

## Lab Manual

### Lab (5): List View



## Visual Programming for Smart Devices lab

## ❖ Objectives:

create an android application using List View.

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### Task 1: Try IT An application using List View .java Write this code then show the output.

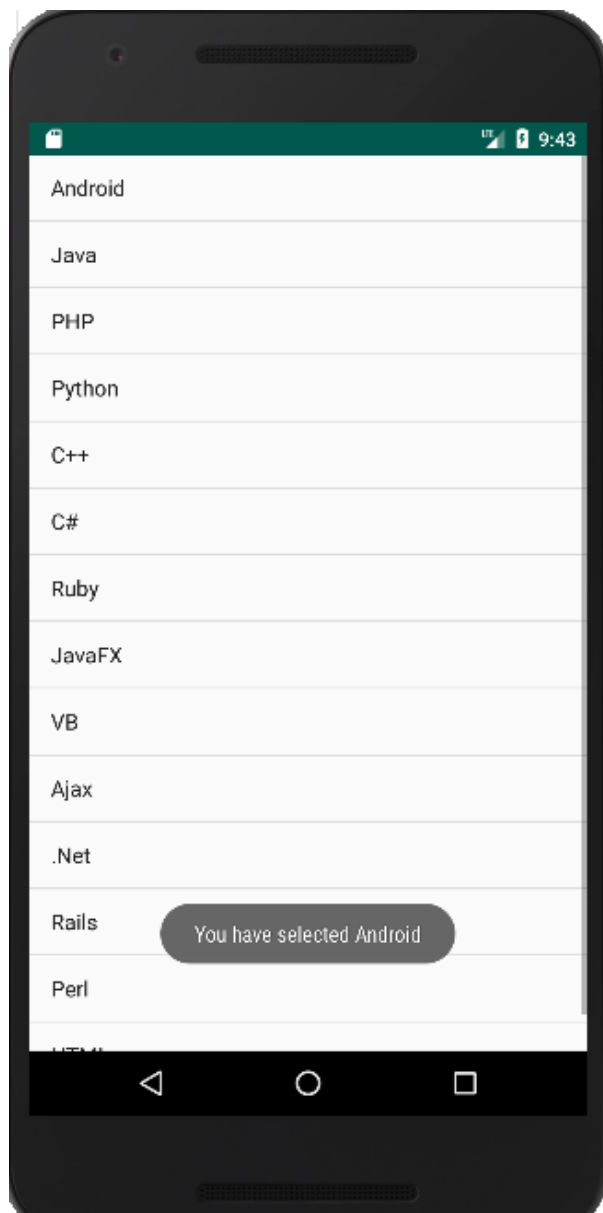
```
package com.example.oraibpc.listview;

import android.app.ListActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ListView;
import android.widget.AdapterView;
import android.widget.Toast;

public class MainActivity extends ListActivity {
    String []
    array_technology={"Android", "Java", "PHP", "Python", "C++", "C#", "Ruby", "JavaFX", "V
B", "Ajax", ".Net", "Rails", "Perl", "HTML"};
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        //called when the activity is first created.
        setListAdapter(new
        ArrayAdapter<String>(this, android.R.layout.simple_list_item_1, array_technology)
        );

    }
    public void onItemClick(ListView parent ,View v, int postion, long id)
    {
        Toast.makeText(this, "You have
        selected"+array_technology[postion], Toast.LENGTH_SHORT).show();
    }
}
```

**Note: Click an item. A message containing the item selected is displayed.**



## Task 2: Try It who to allow multiple items in the List view to be selected and how to enable filtering support.

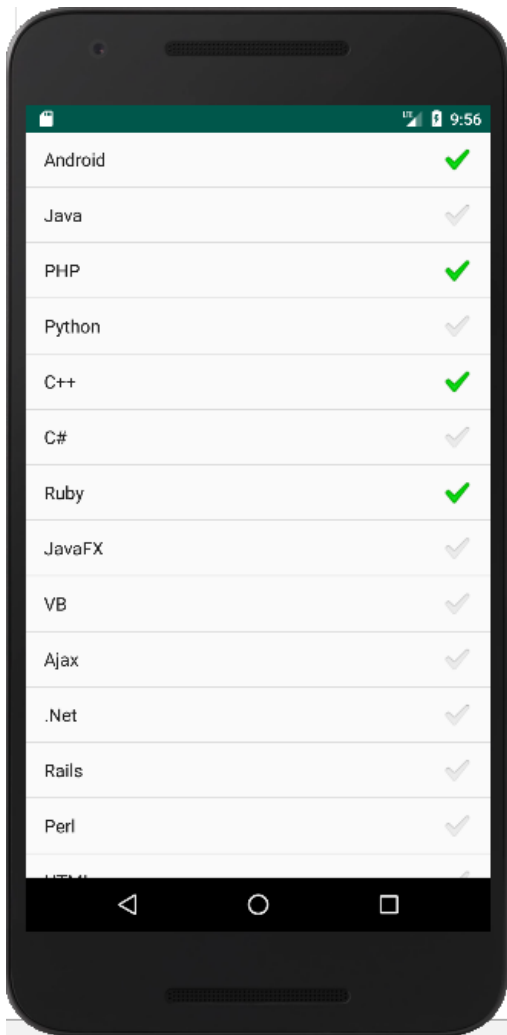
```
package com.example.oraibpc.listview;

import android.app.ListActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ListView;
import android.widget.AdapterView;
import android.widget.Toast;

public class MainActivity extends ListActivity {
    String []
    array_technology={"Android","Java","PHP","Python","C++","C#","Ruby","JavaFX","V
B","Ajax",".Net","Rails","Perl","HTML"};
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        ListView listView = getListView();

        listView.setChoiceMode(ListView.CHOICE_MODE_MULTIPLE);
        listView.setTextFilterEnabled(true);
        setListAdapter(new
        ArrayAdapter<String>(this, android.R.layout.simple_list_item
        _checked, array_technology));

    }
    public void onListItemClick(ListView parent ,View v,int postion,long id)
    {
        Toast.makeText(this,"You have selected
        "+array_technology[postion],Toast.LENGTH_SHORT).show();
    }
}
```



### Task 3: using your application created earlier, add the following

#### Strings.xml file located in the res/values folder:

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string name="hello"> Hello World ,List View Activity ! </string>
    <string name="app_name">List View </string>
    <string-array name="array_technology">
        <item>Android</item>
        <item>Java</item>
        <item>PHP</item>
        <item>Python</item>
        <item>C++</item>
        <item>C#</item>
        <item>Ruby</item>
        <item>JavaFX</item>
        <item>VB</item>
        <item>Ajax</item>
        <item>.Net</item>
        <item>Rails</item>
        <item>Perl</item>
        <item>HTML</item>
    </string-array>
</resources>
```

#### Modify the main Activity.java file as shown below:

```
package com.example.oraibpc.listview;

import android.app.ListActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ListView;
import android.widget.ArrayAdapter;
import android.widget.Toast;

public class MainActivity extends ListActivity {
    String [] array_technology;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        ListView listView = getListView();
        listView.setChoiceMode(ListView.CHOICE_MODE_MULTIPLE);
        listView.setTextFilterEnabled(true);
        array_technology =
        getResources().getStringArray(R.array.array_technology);
        setListAdapter(new
        ArrayAdapter<String>(this, android.R.layout.simple_list_item_check
        ed, array_technology));

    }
    public void onItemClick(ListView parent ,View v,int postion,long id)
    {
        Toast.makeText(this,"You have selected
        "+array_technology[postion],Toast.LENGTH_SHORT).show();
    }
}
```