"
              android:layout_height="1.0dp"
              android:background="#ffaaa9a9"/>
         </LinearLayout>
      </LinearLayout>
    </ScrollView>
  </LinearLayout>
</LinearLayout>
```

### activity\_splashscreen.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  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/splash"
  tools:context=".Splashscreen"
  <ImageView
    android:id="@+id/appsplash"
    android:layout_width="135dp"
    android:layout_height="135dp"
    android:src="@drawable/logo6"
    android:layout alignParentTop="true"
    android:layout_alignParentStart="true"
    android:layout_alignParentEnd="true"
```

```
android:layout alignParentBottom="true"
    android:layout_marginStart="100dp"
    android:layout_marginEnd="100dp"
    android:layout_marginTop="200dp"
    android:layout_alignParentRight="true"
    android:layout alignParentLeft="true" />
  <TextView
    android:id="@+id/appname"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_centerHorizontal="true"
    android:layout marginBottom="50dp"
    android:fontFamily="sans-serif-thin"
    android:text="Fitness App"
    android:textColor="#FFF"
    android:textSize="35sp"
    android:textStyle="bold"
    tools:fontFamily="sans-serif-light" />
</RelativeLayout>
```

#### activity\_squat.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout width="match parent"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  android:background="#DCAABB"
  android:layout height="match parent">
  <ScrollView
    android:layout_width="match_parent"
    android:layout_height="match_parent>
    <LinearLayout
      android:layout_width="match_parent"
      android:layout_height="match_parent"
      android:orientation="vertical">
      <pl><pl.droidsonroids.gif.GifImageView</p>
         android:layout_marginTop="10dp"
         android:layout_width="fill_parent"
         android:layout_height="200dp"
         android:src="@drawable/exercise 17"/>
       <Button
         android:layout_marginTop="35dp"
         android:id="@+id/time"
         android:layout_width="170dp"
         android:layout_height="170dp"
         android:layout_marginLeft="105dp"
         android:text="00:30"
         android:textSize="28sp"
         android:padding="15dp"
```

```
android:background="@drawable/buttonbg"/>
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/startbutton"
    android:layout gravity="center"
    android:gravity="center"
    android:layout marginTop="20dp"
    android:background="@drawable/btnstartbg"
    android:text="START"
    android:textStyle="bold"
    android:textSize="25sp"
    android:layout marginRight="08dp"
    android:textColor="@color/white"/>
  <TextView
    android:layout width="305dp"
    android:layout_height="wrap_content"
    android:layout marginStart="25dp"
    android:textAlignment="center"
    android:layout_marginLeft="35dp"
    android:layout_marginTop="50dp"
    android:text="Steps to do the Exercise:"
    android:textColor="#686060"
    android:textSize="25sp"
    android:padding="7dp"
    android:textStyle="bold"
    android:background="@drawable/btnoutline"/>
  <androidx.cardview.widget.CardView
    android:layout_width="match_parent"
    android:layout height="match parent"
    app:cardCornerRadius="20dp"
    android:background="#ECEDE8"
    android:layout_marginBottom="10dp">
    <LinearLayout
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginStart="5dp"
      android:layout_marginEnd="5dp"
      android:layout marginLeft="5dp"
      android:background="#ECEDE8"
      android:layout_marginTop="25dp"
      android:orientation="horizontal">
       <TextView
         android:layout_width="match_parent"
         android:layout_height="wrap_content"
         android:background="#ffffff"
         android:text="@string/pose17"
         android:textColor="@android:color/black"
         android:textSize="18sp"/>
    </LinearLayout>
  </androidx.cardview.widget.CardView>
</LinearLayout>
```

