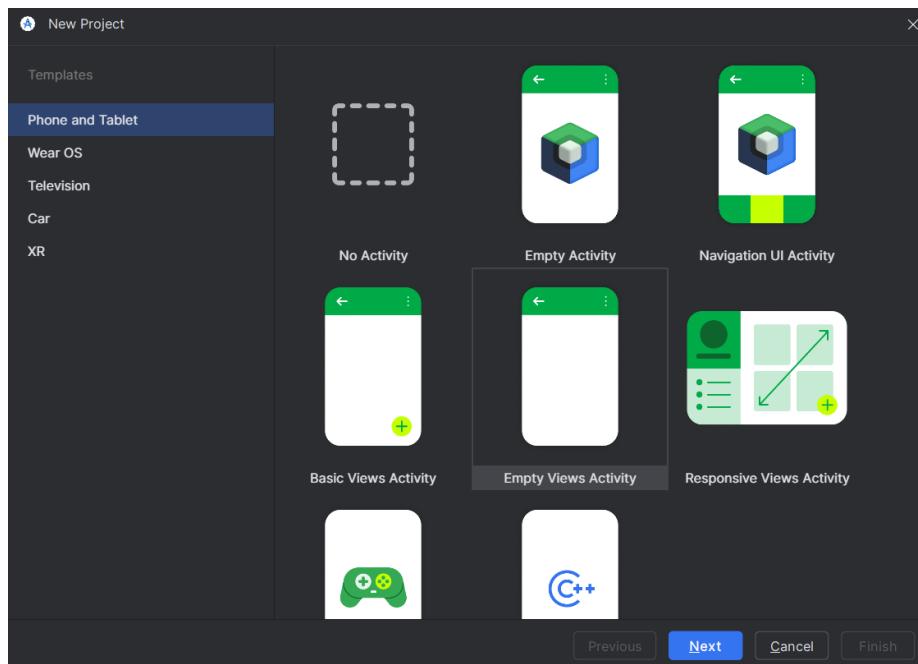


2. Build a Simple Input–Output App (EditText + Validation) Topics covered: EditText, TextView, Button, onClickListener, simple validation Task:

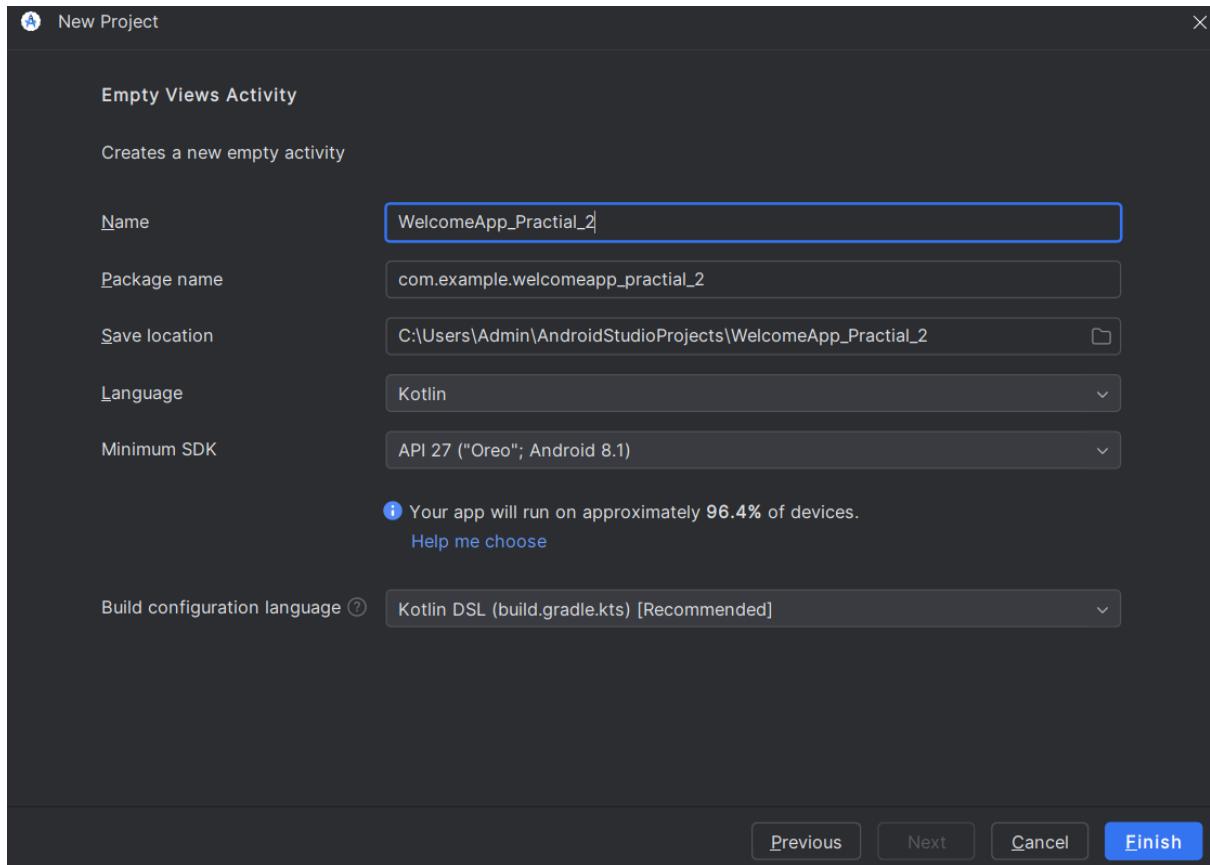
- User enters name in EditText
- On button click, display “Welcome, <name>!” in TextView
- Add validation: if name is empty → show Toast “Please enter a name!”

