# Lab 8: Android ListView Layout

## Introduction

A view group called Android ListView collects various things and displays them in a vertical scrollable list. A list adapter, which draws content from a source like a database or an array, automatically inserts the list items.


| Attribute | Description |
|---|---|
| id | Used to identify uniquely |
| divider | Used to separate items in list |
| dividerHeight | Used to specify the separator width of divider |
| entries | Used to control number of item in list in single screen |
| footerDividersEnabled | Has a Bool value to decide the visibility of footer divider |
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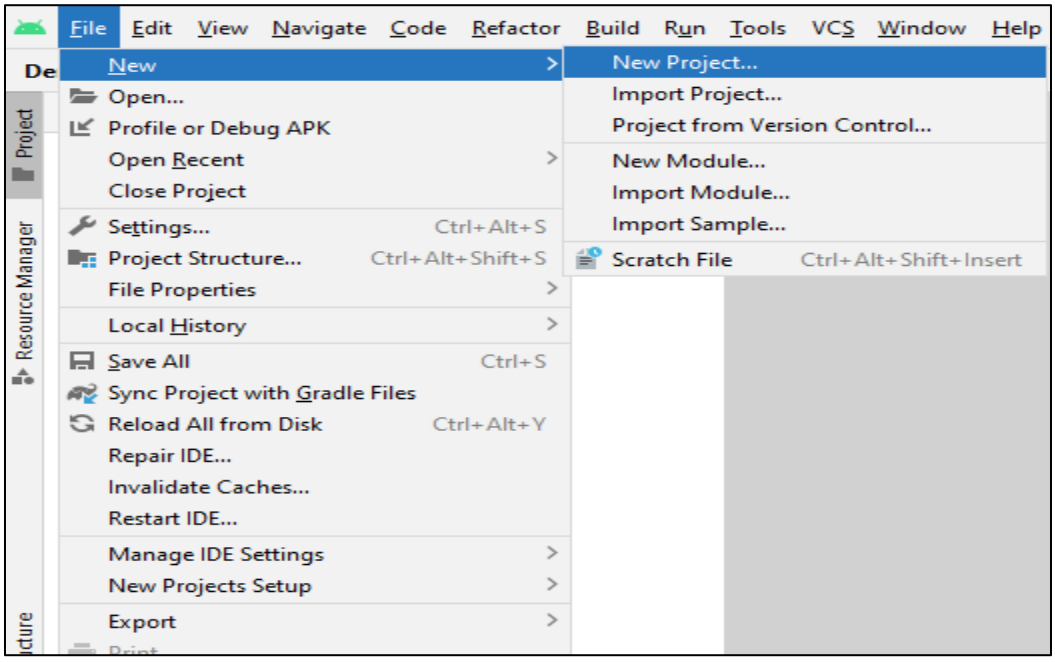
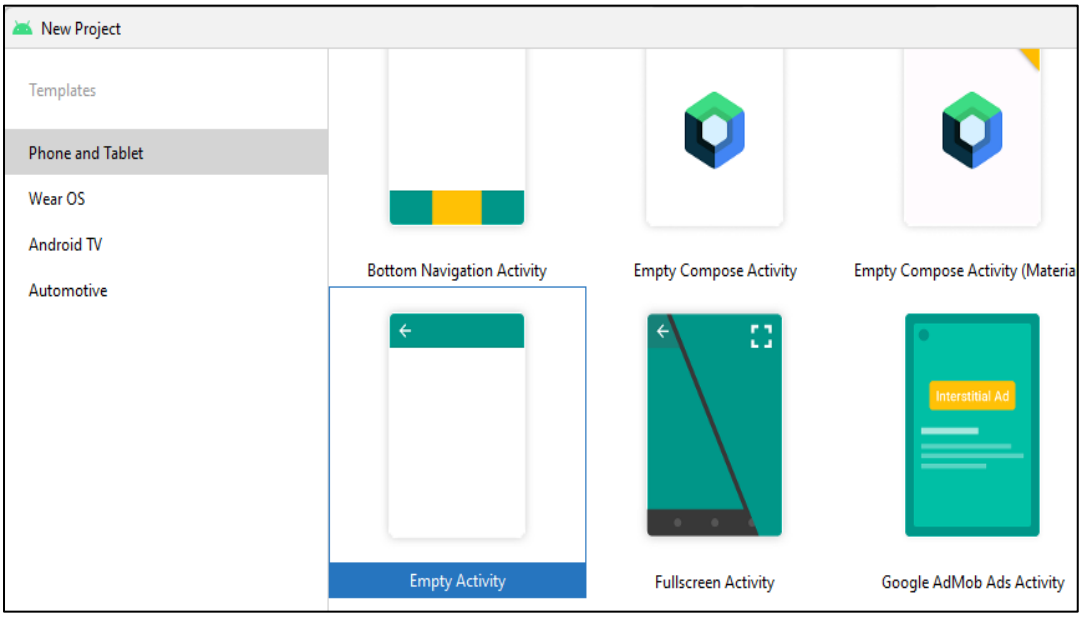
# Let’s get Started