```
</ScrollView> </RelativeLayout>
```

#### activity staps.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  android:layout_width="match_parent"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  android:background="#DCAABB"
  android:layout_height="match_parent">
  <ScrollView
    android:layout_width="match_parent"
    android:layout height="match parent>
    <LinearLayout
      android:layout_width="match_parent"
      android:layout height="match parent"
      android:orientation="vertical" >
      <pl><pl.droidsonroids.gif.GifImageView</p>
         android:layout_marginTop="10dp"
         android:layout_width="fill_parent"
         android:layout_height="200dp"
         android:src="@drawable/exercise_22"/>
       <Button
         android:layout_marginTop="35dp"
         android:id="@+id/time"
         android:layout_width="170dp"
         android:layout_height="170dp"
         android:layout marginLeft="105dp"
         android:text="00:30"
         android:textSize="28sp"
         android:padding="15dp"
         android:background="@drawable/buttonbg"/>
       <Button
         android:id="@+id/startbutton"
         android:layout width="wrap content"
         android:layout_height="wrap_content"
         android:layout_gravity="center"
         android:layout_marginRight="08dp"
         android:layout_marginTop="20dp"
         android:background="@drawable/btnstartbg"
         android:gravity="center"
         android:text="START"
         android:textColor="@color/white"
         android:textSize="25sp"
         android:textStyle="bold" />
       <TextView
         android:layout width="305dp"
         android:layout height="wrap content"
         android:layout_marginStart="25dp"
```

```
android:textAlignment="center"
         android:layout_marginLeft="35dp"
         android:layout_marginTop="50dp"
         android:text="Steps to do the Exercise:"
         android:textColor="#686060"
         android:textSize="25sp"
         android:padding="7dp"
         android:textStyle="bold"
         android:background="@drawable/btnoutline"/>
       <androidx.cardview.widget.CardView
         android:layout_width="match_parent"
         android:layout height="match parent"
         app:cardCornerRadius="20dp"
         android:background="#ECEDE8"
         android:layout marginBottom="10dp">
         <LinearLayout
           android:layout_width="wrap_content"
           android:layout_height="wrap_content"
           android:layout_marginStart="5dp"
           android:layout_marginEnd="5dp"
           android:layout_marginLeft="5dp"
           android:background="#ECEDE8"
           android:layout_marginTop="25dp"
           android:orientation="horizontal">
           <TextView
             android:layout_width="match_parent"
             android:layout_height="wrap_content"
             android:background="#ffffff"
             android:text="@string/pose22"
             android:textColor="@android:color/black"
             android:textSize="18sp"/>
         </LinearLayout>
      </androidx.cardview.widget.CardView>
    </LinearLayout>
  </ScrollView>
</RelativeLayout>
```

