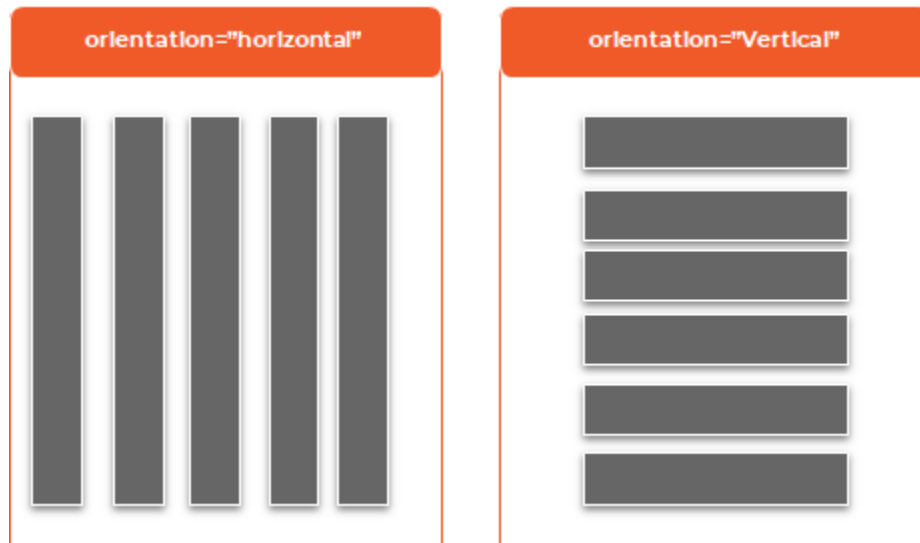# Lab 3: Android LinearLayout

Introduction

Linear Layout is used to align the children in vertical or horizontal manner.
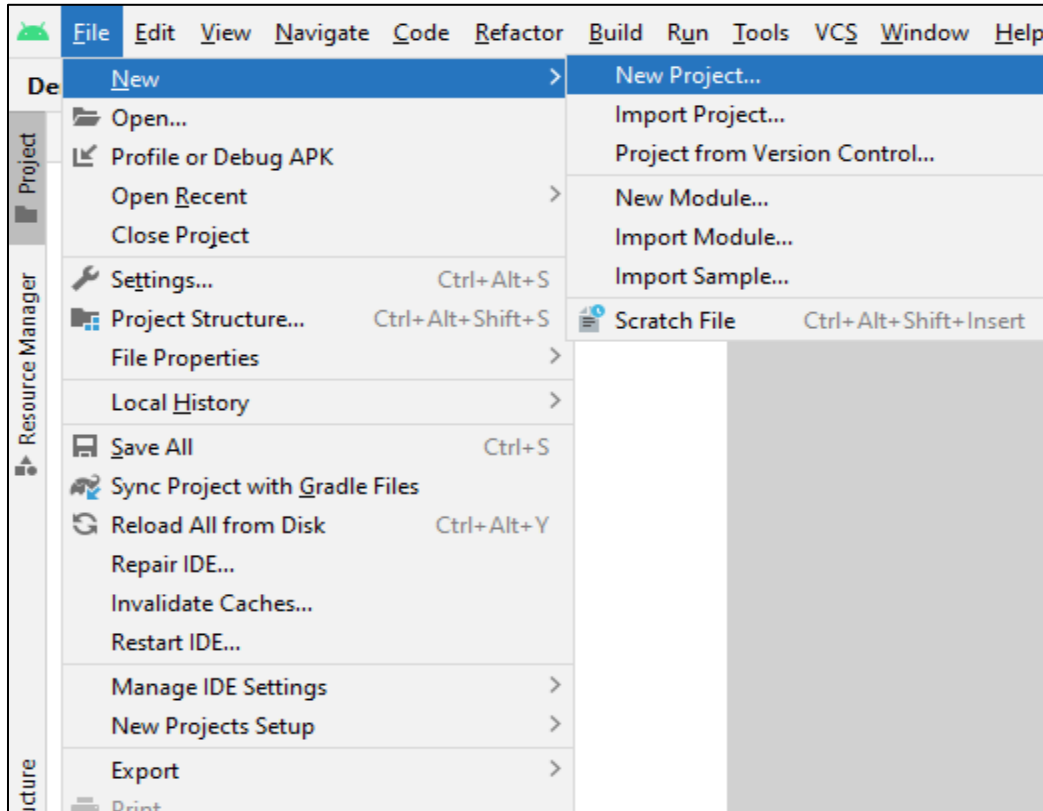
Attributes of Linear Layout

