



CUSTOM LIST VIEW IN ANDROID STUDIO

Add the images for the icons to appear in your Custom List View into the app\resource\drawable folder.



applepie.png



bananabread.png



cupcake.png



donut.png



eclair.png



froyo.png



gingerbread.png



honeycomb.png



icecreamsandwich.png



jellybean.png



kitkat.png



lollipop.png



marshmallow.png



nougat.png

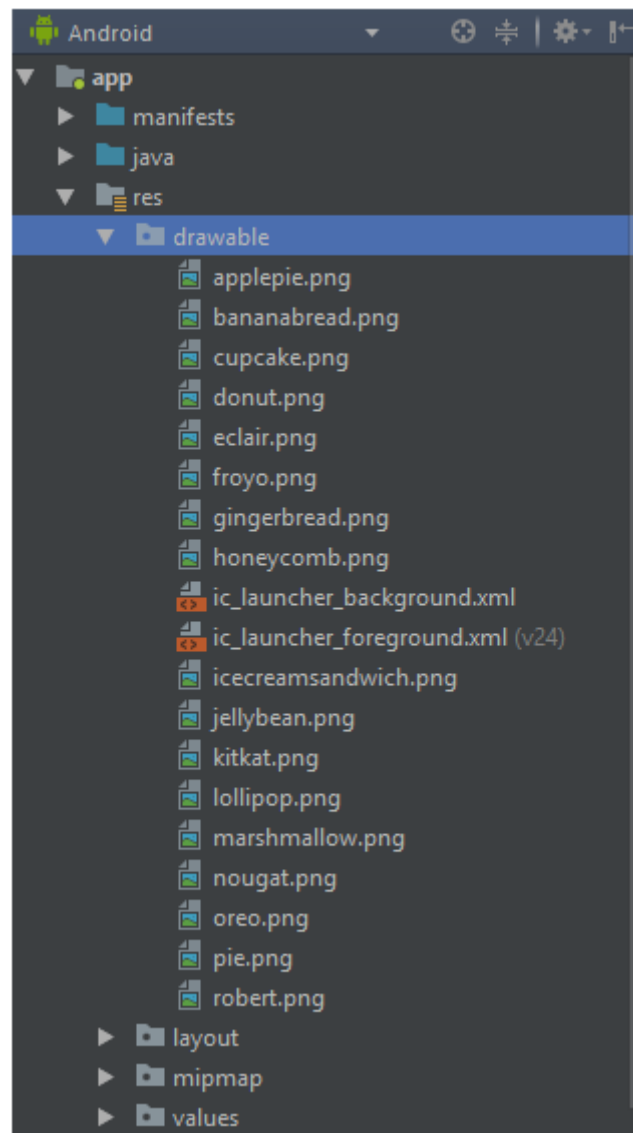


oreo.png

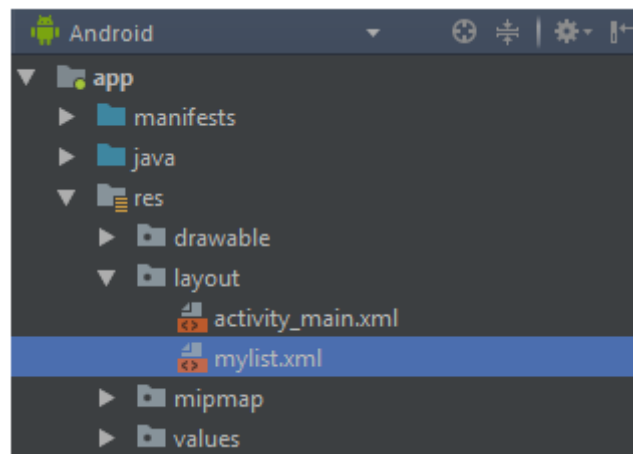


pie.png

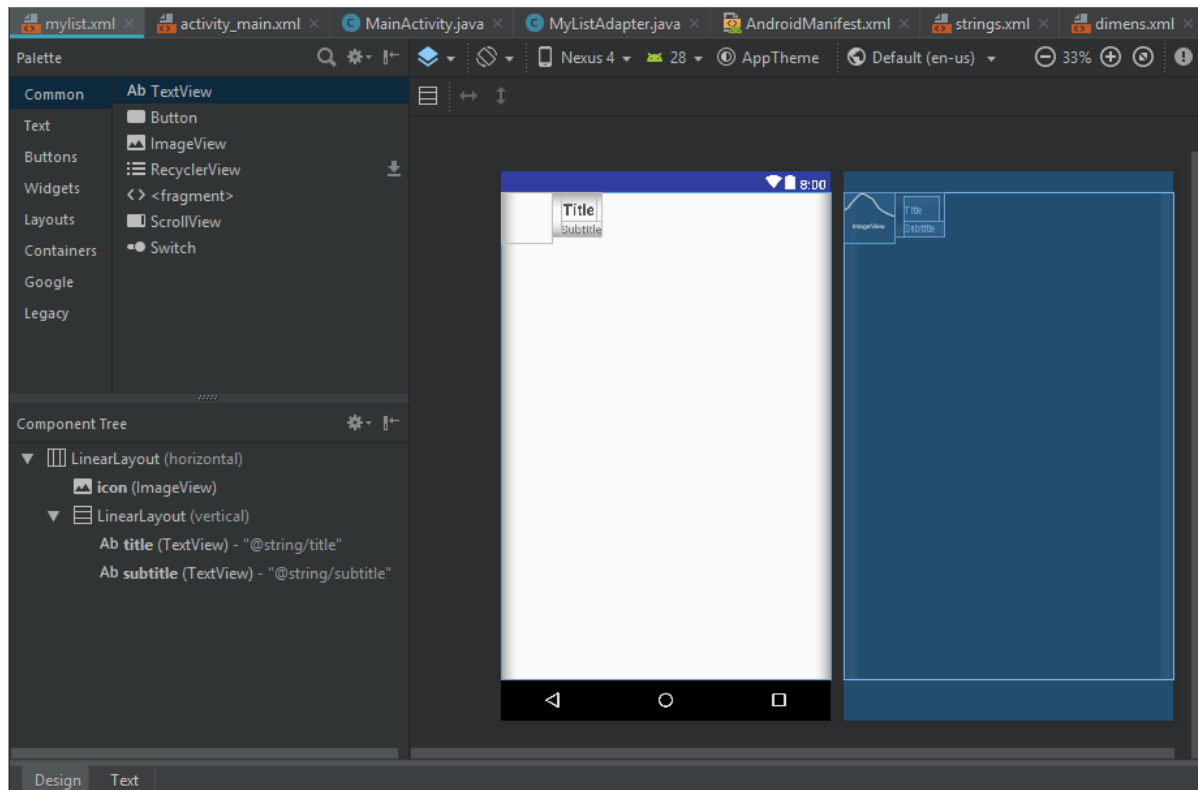
The drawable folder shall look as shown below.



Create a New Layout resource file in the app\res\layout folder and name it mylist.xml.



mylist.xml [Design]



mylist.xml [Text]