### activity\_third.xml

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

#### nutrition.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
   android:layout width="match parent"
   xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
   android:background="#FFFFFF"
  android:layout height="match parent">
  <ScrollView
    android:layout width="match parent"
    android:layout_height="match_parent">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">
       <TextView
         android:id="@+id/healthTips"
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout marginStart="140dp"
         android:layout_marginTop="40dp"
         android:layout marginBottom="30dp"
         android:text="Health Tips"
         android:textColor="#4B04CA"
         android:textSize="24sp"
         android:textStyle="bold"
         app:layout constraintBottom toTopOf="@id/height"
         app:layout_constraintEnd_toEndOf="parent"
         app:layout_constraintStart_toStartOf="parent"
         app:layout_constraintTop_toTopOf="parent" />
       <TextView
         android:id="@+id/tips"
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout marginStart="10dp"
         android:layout_marginTop="0dp"
         android:layout_marginEnd="10dp"
         android:layout_marginBottom="10dp"
         android:text="@string/tips"
         android:textColor="@color/black"
         android:textSize="20sp"
         app:layout constraintEnd toEndOf="parent"
         app:layout_constraintStart_toStartOf="parent"
         app:layout constraintTop toBottomOf="@id/bmi"
         tools:layout_editor_absoluteX="13dp"
         tools:layout_editor_absoluteY="355dp" />
    </LinearLayout>
  </ScrollView>
</RelativeLayout>
```

### **IMPLEMENTATION**

#### 4.1 List of classes imported and their purpose in the application.

- **AppCompatActivity**: Base class for activities that wish to use some of the newer platform features on older Android devices.
- **Intent**: An intent is an abstract description of an operation to be performed. It can be used to navigate from one activity to another or from a fragment to an activity. Data can also be sent along with the intent.
- **Bundle :** Android Bundles are generally used for passing data from one activity to another. Bundles are used with intent and values are sent and retrieved in the same fashion, as it is done in the case of Intent.
- Handler: A Handler allows you to send and process Message and Runnable objects associated with a thread's MessageQueue. When you create a new Handler it is bound to a Looper. It will deliver messages and runnables to that Looper's message queue and execute them on Looper's thread. Hanlder has been used in the Splash activity to navigate to the main Activity after few seconds.
- **View:** Java Class that inherits directly from the Java Object class, the root of the Java class hierarchy. Views are the basic building block for all Android GUI elements and serve as the base class for all GUI widgets.
- **Button:** A Button class represents a push button widget in Android. The full package path for the button class is android.widgets.Button. Buttons are clicked to perform an action. A button can display text or an icon, or both.
- EditText: EditText is a standard entry widget in android apps. It is an overlay over TextView that configures itself to be editable. EditText is a subclass of TextView with text editing operations
- Log: The Android SDK includes a useful logging utility class called android.util.Log. The class allows you to log messages categorized based severity; each type of logging message has its own message.
- ImageView: This class is used to display any kind of image resource in the android application. ImageView is also used in applying tints to an image in order to reuse a drawable resource and create overlays on background images.

- Animation: This is used for adding a motion effect to any view, image, or text. With the help of an animation, you can add motion or can change the shape of a specific view. Animation in Android is generally used to give your UI a rich look and feel.
- **AnimationUtils**: Defines common utilities for working with animations.
- **CountDownTimer**: This class is used to schedule a countdown until a time in the future defined by the user, with regular notifications on intervals along the way.

### List of important library functions used and their descriptions.

- **findViewById()**: Finds a view that was identified by the id attribute from the XML that was processed in OnCreate(Bundle).
- **getText()**: To get the text entered in the EditText views.
- **toString()**: It's a method in java's Object class, which is the superclass of every java object. It is meant for returning a textual representation of an object.
- **String.valueOf()**: method converts different types of values into string. By the help of string valueOf() method, you can convert int to string, long to string, boolean to string, character to string, float to string, double to string, object to string and char array to string.
- **parseDouble()**: this returns a new double initialized to the value represented by the specified String, as done by the valueOf method of class Double.
- **setText():** This is used to set the current text that is to be read by this StringCharacterIterator. This method takes the text to be set as a parameter and sets the text of this StringCharacterIterator at that text.
- **putExtra()**: Adds extended data to the intent. It has two parameters, first one specifies the name of the extra data and the second parameter is the data itself.
- **setOnClickListener()**: OnClickListener and wires the listener to the button using setOnClickListener. As the result, the system executes the code you write in onClick after the user presses the button.
- **getId()**: returns the android id value.

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- **Log.i()**: this is used to post useful information to the log.
- **setAnimation**: Sets the next animation to play for this view.
- **Integer.valueOf()**: It is used to return an Integer instance.
- **getStringExtra()**: Returns the value of an item previously added with putExtra(), or null if no String value was found.
- **setContentView():** It helps to set our content or render our layout on the screen.
- **getIntent()**: It is used to pass data from an activity to another.
- addFlags(): This helps to add additional flags to a particular intent.

#### 4.2 Java Code with proper comment lines

#### FoodActivity.java

```
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import java.text.DecimalFormat;
public class FoodActivitty extends AppCompatActivity {
  EditText hgt,wgt;
  Button bmiBtn,nutriBtn;
  TextView bmi.result:
  @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_food_activitty);
    hgt = findViewById(R.id.heightInput);
    wgt = findViewById(R.id.weightInput);
    bmiBtn = findViewById(R.id.bmiBtn);
    nutriBtn = findViewById(R.id.nutriBtn);
    bmi = findViewById(R.id.bmiOutput);
    result = findViewById(R.id.result);
    bmiBtn.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         Double height, weight, ans;
         height = Double.parseDouble(hgt.getText().toString());
         weight = Double.parseDouble(wgt.getText().toString());
         //ans = Double.valueOf(Math.round((weight/(height*height))*10000));
         ans = (weight/(height*height))*10000;
         String s = String.format("\%.1f", ans);
         bmi.setText(String.valueOf(s));
         Double res = Double.parseDouble(s);
         if(res <= 18.5)
            result.setText("Underweight");
         else if(res>18.5 && res<=24.9)
            result.setText("Normal Weight");
         else if(res>=25 && res<=29.9)
            result.setText("Overweight");
         else if(res>=30.0)
            result.setText("Obesity");
```

```
});
    nutriBtn.setOnClickListener(new View.OnClickListener() {
     @Override
       public void onClick(View view) {
       Intent intent = new Intent(FoodActivitty.this,Nutrition.class);
       startActivity(intent);
     });
MainActivity.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import android.widget.Toolbar;
public class MainActivity extends AppCompatActivity {
  Button button1, button2, button3,button4,checkBmi;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    androidx.appcompat.widget.Toolbar toolbar = findViewById(R.id.toolBar);
    setSupportActionBar(toolbar);
    button1= findViewById(R.id.startab);
    button2= findViewById(R.id.startlower);
    button3= findViewById(R.id.startupper);
    button4= findViewById(R.id.startfull);
    checkBmi= findViewById(R.id.checkBmi);
    button1.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         Intent intent = new Intent(MainActivity.this,SecondActivity.class);
         startActivity(intent);
     });
    button2.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         Intent intent = new Intent(MainActivity.this,SecondActivity2.class);
         startActivity(intent);
```

