Experiment 1.2

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Branch: BE-CSE **Section/Group: NTPP_CC_601/A**

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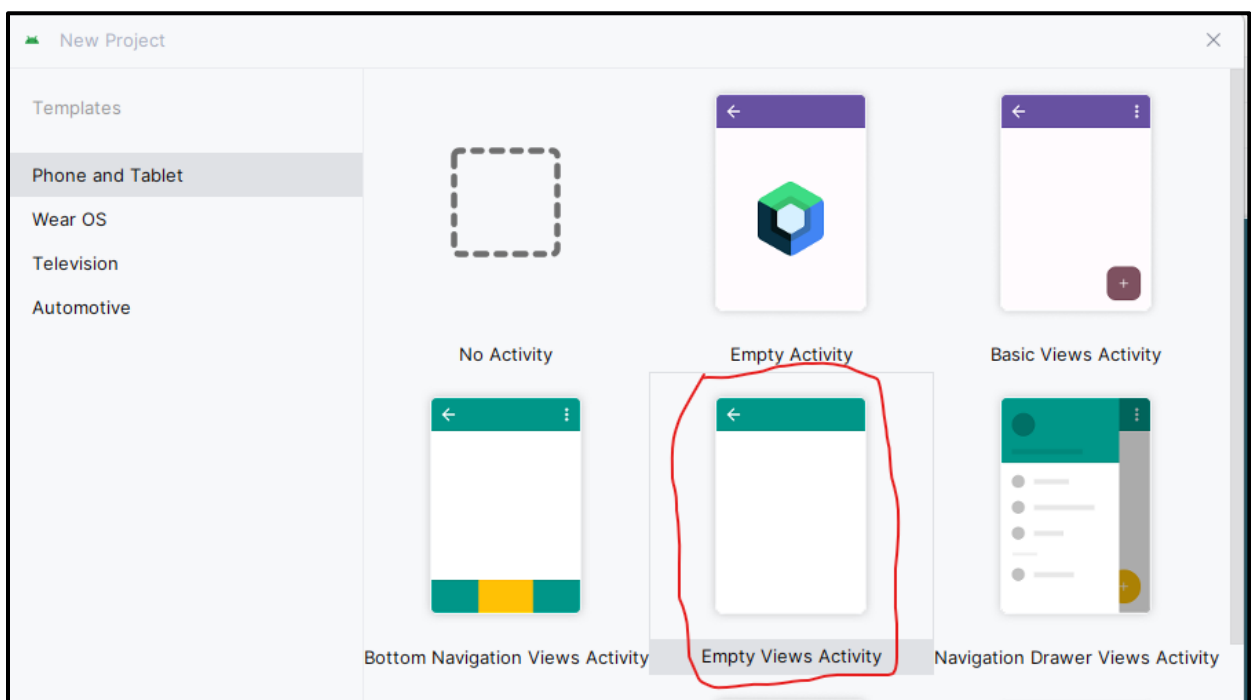**Subject Name: MAD LAB** **Subject Code: 21CSH-355**

Aim: Create an application that takes the name from a "Text Box" and shows a "Hello" message along with the name entered in the "Text Box" when the user clicks the "OK" button.

