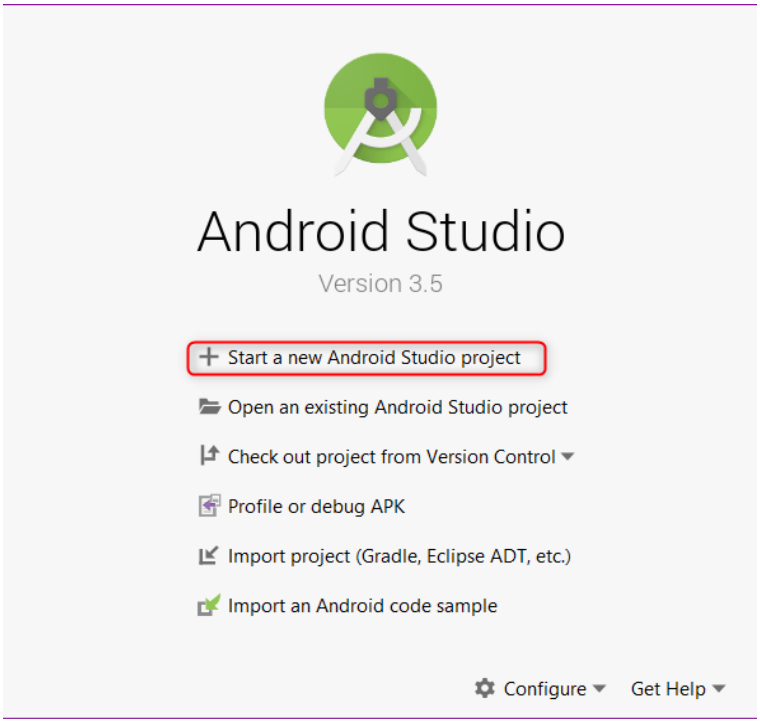
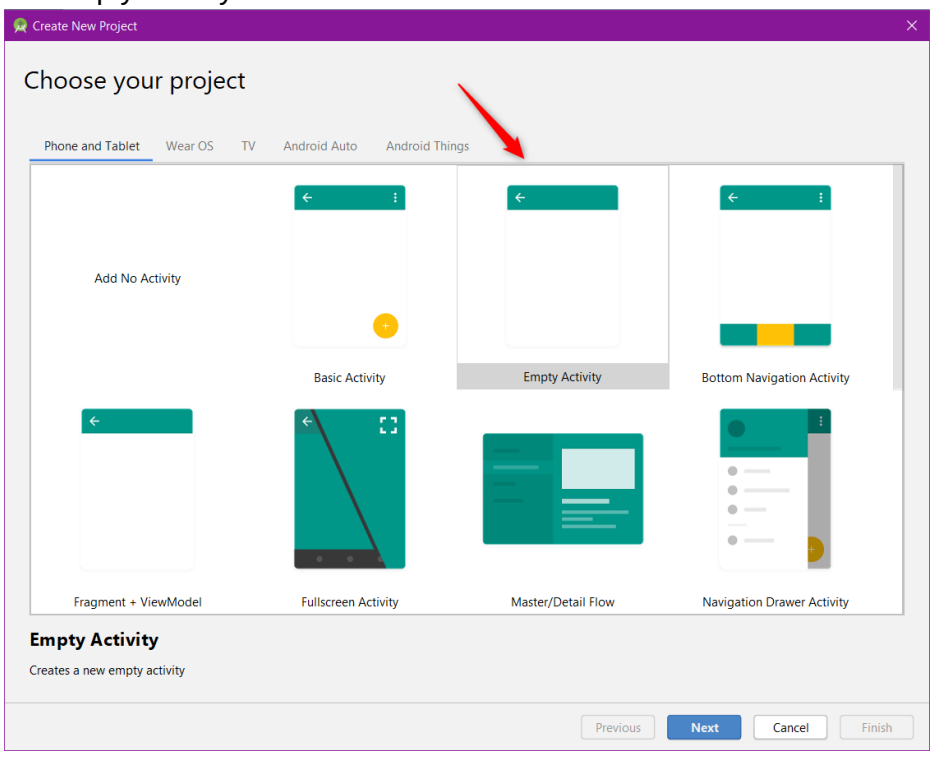
ListyCity – Instructions