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

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="horizontal" >
```

```
<ImageView
```

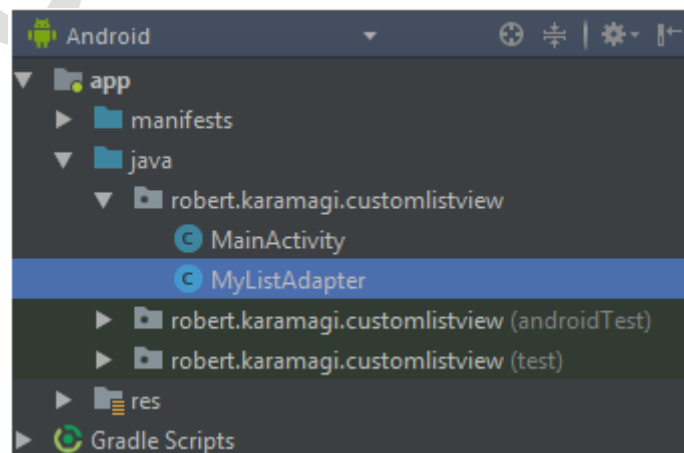
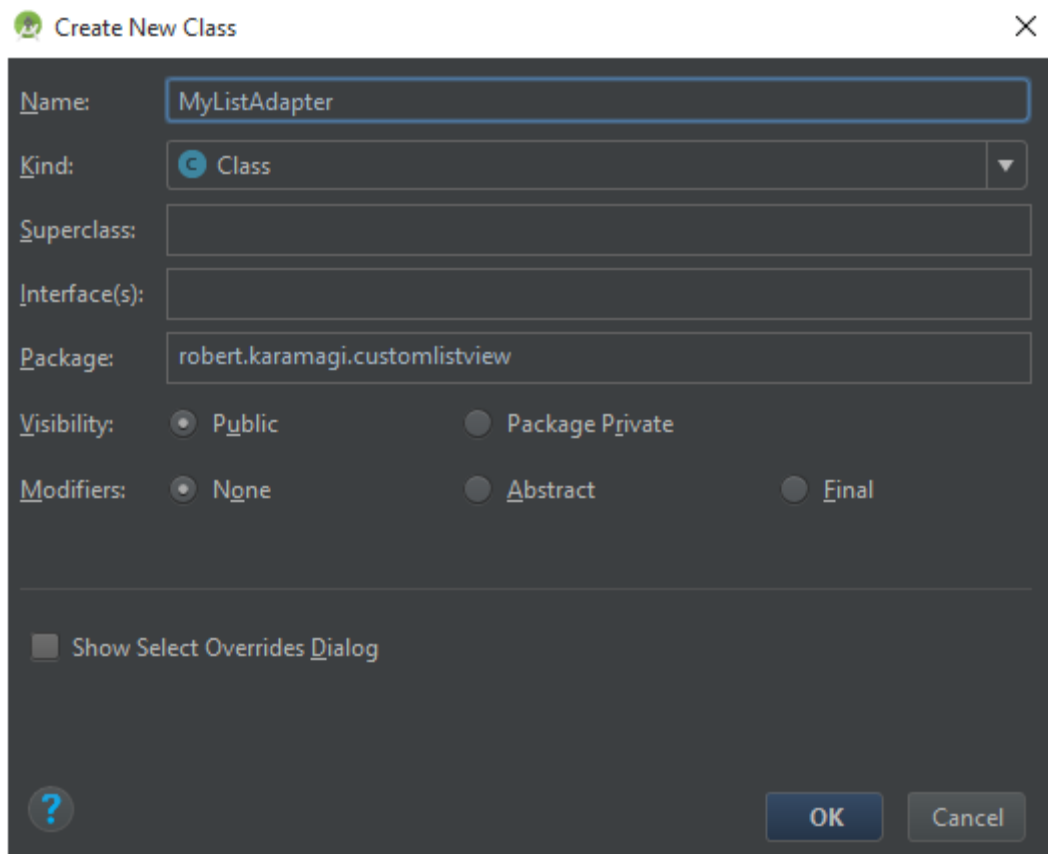
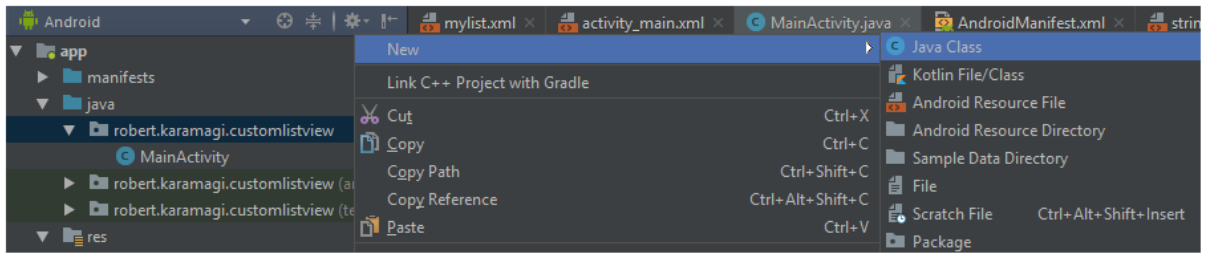
```
    android:id="@+id/icon"
    android:layout_width="60dp"
    android:layout_height="60dp"
    android:padding="5dp"
    android:contentDescription="@string/todo" />
```