Objective: Setting up Android Studio and configuring a basic Android project. Compiling and running a simple Android application on an emulator or a physical device.
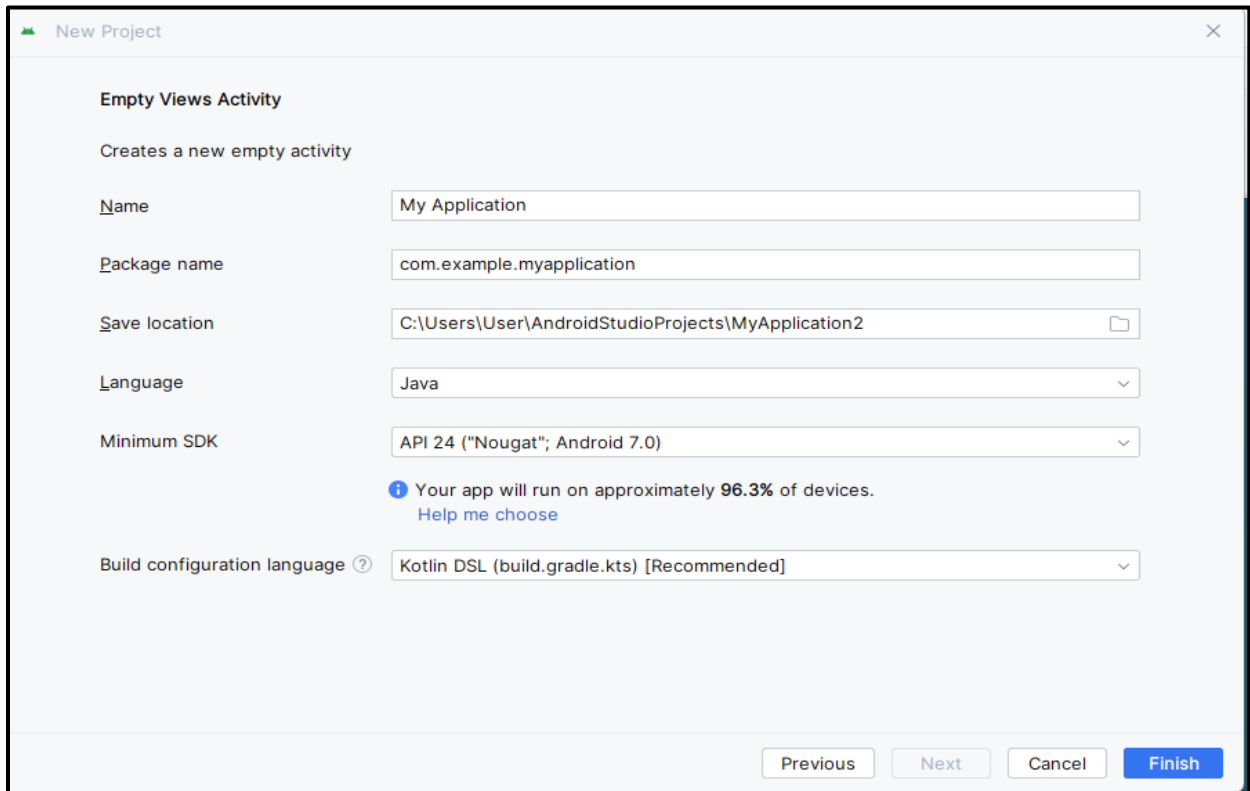
Apparatus/Requirements: Android Studio

Procedure:

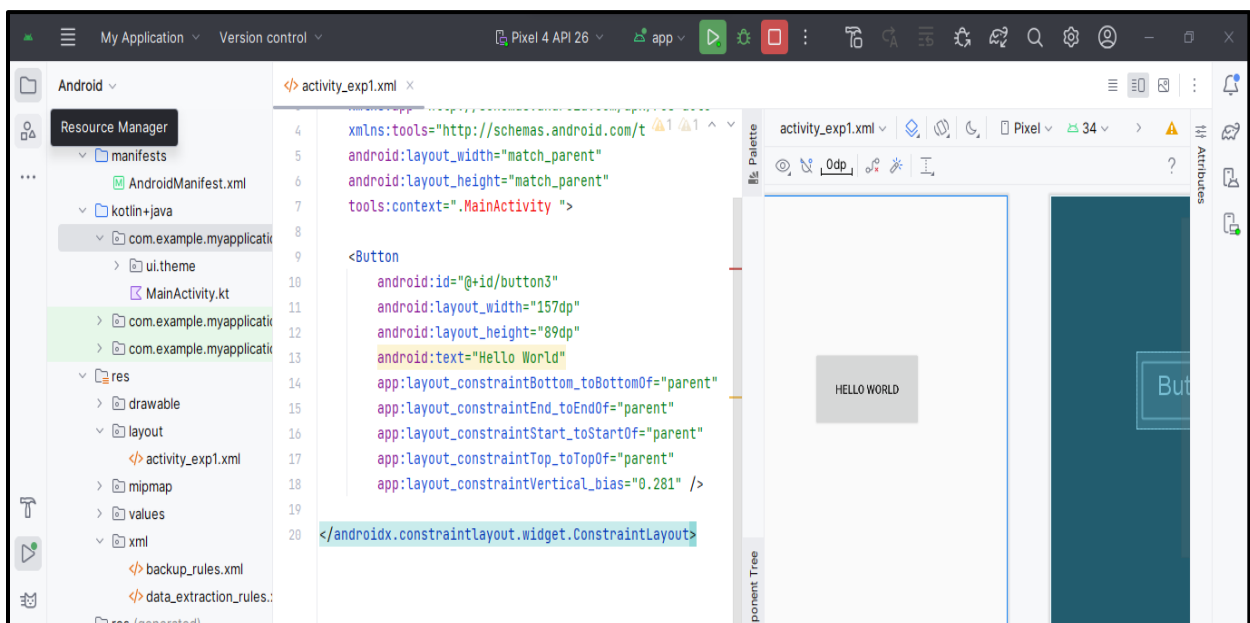1. Create a new project and select Empty views activity