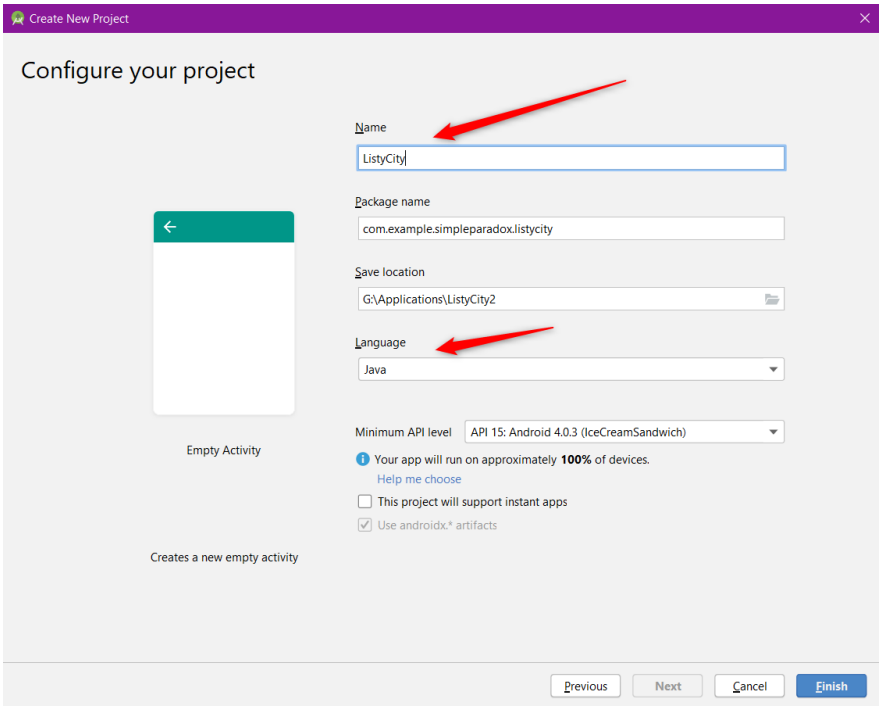
1. Create a new project in Android Studio as shown below by clicking on ‘New Project’.