Step 1:

Go to File→ New→ New Project→Empty Views Activity→ Next



Click on Project name as “WelcomeApp\_Practical\_2” → Finish



### Step 3: Open the activity\_main.xml

1. Go to  
app → src → main → res → layout → activity\_main.xml
2. Click it.

You will see **Design / Code / Split** tabs at the top.

Click **Split** (so you can see both code + preview) or Click (Alt+Shift+Left). You will see xml code.

Replace it with this given code:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    android:id="@+id/main"
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="24dp">

    <EditText
        android:id="@+id/nameEditText"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:hint="Enter your name"
        android:inputType="textPersonName"
        app:layout_constraintTop_toTopOf="parent"
```

```

    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"/>

<Button
    android:id="@+id/welcomeButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Say Welcome"
    app:layout_constraintTop_toBottomOf="@+id/nameEditText"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    android:layout_marginTop="16dp"/>

<TextView
    android:id="@+id/resultTextView"
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:text=""
    android:textSize="18sp"
    android:textStyle="bold"
    android:gravity="center"
    app:layout_constraintTop_toBottomOf="@+id/welcomeButton"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    android:layout_marginTop="24dp"/>

</androidx.constraintlayout.widget.ConstraintLayout>

```

## Step 4: Open MainActivity.kt

Find this file:

app → src → main → java → com.example.WecomApp\_Practical\_1 → MainActivity.kt

Open it.

Add the import at first:

```

import android.widget.Button
import android.widget.EditText
import android.widget.TextView
import android.widget.Toast

```

Then after the:

```

        insets
    }

```

Add this code:

```

// 1. Connect XML views to Kotlin
    val nameEditText = findViewById<EditText>(R.id.nameEditText)
    val welcomeButton = findViewById<Button>(R.id.welcomeButton)
    val resultTextView = findViewById<TextView>(R.id.resultTextView)