2. Type your project name and then click on Finish button.

3. Android layout file

The UI of our application will be designed in this file and it will contain Design and Text modes. It will exist in the layouts folder and the structure of activity_main.xml file in Design mode like as shown below.

We can make required design modifications in activity_main.xml file either using Design or Text modes. If we switch to Text mode activity_main.xml file will contain code like as shown below.

```xml
activity_exp1.xml ×

1   <?xml version="1.0" encoding="utf-8"?>
2   <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/and
3       xmlns:app="http://schemas.android.com/apk/res-auto"
4       xmlns:tools="http://schemas.android.com/tools"
5       android:layout_width="match_parent"
6       android:layout_height="match_parent"
7       tools:context=".MainActivity ">
8
9       <Button
10          android:id="@+id/button3"
11          android:layout_width="157dp"
12          android:layout_height="89dp"
13          android:text="Hello World"
14          app:layout_constraintBottom_toBottomOf="parent"
15          app:layout_constraintEnd_toEndOf="parent"
16          app:layout_constraintStart_toStartOf="parent"
17          app:layout_constraintTop_toTopOf="parent"
18          app:layout_constraintVertical_bias="0.281" />
19
20  </androidx.constraintlayout.widget.ConstraintLayout>
```
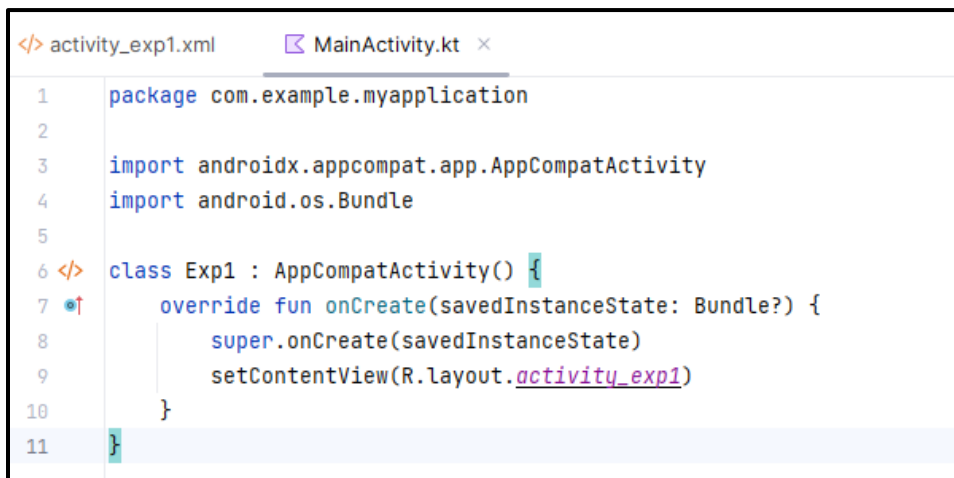
4. Android main activity file

The main activity file in android application is MainActivity.java and it will exists in java folder. The MainActivity.java file will contain the java code to handle all the activities related to our app.