This exercise will take you through simple steps to show how to create your own Android application using ListView Layout.

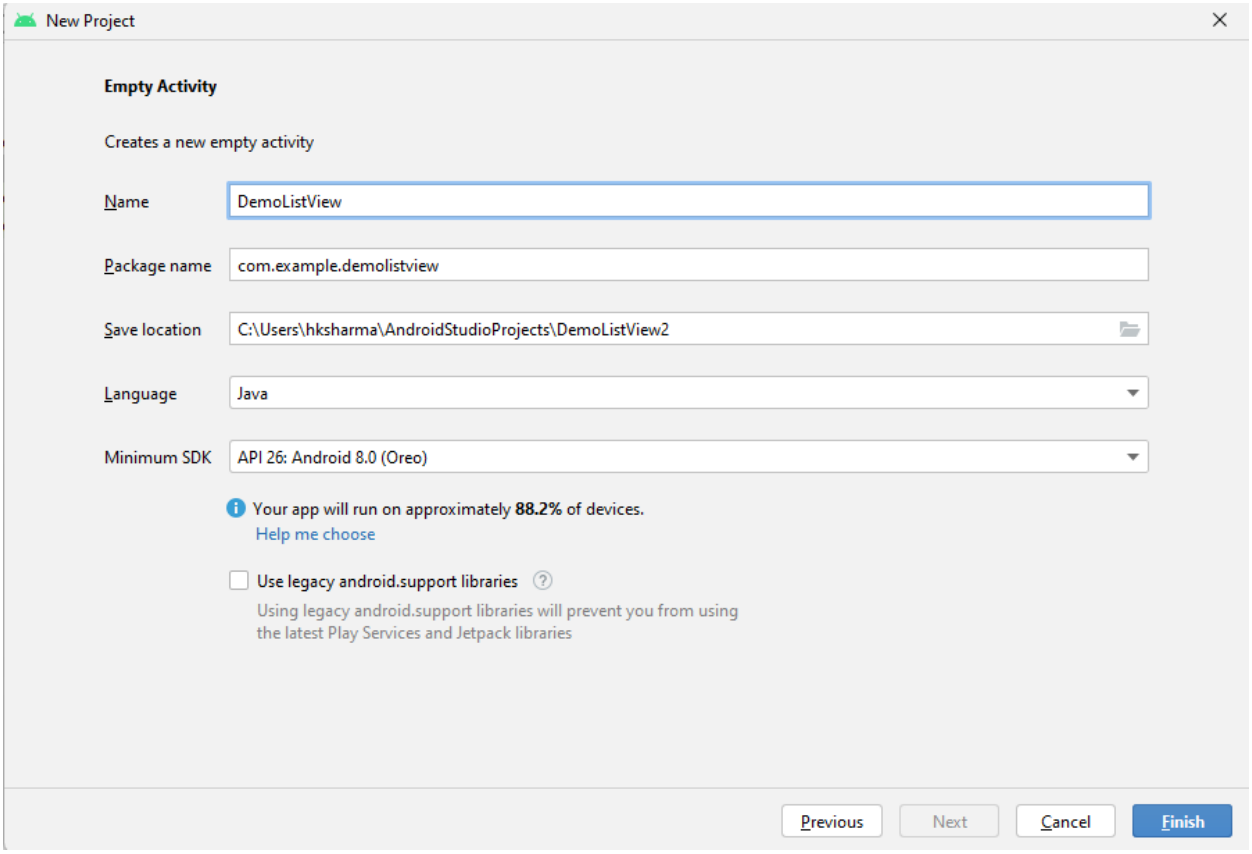
### Step 1: Create a New Project in Android Studio as shown below