```
});
    button3.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         Intent intent = new Intent(MainActivity.this,SecondActivity3.class);
         startActivity(intent);
       }
     });
    button4.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         Intent intent = new Intent(MainActivity.this,SecondActivity4.class);
         startActivity(intent);
     });
    checkBmi.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         Intent intent = new Intent(MainActivity.this,FoodActivitty.class);
         startActivity(intent);
     });
Nutrition.java
package com.example.fitnessapp;
import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
public class Nutrition extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.nutrition);
  }
SecondActivity.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.widget.Toolbar;
import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
public class SecondActivity extends AppCompatActivity {
  int[] newArray;
```

```
@Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_second);
     androidx.appcompat.widget.Toolbar toolbar = findViewById(R.id.toolBar);
     setSupportActionBar(toolbar);
     newArray = new int[]{
         R.id.mountain pose, R.id.crunch pose, R.id.cycle pose, R.id.leg pose,
R.id.heel_pose, R.id.ek_pose, R.id.situp_pose, R.id.scissor_pose, R.id.legraise_pose,
R.id.twist_pose, R.id.toe_pose
    };
  public void Imagebuttonclicked(View view) {
     for (int i = 0; i < newArray.length; i++) {
       if (view.getId() == newArray[i]) {
         int value = i + 1:
         Log.i("FIRST", String.valueOf(value));
         Intent intent = new Intent(SecondActivity.this, ThirdActivity.class);
         intent.putExtra("value", String.valueOf(value));
          startActivity(intent);
       }
     }
   }
SecondActivity2.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
public class SecondActivity2 extends AppCompatActivity {
  int[] newArray;
   @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity second2);
     androidx.appcompat.widget.Toolbar toolbar = findViewById(R.id.toolBar);
     setSupportActionBar(toolbar);
     newArray = new int[]{
         R.id.bridge_pose,
R.id.jsquat_pose,R.id.squat_pose,R.id.lunge_pose,R.id.rlunge_pose,R.id.sts_pose,R.id.ks
quat_pose
    };
  public void Imagebuttonclicked(View view) {
     for (int i = 0; i < \text{newArray.length}; i++) {
       if (view.getId() == newArray[i]) {
```

```
int value = i + 1:
         Log.i("FIRST", String.valueOf(value));
          Intent intent = new Intent(SecondActivity2.this, ThirdActivity2.class);
         intent.putExtra("value", String.valueOf(value));
          startActivity(intent);
       }
     }
   }
}
SecondActivity3.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
public class SecondActivity3 extends AppCompatActivity {
  int[] newArray;
   @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_second3);
     androidx.appcompat.widget.Toolbar toolbar = findViewById(R.id.toolBar);
     setSupportActionBar(toolbar);
     newArray = new int[]{
R.id.dips_pose, R.id.praise_pose, R.id.push_pose, R.id.staps_pose, R.id.ud-
plank_pose,R.id.armc_pose,R.id.arms_pose
     };
  public void Imagebuttonclicked(View view) {
     for (int i = 0; i < newArray.length; i++) {
       if (view.getId() == newArray[i]) {
         int value = i + 1;
         Log.i("FIRST", String.valueOf(value));
         Intent intent = new Intent(SecondActivity3.this, ThirdActivity3.class);
         intent.putExtra("value", String.valueOf(value));
          startActivity(intent);
       }
     }
   }
SecondActivity4.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
```