```
<LinearLayout android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="vertical">

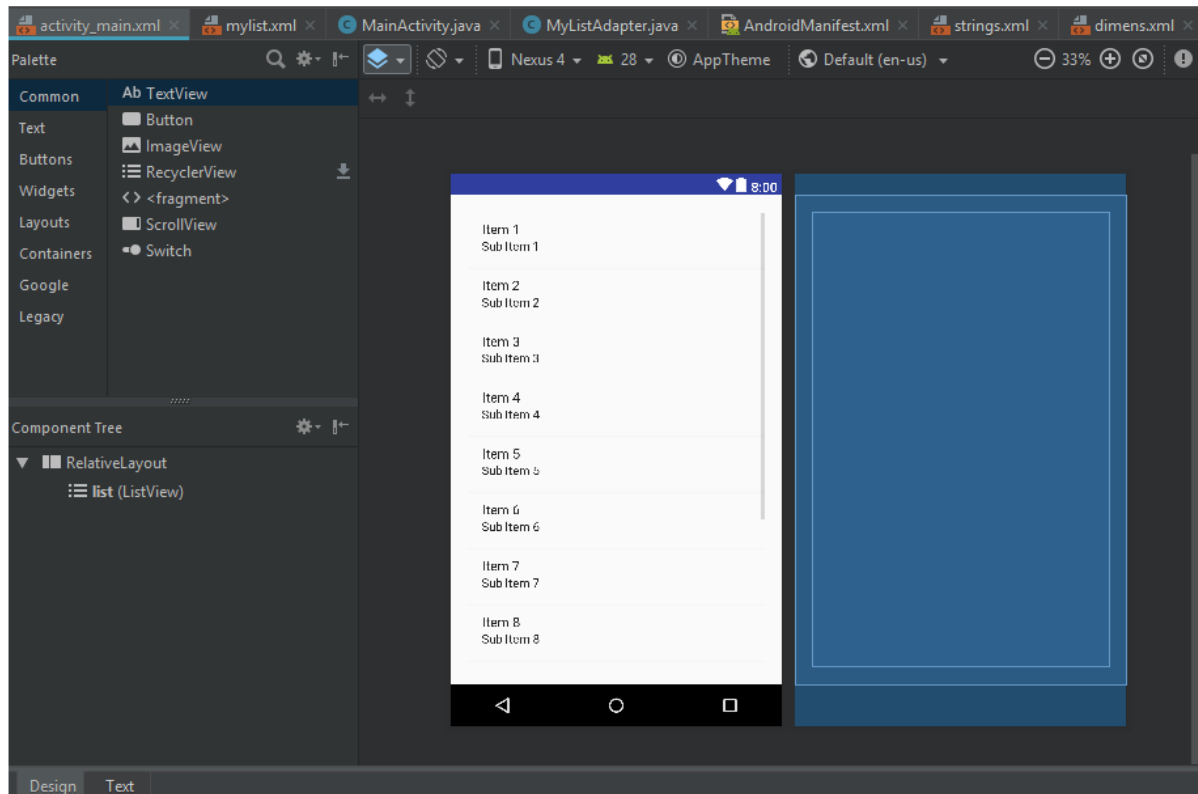
    <TextView
        android:id="@+id/title"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/title"
        android:textStyle="bold"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:layout_marginLeft="10dp"
        android:layout_marginTop="5dp"
        android:padding="2dp"
        android:textColor="#4d4d4d"
        android:layout_marginStart="10dp" />