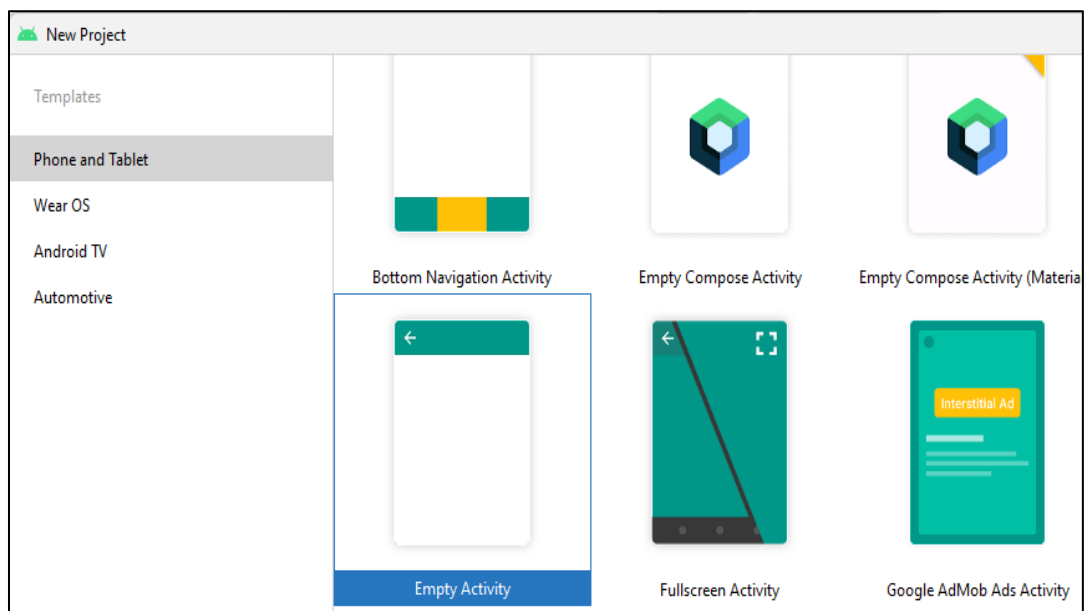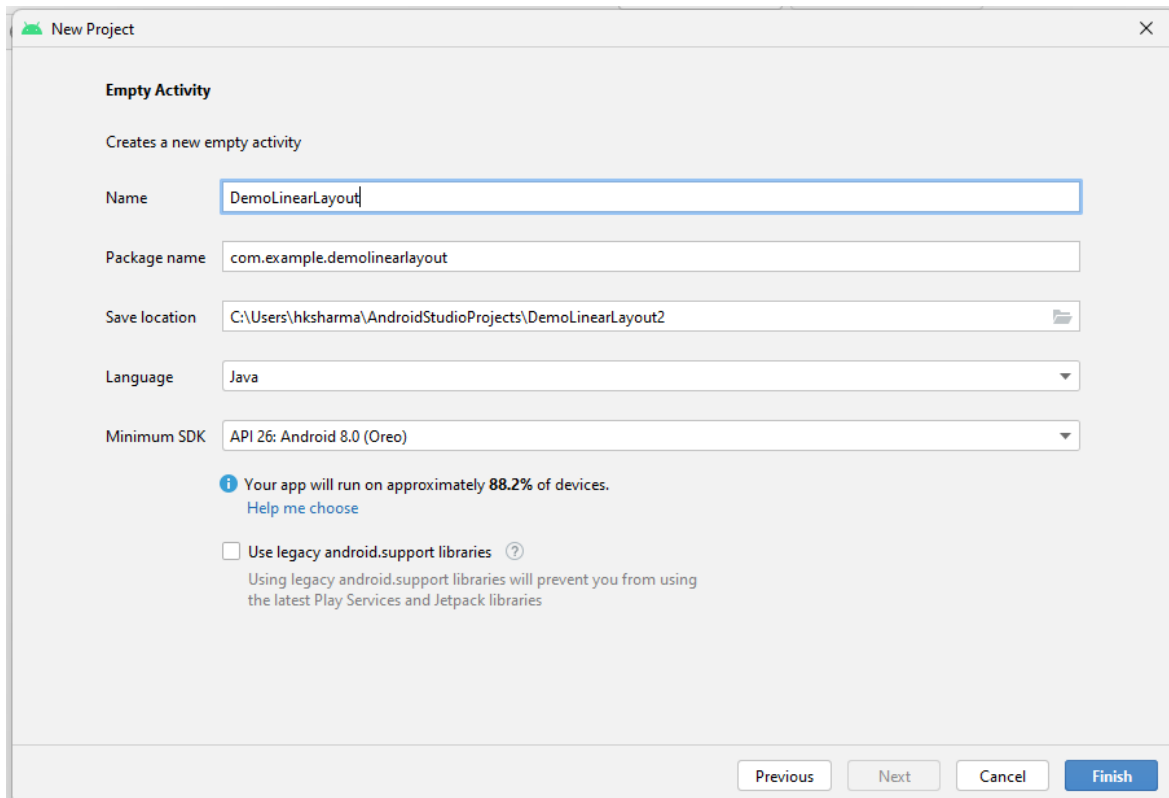| Name of the Attribute	Specification
id	Used for unique identification
baselineAligned	It has true or false value and used for controlling baseline view.
baselineAlignedChildIndex	It specify the child for base.
divider	This is used separator between buttons
gravity	Used to specify child position
orientation	This attribute specify the vertical or horizontal placement.
weightSum	Child weight Sum