2. Select Empty Activity under the ‘Phone and Tablet’ tab. Click Next.

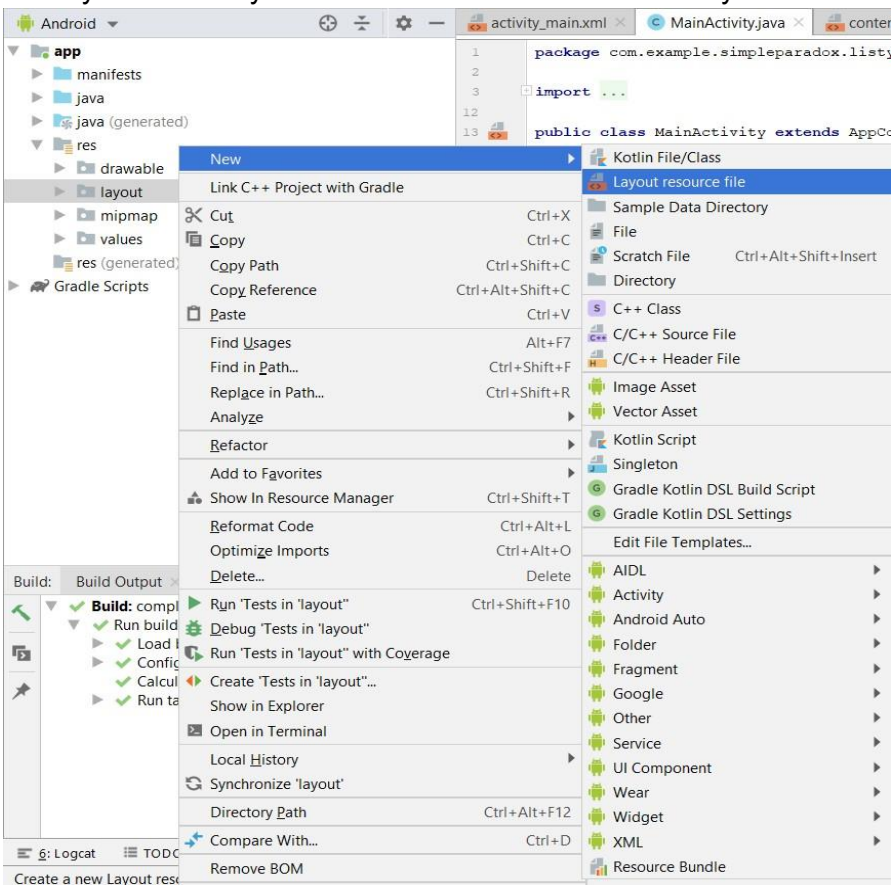


3. Configure your project.
   a. Give the project a name.
   b. Make sure the language is Java
   c. The minimum API level should be enough so that the application runs on most devices.

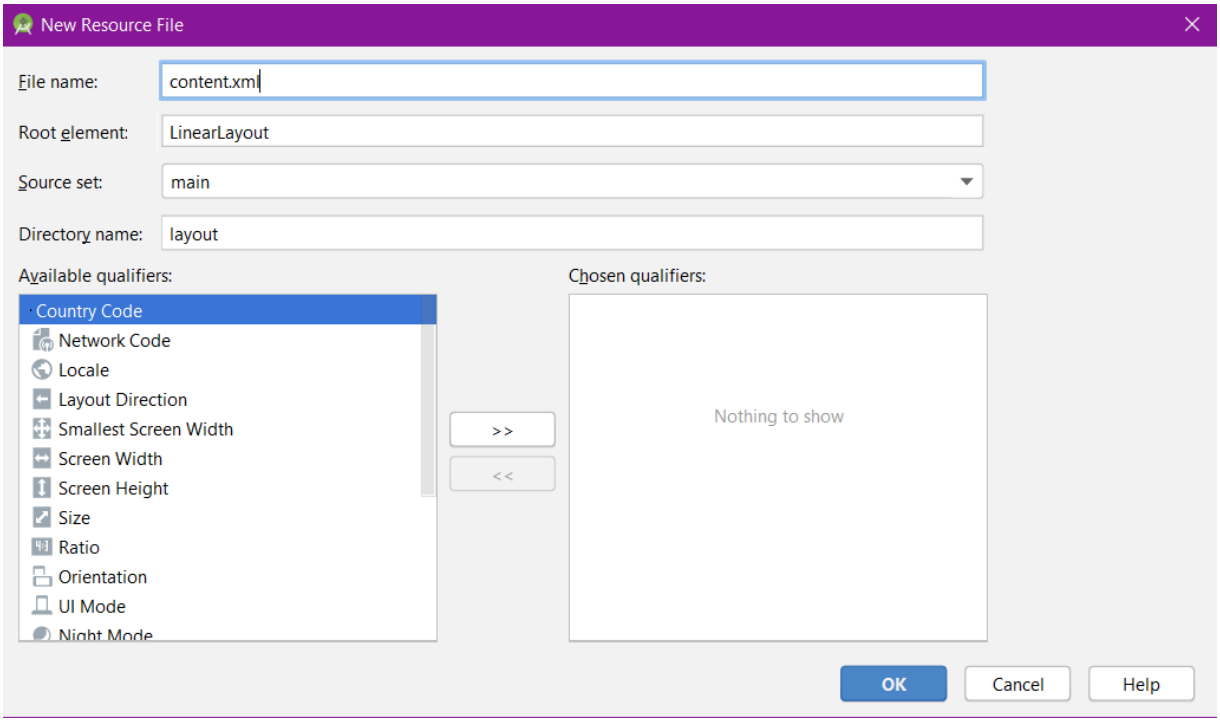


Click on finish and wait for the project to build itself.

