



## **Experiment 15: Checking Health of a user**

### 1.Design (activity\_main.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"
    android:background="@drawable/img"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="176dp"
        android:layout_height="0dp"
        android:layout_marginTop="35dp"
        android:layout_marginBottom="43dp"
        android:fontFamily="monospace"
        android:text="@string/health_tracker"
        android:textSize="20sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toTopOf="@+id/editTextText"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/editTextText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="32dp"
        android:ems="10"
        android:hint="@string/blood_pressure"
        android:inputType="text"
        app:layout_constraintBottom_toTopOf="@+id/editTextText2"
        app:layout_constraintEnd_toEndOf="@+id/textView"
        app:layout_constraintStart_toStartOf="@+id/textView"
```

```
app:layout_constraintTop_toBottomOf="@+id/textView"  
android:autofillHints="" />
```

```
<EditText
```

```
    android:id="@+id/editTextText2"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginBottom="39dp"  
    android:ems="10"  
    android:hint="@string/temperature"  
    android:inputType="text"  
    app:layout_constraintBottom_toTopOf="@+id/button"  
    app:layout_constraintEnd_toEndOf="@+id/editTextText"  
    app:layout_constraintStart_toStartOf="@+id/editTextText"  
    app:layout_constraintTop_toBottomOf="@+id/editTextText"  
    android:autofillHints="" />
```

```
<Button
```

```
    android:id="@+id/button"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginBottom="406dp"  
    android:backgroundTint="#01172E"  
    android:text="@string/notification"  
    android:onClick="notify"  
    app:layout_constraintBottom_toBottomOf="parent"  
    app:layout_constraintEnd_toEndOf="@+id/editTextText2"  
    app:layout_constraintStart_toStartOf="@+id/editTextText2"  
    app:layout_constraintTop_toBottomOf="@+id/editTextText2" />
```

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

## 2.JAVA File (MainActivity.java)

```
package com.example.healthapp_0223;

import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.NotificationCompat;

import android.annotation.SuppressLint;
import android.app.NotificationChannel;
import android.app.NotificationManager;
import android.app.PendingIntent;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity {
    EditText editTextText,editTextText2;
    Button button;
    int st1,st2;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        editTextText=findViewById(R.id.editTextText);
        editTextText2=findViewById(R.id.editTextText2);
        button=findViewById(R.id.button);
    }
    @SuppressLint("NotificationPermission")
    public void notify(View view){
        st1=Integer.parseInt(editTextText.getText().toString());
        st2=Integer.parseInt(editTextText2.getText().toString());
        String message;
        int notification=100;
        if(st1>=60 && st1<=120 || st2==98.6){ //check BP
            message="Your vitals are fine :)";
        }
        else
            message="You need to consult a doctor!!";
        String Channel_ID="my_ch";
        String Channel_NAME="My_channel";
```

```
        int importance= NotificationManager.IMPORTANCE_HIGH;//notification sound is high(here 4)
        NotificationChannel channel=new NotificationChannel(Channel_ID,Channel_NAME,importance);
        NotificationManager manager=(NotificationManager) getSystemService(NOTIFICATION_SERVICE);//class
        manager.createNotificationChannel(channel);//creates channel
        Intent intent=new Intent(this, MainActivity2.class);
        intent.putExtra("message",message);
        intent.addFlags(Intent.FLAG_ACTIVITY_SINGLE_TOP|Intent.FLAG_ACTIVITY_CLEAR_TOP);
        PendingIntent pendingIntent=PendingIntent.getActivity(this,0,intent,PendingIntent.FLAG_UPDATE_CURRENT);
        NotificationCompat.Builder builder = new NotificationCompat.Builder(this, Channel_ID)
            .setSmallIcon(R.drawable.baseline_add_alert_24)
            //setSmallIcon(R.drawable.ic_launcher_background)
            .setContentIntent(pendingIntent)
            .setContentTitle("New Notification")
            .setContentText("BloodPressure: "+st1+"Temperature: "+st2);

        manager.notify(notification,builder.build());
    }
}
```

## 3.Design (activity\_main2.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=".MainActivity2"
    android:background="@drawable/img_1">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="0dp"
        android:layout_height="410dp"
        android:layout_marginStart="69dp"
        android:layout_marginTop="128dp"
        android:layout_marginEnd="69dp"
        android:foregroundGravity="center"
        android:gravity="center"
        android:hint="Health report "
        android:textColorHint="@color/black"
        android:textSize="20sp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

#### 4.JAVA File (MainActivity2.java)

```

package com.example.healthapp_0223;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.app.NotificationManager;
import android.content.Context;
import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;

public class MainActivity2 extends AppCompatActivity {
    TextView textView2;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        //textView2=findViewById(R.id.textView2);
        onNewIntent(getIntent());
        NotificationManager manager=(NotificationManager)
        getSystemService(Context.NOTIFICATION_SERVICE);
        manager.cancel(100);
    }
    @SuppressLint("SetTextI18n")
    @Override
    protected void onNewIntent(Intent intent){
        Bundle extras=intent.getExtras();
        if(extras!=null){
            if(extras.containsKey("message")){
                setContentView(R.layout.activity_main2);
                String msg=extras.getString("message");
            }
        }
    }
}

```

```

        textView2=(TextView) findViewById(R.id.textView2);
        textView2.setText("Health Report of user is:\n"+msg);
    }

    super.onNewIntent(intent);
}
}
}

```

## AndroidManifest.xml

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.HealthApp"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity2"
            android:exported="false"
            />
        <activity
            android:name=".MainActivity"
            android:exported="true"
            android:icon="@mipmap/stethoscope">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>

```

## 5. Output in the emulator