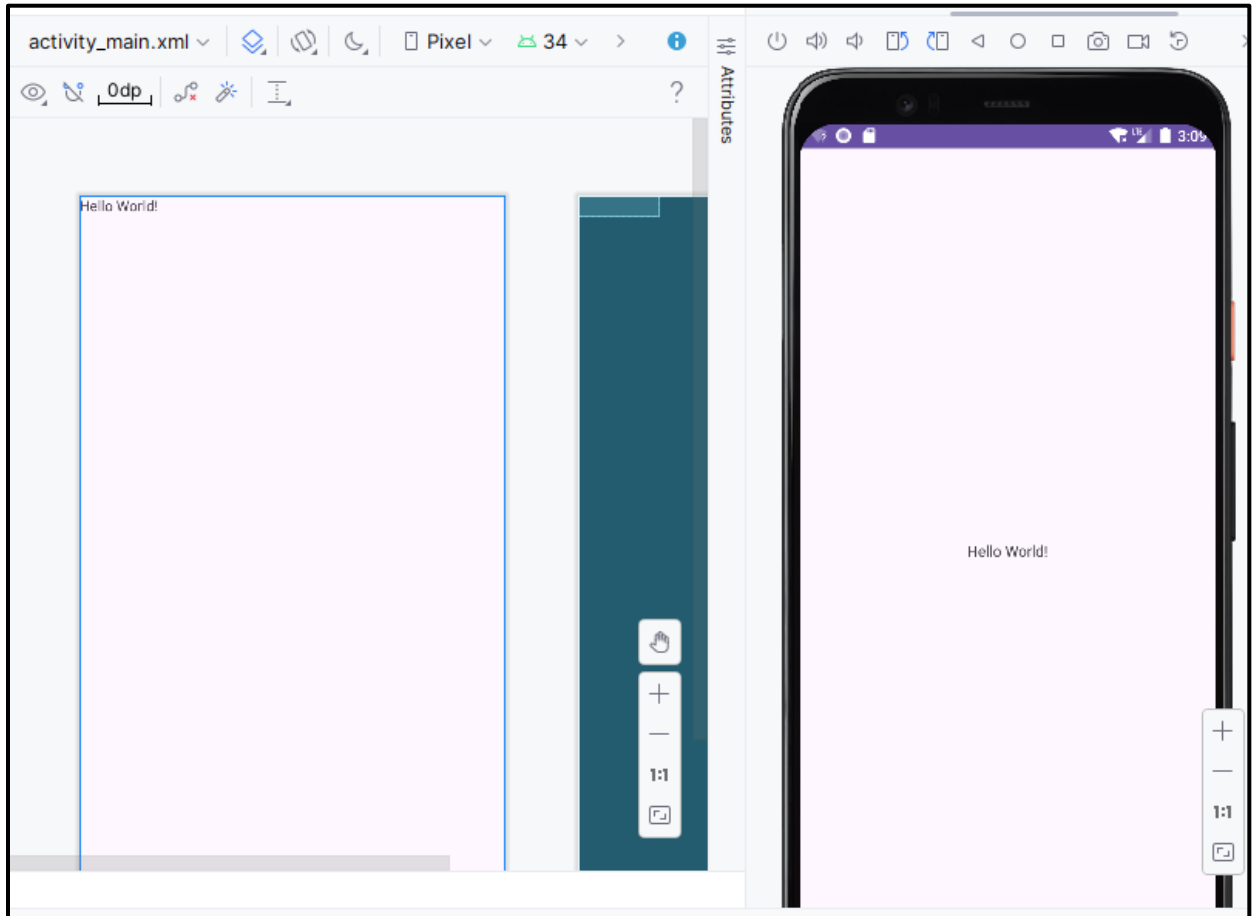Following is the default code of MainActivity.java file which is generated by our HelloWorld application.

```kotlin
activity_exp1.xml      MainActivity.kt ×

1    package com.example.myapplication
2
3    import androidx.appcompat.app.AppCompatActivity
4    import android.os.Bundle
5
6    class Exp1 : AppCompatActivity() {
7        override fun onCreate(savedInstanceState: Bundle?) {
8            super.onCreate(savedInstanceState)
9            setContentView(R.layout.activity_exp1)
10       }
11   }
```

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Output

Learning Outcomes:

- Learned about creating project in Android studio.
- Learned about to create "Hello World" message.