```
import android.os.Bundle:
import android.util.Log;
import android.view.View;
public class SecondActivity4 extends AppCompatActivity {
  int[] newArray;
   @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_second4);
     androidx.appcompat.widget.Toolbar toolbar = findViewById(R.id.toolBar);
     setSupportActionBar(toolbar);
     newArray = new int[]{
          R.id.mountain pose, R.id. crunch pose, R.id. cy-
cle_pose,R.id.heel_pose,R.id.scis-
sor_pose,R.id.twist_pose,R.id.bridge_pose,R.id.toe_pose,
R.id.squat pose, R.id.lunge pose, R.id.rlunge pose, R.id.staps pose, R.id.ud-
plank pose, R.id. armc pose
                                };
  public void Imagebuttonclicked(View view) {
     for (int i = 0; i < \text{newArray.length}; i++) {
       if (view.getId() == newArray[i]) {
         int value = i + 1;
         Log.i("FIRST", String.valueOf(value));
         Intent intent = new Intent(SecondActivity4.this, ThridActivity4.class);
         intent.putExtra("value", String.valueOf(value));
          startActivity(intent);
     }
   }
Splashscreen.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.media.Image;
import android.os.Bundle;
import android.os.Handler;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.widget.ImageView;
import android.widget.TextView;
public class Splashscreen extends AppCompatActivity {
  Animation up,down;
  ImageView imageView;
  TextView textView:
  @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_splashscreen)
     ImageView imageView= findViewById(R.id.appsplash);
     up = AnimationUtils.loadAnimation(getApplicationContext(),R.anim.up);
     imageView.setAnimation(up)
     TextView textView= findViewById(R.id.appname);
     down = AnimationUtils.loadAnimation(getApplicationContext(),R.anim.down);
     textView.setAnimation(down);
     new Handler().postDelayed(new Runnable() {
       @Override
       public void run() {
         startActivity(new Intent(getApplicationContext(),MainActivity.class));
     },3500);
  }
ThirdActivity.java
package com.example.fitnessapp;
     import androidx.appcompat.app.AppCompatActivity
     import android.content.Intent;
     import android.os.Bundle;
     import android.os.CountDownTimer;
     import android.view.View;
     import android.widget.Button;
     import android.widget.TextView;
public class ThirdActivity extends AppCompatActivity {
  String buttonvalue;
  Button startBtn;
  private CountDownTimer countDownTimer ;
  TextView mtextview;
  private boolean MTimeRunning;
  private long MTimeLeft;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_third2)
     Intent intent = getIntent();
     buttonvalue=intent.getStringExtra("value")
     int intvalue = Integer.valueOf(buttonvalue);
     switch(intvalue){
       case 1:
         setContentView(R.layout.activity_mountain);
         break;
       case 2:
         setContentView(R.layout.activity_crunch);
         break;
```

```
case 3:
       setContentView(R.layout.activity_cycle);
       break;
    case 4:
       setContentView(R.layout.activity_leg);
       break;
    case 5:
       setContentView(R.layout.activity_heel);
       break;
    case 6:
       setContentView(R.layout.activity_ek);
       break;
    case 7:
       setContentView(R.layout.activity_situp);
       break;
    case 8:
       setContentView(R.layout.activity_scissor);
       break;
    case 9:
       setContentView(R.layout.activity_legraise);
       break;
    case 10:
       setContentView(R.layout.activity_twist);
       break;
    case 11:
       setContentView(R.layout.activity_toe);
       break;
  }
  startBtn = findViewById(R.id.startbutton);
  mtextview = findViewById(R.id.time);
  startBtn.setOnClickListener(new View.OnClickListener() {
     @Override
    public void onClick(View v) {
       if (MTimeRunning)
       {
         stoptimer();
       }
       else{
         starttimer()
  });
private void stoptimer()
  countDownTimer.cancel();
  MTimeRunning = false;
  startBtn.setText("START");
```

```
private void starttimer()
  final CharSequence value1 = mtextview.getText();
  String num1 = value1.toString();
  String num2= num1.substring(0,2);
  String num3 = \text{num}1.\text{substring}(3,5);
  final int number = Integer.valueOf(num2) * 30+ Integer.valueOf(num3);
  MTimeLeft = number*1000;
  countDownTimer= new CountDownTimer(MTimeLeft,1000) {
     @Override
    public void onTick(long millisUntilFinished) {
       MTimeLeft = millisUntilFinished;
       updateTimer()
     }
     @Override
    public void onFinish() {
       int newvalue = Integer.valueOf(buttonvalue)+1;
       if(newvalue <= 7) {
         Intent intent = new Intent(ThirdActivity.this, ThirdActivity.class);
         intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK);
         intent.putExtra("value", String.valueOf(newvalue));
         startActivity(intent);
       }
       else{
         newvalue=1;
         Intent intent= new Intent(ThirdActivity.this, ThirdActivity.class);
         intent.addFlags(Intent.FLAG ACTIVITY CLEAR TASK);
         intent.putExtra("value", String.valueOf(newvalue));
         startActivity(intent);
       }
     }
  }.start();
  startBtn.setText("PAUSE");
  MTimeRunning= true;
private void updateTimer(
  int minutes= (int) MTimeLeft/60000;
  int seconds = (int) MTimeLeft%60000 /1000;
  String timeLeftText=" ";
  if( minutes<10)
    timeLeftText="0";
  timeLeftText = timeLeftText + minutes + ":";
  if(seconds <10)
    timeLeftText+="0";
  timeLeftText+= seconds;
  mtextview.setText(timeLeftText);
@Override
public void onBackPressed() {
```