Let's get Started:

Step 1: Create a New Project in Android Studio as shown below

Step 2: Select Empty Activity as shown below

Step 3: Provide a Project Name as shown below

Step 4: Update MainActivity.java as per the code given below

```java
package com.example.demolinearlayout;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

Step 5: Update activity_main.xml for Vertical Orientation as per the code given below

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:orientation="vertical" >
    <Button android:id="@+id/btn1"
        android:layout_width="300dp"
        android:layout_height="wrap_content"
```

```xml
        android:text="Click Button 1"/>

    <Button android:id="@+id/btn2"
        android:layout_width="300dp"
        android:layout_height="wrap_content"
        android:text="Click Button 2"/>

    <Button android:id="@+id/btn3"
        android:layout_width="300dp"
        android:layout_height="wrap_content"
        android:text="Click Button 3"/>
    <Button android:id="@+id/btn4"
        android:layout_width="300dp"
        android:layout_height="wrap_content"
        android:text="Click Button 4"/>
</LinearLayout>
```

Step 6: Check Output on Android Emulator and it should look like as given below

Step 7: Update activity_main.xml for Horizontal Orientation as per the code given below

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:orientation="horizontal" >
```

```xml
    <Button android:id="@+id/btn1"
        android:layout_width="100dp"
        android:layout_height="wrap_content"
        android:text="Click Button 1"/>

    <Button android:id="@+id/btn2"
        android:layout_width="100dp"
        android:layout_height="wrap_content"
        android:text="Click Button 2"/>

    <Button android:id="@+id/btn3"
        android:layout_width="100dp"
        android:layout_height="wrap_content"
        android:text="Click Button 3"/>
    <Button android:id="@+id/btn4"
        android:layout_width="100dp"
        android:layout_height="wrap_content"
        android:text="Click Button 4"/>
</LinearLayout>
```

Step 8: Check Output on Android Emulator and it should look like as given below

Voila!! We have successfully completed this lab.