    <TextView
        android:id="@+id/subtitle"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/subtitle"
        android:layout_marginLeft="10dp"
        android:layout_marginStart="10dp" />
</LinearLayout>
</LinearLayout>
```

Create a New Java Class in the app\java folder and name it MyListAdapter.java.



activity_main.xml [Design]



activity_main.xml [Text]

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity">

    <ListView
```

```
        android:id="@+id/list"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
    >
</ListView>
</RelativeLayout>
```

MainActivity.java

```
package robert.karamagi.customlistview;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ListView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    ListView list;

    String[] maintitle ={
        "Apple Pie","Banana Bread","Cupcake","Donut",
        "Eclair","Froyo","Gingerbread","Honeycomb",
        "Ice Cream Sandwich","Jelly Bean","KitKat","Lollipop",
        "Marshmallow","Nougat","Oreo","Pie",
    };

    String[] subtitle ={
        "v1.0, API 1","v1.1, API 2","v1.5, API 3","v1.6, API 4",
        "v2.0-2.1, API 5-7","v2.2-2.2.3, API 8","v2.3-2.3.7, API 9-10",
    };
}
```

```
"v3.0-3.2.6, API 11-13","v4.0-4.0.4, API 14-15","v4.1-4.3.1, API 16-18","v4.4-4.4.4,  
API 19-20","v5.0-5.1.1, API 21-22","v6.0-6.0.1, API 23","v7.0-7.1.2, API 24-25",  
"v8.0-8.1, API 26-27","v9.0, API 28",  
};
```

```
Integer[] imgid={
```

```
    R.drawable.applepie, R.drawable.bananabread,  
    R.drawable.cupcake,R.drawable.donut,  
    R.drawable.eclair,R.drawable.froyo,  
    R.drawable.gingerbread,R.drawable.honeycomb,  
    R.drawable.icecreamsandwich,R.drawable.jellybean,  
    R.drawable.kitkat,R.drawable.lollipop,  
    R.drawable.marshmallow,R.drawable.nougat,  
    R.drawable.oreo,R.drawable.pie,
```

```
};
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
```

```
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_main);
```

```
    MyListAdapter adapter=new MyListAdapter(this, maintitle, subtitle,imgid);
```

```
    list=(ListView)findViewById(R.id.list);
```

```
    list.setAdapter(adapter);
```

```
    list.setOnItemClickListener(new AdapterView.OnItemClickListener() {
```

```
        @Override
```

```
        public void onItemClick(AdapterView<?> parent, View view, int position, long  
id) {
```

```
            // TODO Auto-generated method stub
```

```
            if(position == 0) {
```

```
                //code specific to first list item
```

```

        Toast.makeText(getApplicationContext(),"Apple
Pie",Toast.LENGTH_SHORT).show();
    }
    else if(position == 1) {
        //code specific to 2nd list item
        Toast.makeText(getApplicationContext(),"Banana
Bread",Toast.LENGTH_SHORT).show();
    }
    else if(position == 2) {
        Toast.makeText(getApplicationContext(),"Cupcake",Toast.LENGTH_SHORT).show()
;
    }
    else if(position == 3) {
        Toast.makeText(getApplicationContext(),"Donut",Toast.LENGTH_SHORT).show();
    }
    else if(position == 4) {
        Toast.makeText(getApplicationContext(),"Eclair",Toast.LENGTH_SHORT).show();
    }
    else if(position == 5) {
        Toast.makeText(getApplicationContext(),"Froyo",Toast.LENGTH_SHORT).show();
    }
    else if(position == 6) {
        Toast.makeText(getApplicationContext(),"Gingerbread",Toast.LENGTH_SHORT).sho
w();
    }
    else if(position == 7) {
        Toast.makeText(getApplicationContext(),"Honeycomb",Toast.LENGTH_SHORT).sho
w();
    }
    else if(position == 8) {
        Toast.makeText(getApplicationContext(),"Ice Cream
Sandwich",Toast.LENGTH_SHORT).show();
    }