```
super.onBackPressed();
   }
ThirdActivity2.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.os.CountDownTimer;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class ThirdActivity2 extends AppCompatActivity {
  String buttonvalue;
  Button startBtn:
  private CountDownTimer countDownTimer;
  TextView mtextview;
  private boolean MTimeRunning;
  private long MTimeLeft;
   @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_third3)
     Intent intent = getIntent();
     buttonvalue=intent.getStringExtra("value");
     int intvalue = Integer.valueOf(buttonvalue);
     switch(intvalue){
       case 1:
         setContentView(R.layout.activity_bridge);
         break;
       case 2:
         setContentView(R.layout.activity_jsquat);
         break:
       case 3:
         setContentView(R.layout.activity_squat);
         break;
       case 4:
         setContentView(R.layout.activity_lunge);
         break;
       case 5:
         setContentView(R.layout.activity_rlunge);
         break;
       case 6:
         setContentView(R.layout.activity_sts);
         break
       case 7:
         setContentView(R.layout.activity_ksquat);
```

```
break:
  }
  startBtn = findViewById(R.id.startbutton);
  mtextview = findViewById(R.id.time);
  startBtn.setOnClickListener(new View.OnClickListener() {
     @Override
    public void onClick(View v) {
       if (MTimeRunning)
       {
         stoptimer()
       else{
         starttimer();
  });
private void stoptimer()
  countDownTimer.cancel();
  MTimeRunning = false;
  startBtn.setText("START");
}
private void starttimer()
  final CharSequence value1 = mtextview.getText();
  String num1 = value1.toString();
  String num2= num1.substring(0,2);
  String num3 = \text{num}1.\text{substring}(3,5);
  final int number = Integer.valueOf(num2) * 30+ Integer.valueOf(num3);
  MTimeLeft = number*1000;
  countDownTimer= new CountDownTimer(MTimeLeft,1000) {
     @Override
    public void onTick(long millisUntilFinished)
       MTimeLeft = millisUntilFinished;
       updateTimer();
     @Override
    public void onFinish() {
       int newvalue = Integer.valueOf(buttonvalue)+1;
       if(newvalue <= 7) {
         Intent intent = new Intent(ThirdActivity2.this, ThirdActivity2.class)
         intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK);
         intent.putExtra("value", String.valueOf(newvalue));
         startActivity(intent);
       }
       else
         newvalue=1:
         Intent intent= new Intent(ThirdActivity2.this, ThirdActivity2.class);
```

```
intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK);
           intent.putExtra("value", String.valueOf(newvalue));
            startActivity(intent);
         }
       }
     }.start();
     startBtn.setText("PAUSE");
     MTimeRunning= true
  private void updateTimer(
     int minutes= (int) MTimeLeft/60000;
     int seconds = (int) MTimeLeft%60000 /1000;
     String timeLeftText=" ";
     if( minutes<10)
       timeLeftText="0":
     timeLeftText = timeLeftText + minutes + ":";
     if(seconds <10)
       timeLeftText+="0";
     timeLeftText+= seconds;
     mtextview.setText(timeLeftText);
  @Override
  public void onBackPressed()
     super.onBackPressed();
}
ThirdActivity3.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity
import android.content.Intent;
import android.os.Bundle;
import android.os.CountDownTimer;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class ThirdActivity3 extends AppCompatActivity {
  String buttonvalue;
  Button startBtn;
  private CountDownTimer countDownTimer ;
  TextView mtextview;
  private boolean MTimeRunning;
  private long MTimeLeft
  @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_third4);
```