### 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

```
package com.example.demolistview;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.Toast;

import java.util.ArrayList;

public class MainActivity extends AppCompatActivity {
    ArrayList<String> alNames= new ArrayList<>();

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ListView lstView = findViewById(R.id.lstView);
        alNames.add("Hitesh 1");
```

```
        alNames.add("Hitesh 2");
        alNames.add("Hitesh 3");
        alNames.add("Hitesh 4");
        alNames.add("Hitesh 5");
        alNames.add("Hitesh 6");
        alNames.add("Hitesh 7");
        alNames.add("Hitesh 8");
        alNames.add("Hitesh 9");
        alNames.add("Hitesh 10");
        ArrayAdapter<String> arrayAdapter= new
ArrayAdapter<>(getApplicationContext(),
android.R.layout.simple_list_item_1,alNames);
        lstView.setAdapter(arrayAdapter);
        lstView.setOnItemClickListener(new AdapterView.OnItemClickListener()
{
            @Override
            public void onItemClick(AdapterView<?> adapterView, View view,
int i, long l) {
                if (i==0)
                {
                    Toast.makeText(MainActivity.this, "Clicked First Item",
Toast.LENGTH_SHORT).show();
                }
            }
        });

    }
}
```

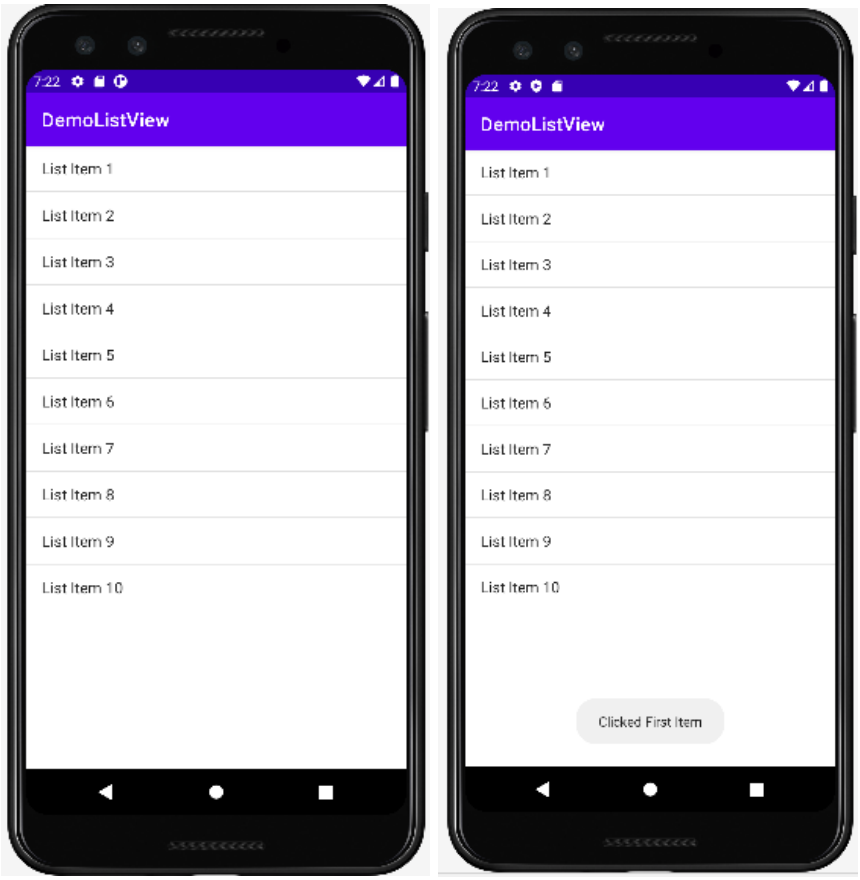
**Step 5: Update activity_main.xml as per the code given below**

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    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">


    <ListView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/lstView"/>

</LinearLayout>
```

**Step 6: Check Output on Android Emulator.**




**Voila!!** We have successfully completed this lab.