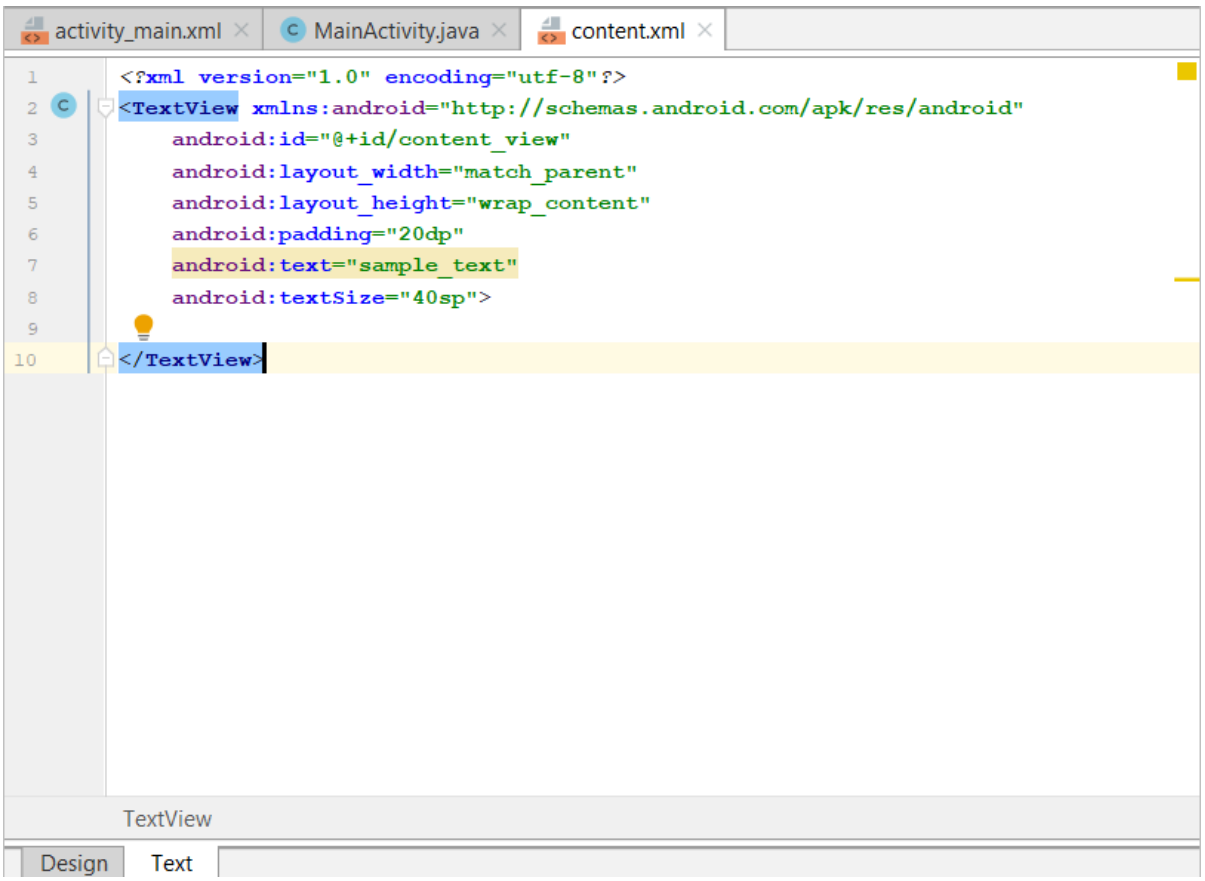
4. Navigate to app/res/layout directory in the 'Project' pane. Then right click on the 'res/layout' directory and then click on 'New' and then 'Layout Resource file'