```
Intent intent = getIntent();
  buttonvalue=intent.getStringExtra("value");
  int intvalue = Integer.valueOf(buttonvalue);
  switch(intvalue){
    case 1:
       setContentView(R.layout.activity_dips);
       break;
    case 2:
       setContentView(R.layout.activity_praise);
       break;
    case 3:
       setContentView(R.layout.activity_push);
    case 4:
       setContentView(R.layout.activity_staps);
       break;
    case 5:
       setContentView(R.layout.activity_udplank);
       break;
    case 6:
       setContentView(R.layout.activity_armc);
       break;
    case 7:
       setContentView(R.layout.activity_arms);
       break;
  }
  startBtn = findViewById(R.id.startbutton);
  mtextview = findViewById(R.id.time);
  startBtn.setOnClickListener(new View.OnClickListener() {
     @Override
    public void onClick(View v) {
       if (MTimeRunning)
       {
         stoptimer();
       }
       else{
         starttimer();
  });
private void stoptimer()
  countDownTimer.cancel();
  MTimeRunning = false;
  startBtn.setText("START");
private void starttimer()
```

```
final CharSequence value1 = mtextview.getText();
  String num1 = value1.toString();
  String num2= num1.substring(0,2);
  String num3 = \text{num}1.\text{substring}(3.5):
  final int number = Integer.valueOf(num2) * 30+ Integer.valueOf(num3);
  MTimeLeft = number*1000;
  countDownTimer= new CountDownTimer(MTimeLeft,1000) {
     @Override
    public void onTick(long millisUntilFinished) {
       MTimeLeft = millisUntilFinished;
       updateTimer()
     @Override
    public void onFinish() {
       int newvalue = Integer.valueOf(buttonvalue)+1;
       if(newvalue <= 7) {
         Intent intent = new Intent(ThirdActivity3.this, ThirdActivity3.class);
         intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK);
         intent.putExtra("value", String.valueOf(newvalue));
         startActivity(intent);
       }
       else{
         newvalue=1;
         Intent intent= new Intent(ThirdActivity3.this, ThirdActivity3.class);
         intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK);
         intent.putExtra("value", String.valueOf(newvalue));
         startActivity(intent);
       }
     }
  }.start();
  startBtn.setText("PAUSE");
  MTimeRunning= true
private void updateTimer(
  int minutes= (int) MTimeLeft/60000;
  int seconds = (int) MTimeLeft% 60000 /1000;
  String timeLeftText=" ";
  if( minutes<10)
    timeLeftText="0";
  timeLeftText = timeLeftText + minutes + ":";
  if(seconds <10)
    timeLeftText+="0";
  timeLeftText+= seconds;
  mtextview.setText(timeLeftText);
```

}

```
@Override
  public void onBackPressed()
    super.onBackPressed();
}
```

```
ThirdActivity4.java
package com.example.fitnessapp;
import androidx.appcompat.app.AppCompatActivity
import android.content.Intent;
import android.os.Bundle;
import android.os.CountDownTimer;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class ThridActivity4 extends AppCompatActivity {
  String buttonvalue;
  Button startBtn;
  private CountDownTimer countDownTimer ;
  TextView mtextview;
  private boolean MTimeRunning;
  private long MTimeLeft;
   @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_thrid4);
     Intent intent = getIntent();
     buttonvalue=intent.getStringExtra("value");
     int intvalue = Integer.valueOf(buttonvalue);
     switch(intvalue){
       case 1:
         setContentView(R.layout.activity_mountain);
         break;
       case 2:
         setContentView(R.layout.activity_crunch);
         break:
          setContentView(R.layout.activity_cycle);
         break;
       case 4:
          setContentView(R.layout.activity_heel);
         break;
       case 5:
          setContentView(R.layout.activity_scissor);
         break;
```

```
case 6:
       setContentView(R.layout.activity_twist);
    case 7:
       setContentView(R.layout.activity_bridge);
       break;
    case 8:
       setContentView(R.layout.activity_toe);
       break;
    case 9:
       setContentView(R.layout.activity_squat);
       break:
    case 10:
       setContentView(R.layout.activity_lunge);
       break:
    case 11:
       setContentView(R.layout.activity_rlunge);
       break;
    case 12:
       setContentView(R.layout.activity_staps);
       break;
    case 13:
       setContentView(R.layout.activity_udplank);
       break;
    case 14:
       setContentView(R.layout.activity_armc);
  }
  startBtn = findViewById(R.id.startbutton);
  mtextview = findViewById(R.id.time)
  startBtn.setOnClickListener(new View.OnClickListener() {
     @Override
    public void onClick(View v) {
       if (MTimeRunning)
         stoptimer();
       }
       else{
         starttimer()
  });
private void stoptimer()
  countDownTimer.cancel();
  MTimeRunning = false;
  startBtn.setText("START");
```

