MOBIL APP DEVELOPMENET LAB

WEEK 3b: Create "Say Hello" App using Intent with Object

Objective: Implementation of Intent with Object to create "Say Hello" App

PROCEDURE:

Step 1: Open Android Studio

Step 2: In the main Welcome to Android Studio window, click **New Project**

Step 3: choose Empty Activity
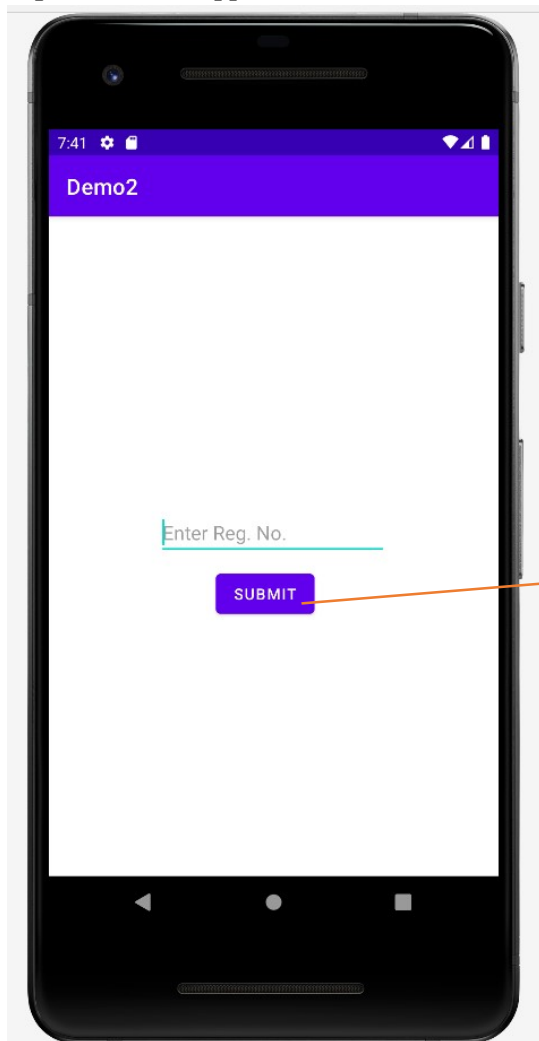
Step 4: Enter Project Details

Step 5: Create Student.java Class

Step 6: Write the Code to implement Button Click Event in MainActivity
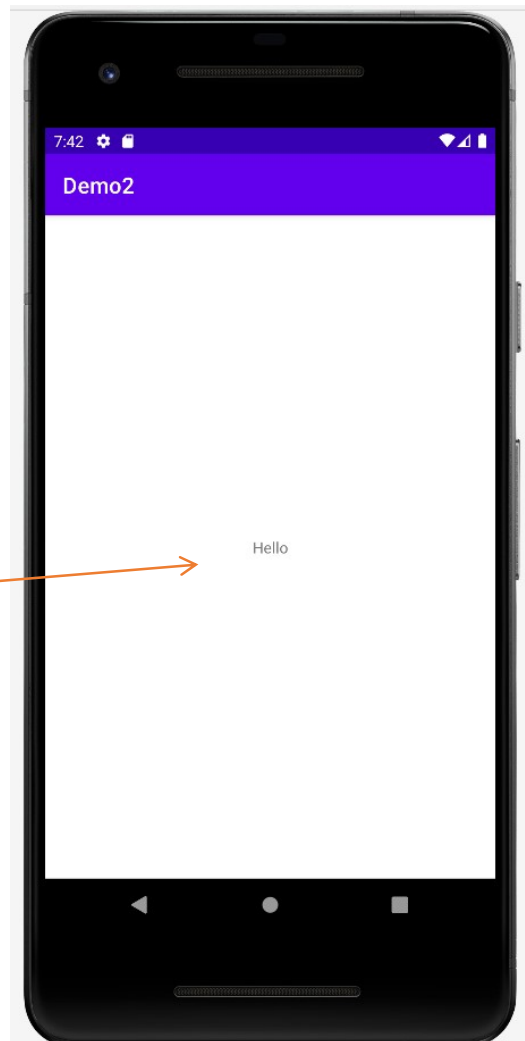
Step 7: Create SecondActivity to Receive Message from MainActivity

Step 8: Create and Select Android Virtual Device (Emulator)

Step 9: Run the App on the Virtual Device

MainActivity   Second Activity

Phase 1: Create Hello World App
Procedure:
Step 5: Create Student Class
Open Student.java → Write Code

```java
package com.example.demo2;

import java.io.Serializable;

public class Student implements Serializable {
    public String name;
}
```

Step 6: Design UI in MainActivity
6a. Open activity_main.xml → Select Design View → Add Widgets – EditText and Button

Widget	id	Other Attributes
EditText	editTextName	id="@+id/editTextName" hint="Enter Name" inputType="text"
Button	btnSubmit	id="@+id/btnSubmit" layout_marginTop="8dp" onClick="SayHello" text="Say Hello"

```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=".MainActivity">

    <EditText
        android:id="@+id/editTextName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Enter Name"
        android:inputType="text"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"/>

    <Button
        android:id="@+id/btnSubmit"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:onClick="SayHello"
        android:text="Submit"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
```

```
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.60" />

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

6b. Open MainActivity.java and write Code

```java
package com.example.demo2;

import androidx.appcompat.app.AppCompatActivity;

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

import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

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

    public void SayHello(View view){
        EditText editTextName;
        editTextName = findViewById(R.id.editTextName);

        Student student = new Student();
        student.name = editTextName.getText().toString();

        Intent intent = new Intent(MainActivity.this, SecondActivity.class);
        intent.putExtra("KEY",student);
        startActivity(intent);

    }
}
```

7a. Open activity_second.xml → Select Design View → Add Widgets – TextView

Widget	id	Other Attributes
TextView	textReceived	id="@+id/textReceived " text="Hi"

```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=".SecondActivity">

    <TextView
        android:id="@+id/textReceived"
        android:layout_width="wrap_content"
```

```xml
            android:layout_height="wrap_content"
            android:text="TextView"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

7b. Open SecondActivity.java and write Code

```java
package com.example.demo2;

import androidx.appcompat.app.AppCompatActivity;

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

public class SecondActivity extends AppCompatActivity {

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

        Intent intent = getIntent();
        Student student = (Student) intent.getSerializableExtra("KEY");

        TextView textReceived = findViewById(R.id.textReceived);
        textReceived.setText(student.name);

    }
}
```