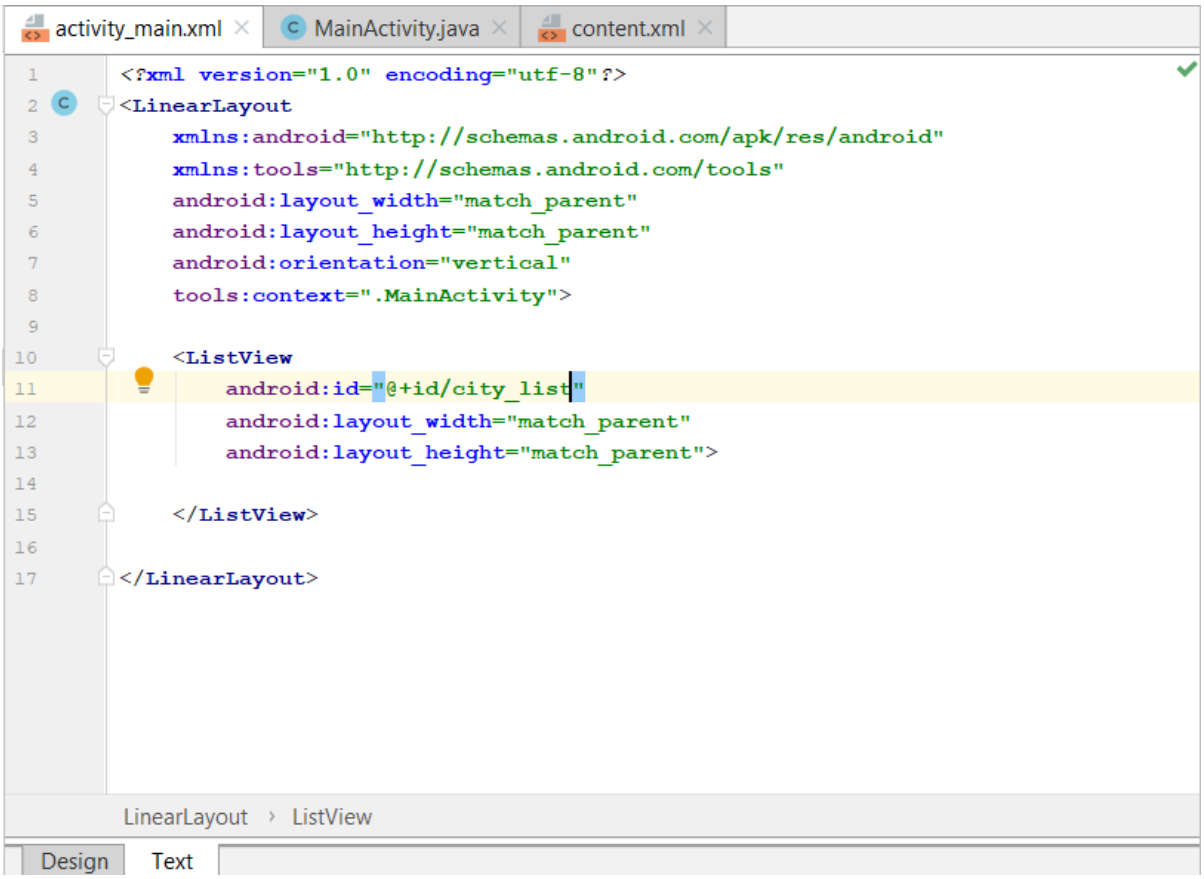
5. Give a name to the layout resource file with the extension '.xml' and then press 'OK'.