```
private void starttimer()
  final CharSequence value1 = mtextview.getText();
  String num1 = value1.toString();
  String num2= num1.substring(0,2);
  String num3 = \text{num}1.\text{substring}(3,5);
  final int number = Integer.valueOf(num2) * 30+ Integer.valueOf(num3);
  MTimeLeft = number*1000;
  countDownTimer= new CountDownTimer(MTimeLeft,1000) {
     @Override
    public void onTick(long millisUntilFinished) {
       MTimeLeft = millisUntilFinished;
       updateTimer();
     }
     @Override
    public void onFinish() {
       int newvalue = Integer.valueOf(buttonvalue)+1;
       if(newvalue <= 7) {
         Intent intent = new Intent(ThridActivity4.this, ThridActivity4.class);
         intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK);
         intent.putExtra("value", String.valueOf(newvalue));
         startActivity(intent);
       }
       else{
         newvalue=1;
         Intent intent= new Intent(ThridActivity4.this, ThridActivity4.class);
         intent.addFlags(Intent.FLAG ACTIVITY CLEAR TASK);
         intent.putExtra("value", String.valueOf(newvalue));
         startActivity(intent);
       }
     }
  }.start();
  startBtn.setText("PAUSE");
  MTimeRunning= true;
private void updateTimer()
  int minutes= (int) MTimeLeft/60000;
  int seconds = (int) MTimeLeft% 60000 /1000;
  String timeLeftText=" ";
  if( minutes<10)
    timeLeftText="0";
  timeLeftText = timeLeftText + minutes + ":";
  if(seconds <10)
    timeLeftText+="0";
  timeLeftText+= seconds:
  mtextview.setText(timeLeftText);
```

```
@Override
public void onBackPressed() {
    super.onBackPressed();
}
```

# **CHAPTER 5**

# **RESULTS AND DISCUSSION**

## 5.1 Screenshots

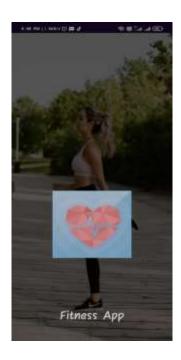


Fig 5.1.1: Splash Screen

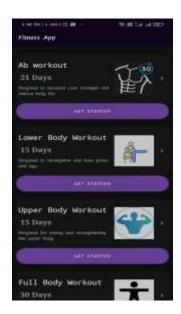


Fig 5.1.2: Dashboard



Fig 5.1.3: Leg Exercise List

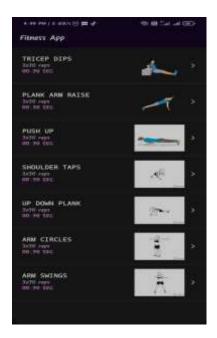


Fig 5.1.4: Upper Body Exercise List



Fig 5.1.5: Exercise with countdown and steps



Fig 5.1.6: Exercise with countdown and steps



Fig 5.1.7: BMI calculator

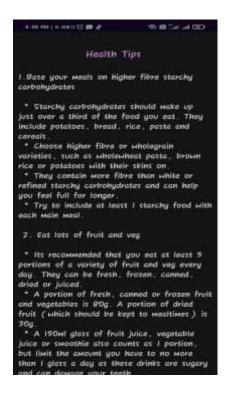


Fig 5.1.8: Health tips

## Chapter 6

## **CONCLUSION & FUTURE ENHANCEMENTS**

This project is more informative and more helpful for understanding the concept of android app development. It is an android based application that enables the user to keep an eye on their fitness regime. The project has been completed successfully with maximum satisfaction. The constraints are met and overcome successfully. The project gives a good idea on developing a user-friendly application satisfying the user. The system is very flexible and versatile. This application has a user-friendly screen that enables the user to use it without any inconvenience. We were able able to understand the importance of designing a good and clean interface for android applications. We tested different layouts for presenting the data of the user and decided to use simpler layout as it provided a modern look for the application.

#### Future Enhancements for this application would be

- Improvement in UI
- A registration page
- Verification email can be sent to the user when they complete the signup process.
- OTP can be sent to the users registered email address
- Activity tracking mobile app development
- Developing need-based customized app
- Activity sleep, calorie intake tracking
- Metabolism tracking, Water intake tracking
- Goal setting
- Progress tracker
- Push notification systems and reminders

# **REFERENCES**

- https://developer.android.com/studio
- www.geeksforgeeks.com
- https://stackoverflow.com/