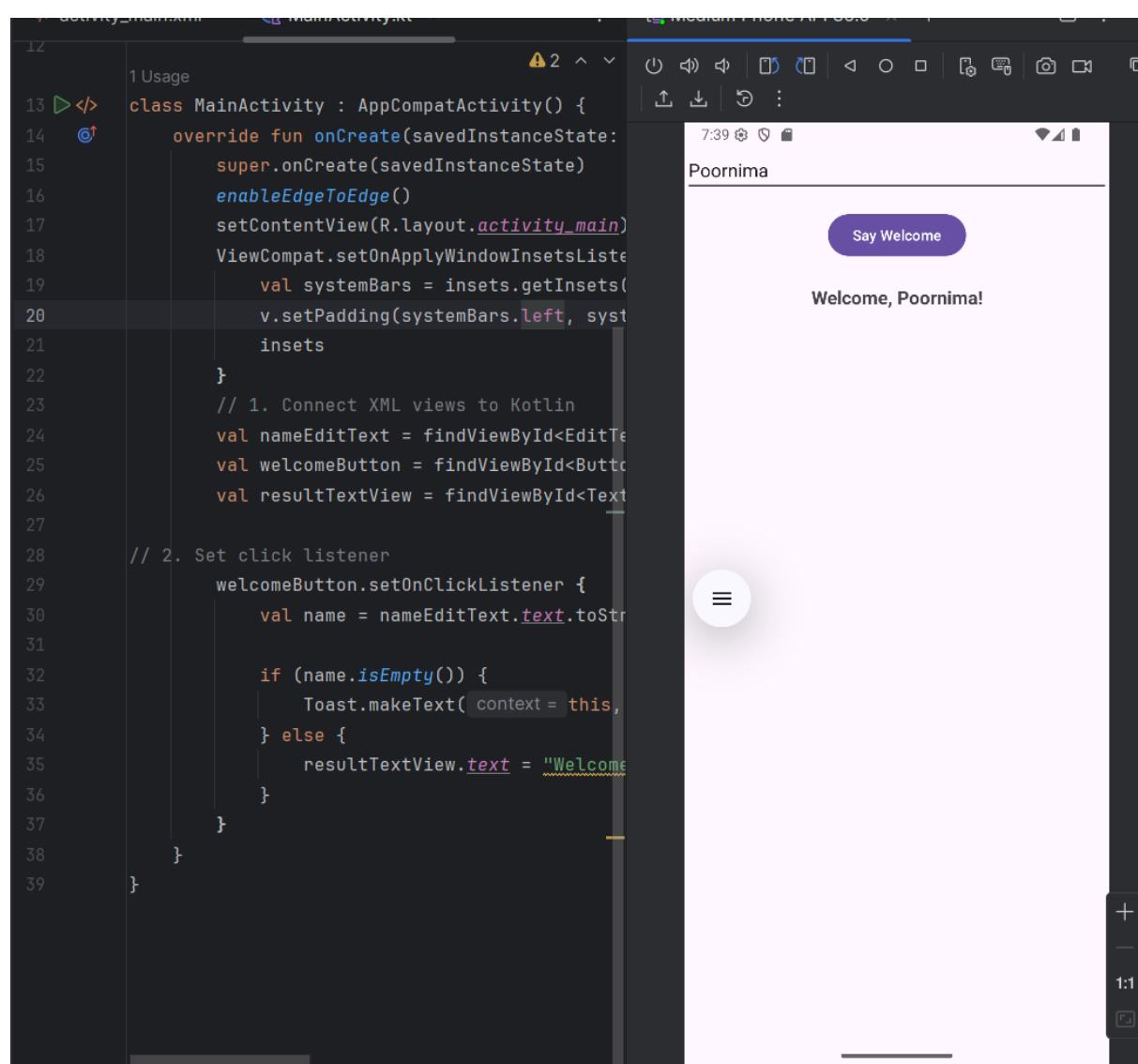
// 2. Set click listener
    welcomeButton.setOnClickListener {

```

```
    val name = nameEditText.text.toString().trim()

    if (name.isEmpty()) {
        Toast.makeText(this, "Please enter a name!",
Toast.LENGTH_SHORT).show()
    } else {
        resultTextView.text = "Welcome, $name!"
    }
}
```

## Output (Virtual Phone):



Step 6: Connection this app in Actual phone (your phone)

**1. Open your YOUR phone**

Unlock it.

**2. Open the “Settings” app**

It's a **gear**  icon (on your home screen or app drawer).

**3. Scroll and tap “About device”**

On OPPO, it is usually at the **top** of settings.

**4. Tap “Version”**

Inside About Device.

**5. Tap “Build number” 7 times**

Your phone will say:

**“You are now a developer!”**

**6. Go back → Additional Settings**

Scroll and find:

**Additional Settings OR**

**7. Search and Tap “Developer Options”**

Now you will see:

**Developer Options** (only appears after enabling it)

**8. Turn ON USB Debugging**

Scroll down and enable:

**USB Debugging**

Tap **OK** to allow it.

**Now connect you're YOUR phone to your laptop**

Use your USB cable → as soon as you connect, your phone will show:

**“Allow USB debugging?”**

Tap:

**✓ Always allow from this computer**

**✓ Allow**

**✓ USB Mode MUST be “File Transfer”**

**Once your Phone is connected**

**✓ Select your phone:**

**At the top device dropdown, choose for example:**

 **OPPO CPH2557**

**(It should show a green phone icon)**

**✓ Then click the green RUN ▶ button.**

**Your app will install and start on your phone.**

**Output (Real phone):**

9:07



⌚ ⌂ Vo LTE 45 🔋

Poornima 😊

Say Welcome

Welcome, Poornima 😊 !