6. Now go to 'content.xml' under res/layout and then add a TextView with the following properties. Make sure the 'Text' tab is selected. Make sure you add an 'id' to the TextView.

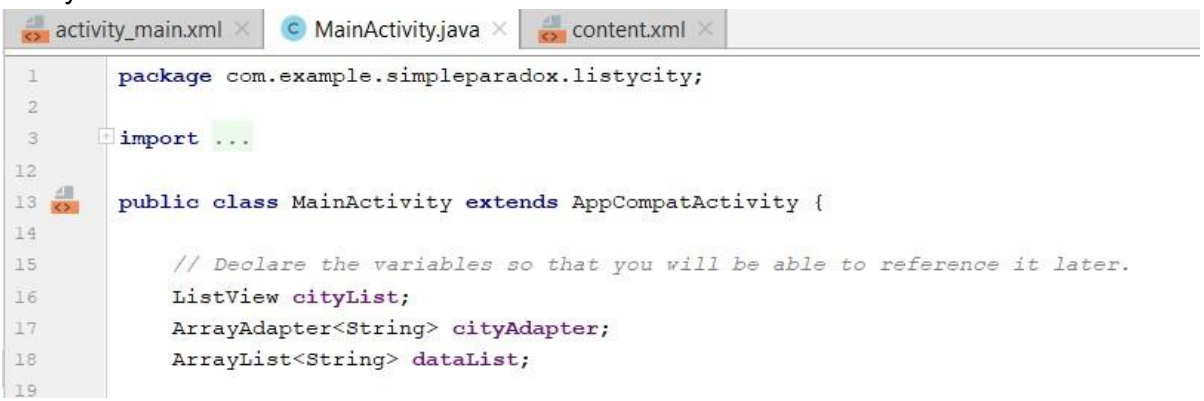


7. Go to activy_main.xml and add a ‘ListView’ inside the ‘LinearLayout’ viewgroup. Make sure you add an ‘id’ attribute to the ‘ListView’.



8. Now let’s head over to MainActivity.java file which will contain the logic for mapping the data to the ‘ListView’ so that it can be shown as a scrolling list.

9. Create References for the ‘ListView’ along with a reference for ‘ArrayAdapter’ and an ‘ArrayList’.



10. Now inside the onCreate() method, we write the logic that will help to bind the data to the ‘ListView’.
    a. First find the reference to the ‘ListView’ using findViewById() and assign it to the reference ‘cityList’.
    b. Then declare a string array consisting of cities which can be fed into the ‘ListView’ later.
    c. Create a new ‘ArrayList’ and assign it to the reference ‘dataList’. This will contain the data (the string array of cities).
    d. Add the data(string array containing city names) to the ‘dataList’ as shown in the picture below.
    e. Now we have to link the content.xml to the ‘dataList’ so that each element will be displayed in a separate row in the list.
    f. Finally, we connect the ‘ListView’ to the ‘ArrayAdapter’(cityAdapter) which will show each ‘TextView’ in the form of scrolling list.

activity_main.xml | MainActivity.java | content.xml

```
package com.example.simpleparadox.listycity;

import ...

public class MainActivity extends AppCompatActivity {

    // Declare the variables so that you will be able to reference it later.
    ListView cityList;
    ArrayAdapter<String> cityAdapter;
    ArrayList<String> dataList;

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

        cityList = findViewById(R.id.city_list);

        String []cities ={"Edmonton", "Vancouver", "Moscow", "Sydney", "Berlin", "Vienna", "Tokyo", "Beijing", "Osaka", "New Delhi"};

        dataList = new ArrayList<>();
        dataList.addAll(Arrays.asList(cities));

        cityAdapter = new ArrayAdapter<>( context: this, R.layout.content, dataList);

        cityList.setAdapter(cityAdapter);

    }


}

```