```

```

    }
    else if(position == 9) {
        Toast.makeText(getApplicationContext(),"Jelly
Bean",Toast.LENGTH_SHORT).show();
    }
    else if(position == 10) {
        Toast.makeText(getApplicationContext(),"KitKat",Toast.LENGTH_SHORT).show();
    }
    else if(position == 11) {
        Toast.makeText(getApplicationContext(),"Lollipop",Toast.LENGTH_SHORT).show();
    }
    else if(position == 12) {
        Toast.makeText(getApplicationContext(),"Marshmallow",Toast.LENGTH_SHORT).sh
ow();
    }
    else if(position == 13) {
        Toast.makeText(getApplicationContext(),"Nougat",Toast.LENGTH_SHORT).show();
    }
    else if(position == 14) {
        Toast.makeText(getApplicationContext(),"Oreo",Toast.LENGTH_SHORT).show();
    }
    else if(position == 15) {
        Toast.makeText(getApplicationContext(),"Pie",Toast.LENGTH_SHORT).show();
    }
    }
    });
}
}

```

MyListAdapter.java

```
package robert.karamagi.customlistview;

import android.app.Activity;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ArrayAdapter;
import android.widget.ImageView;
import android.widget.TextView;

public class MyListAdapter extends ArrayAdapter<String> {

    private final Activity context;
    private final String[] maintitle;
    private final String[] subtitle;
    private final Integer[] imgid;

    public MyListAdapter(Activity context, String[] maintitle,String[] subtitle, Integer[]
imgid) {
        super(context, R.layout.mylist, maintitle);
        // TODO Auto-generated constructor stub

        this.context=context;
        this.maintitle=maintitle;
        this.subtitle=subtitle;
        this.imgid=imgid;

    }
```

```

public View getView(int position,View view,ViewGroup parent) {
    LayoutInflater inflater=context.getLayoutInflater();
    View rowView=inflater.inflate(R.layout.mylist, null,true);

    TextView titleText = (TextView) rowView.findViewById(R.id.title);
    ImageView imageView = (ImageView) rowView.findViewById(R.id.icon);
    TextView subtitleText = (TextView) rowView.findViewById(R.id.subtitle);

    titleText.setText(maintitle[position]);
    imageView.setImageResource(imgid[position]);
    subtitleText.setText(subtitle[position]);

    return rowView;

};
}

```

AndroidManifest.xml

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="robert.karamagi.customlistview">

    <application
        android:allowBackup="true"
        android:icon="@drawable/robert"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>

```

```
        <action android:name="android.intent.action.MAIN" />

        <category android:name="android.intent.category.LAUNCHER" />
    </intent-filter>
</activity>
</application>

</manifest>
```

strings.xml

```
<resources>
    <string name="app_name">Custom List View</string>
    <string name="todo">TODO</string>
    <string name="title">Title</string>
    <string name="subtitle">Subtitle</string>
</resources>
```

dimens.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <dimen name="activity_vertical_margin">20dp</dimen>
    <dimen name="activity_horizontal_margin">20dp</dimen>
</resources>
```

Custom List View



Apple Pie

v1.0, API 1



Banana Bread

v1.1, API 2



Cupcake

v1.5, API 3



Donut

v1.6, API 4



Eclair

v2.0-2.1, API 5-7



Froyo

v2.2-2.2.3, API 8



Gingerbread

v2.3-2.3.7, API 9-10



Honeycomb

v3.0-3.2.6, API 11-13



Ice Cream Sandwich

v4.0-4.0.4, API 14-15



Jelly Bean

v4.1-4.3.1, API 16-18





Custom List View



Gingerbread

v2.3-2.3.7, API 9-10



Honeycomb

v3.0-3.2.6, API 11-13



Ice Cream Sandwich

v4.0-4.0.4, API 14-15



Jelly Bean

v4.1-4.3.1, API 16-18



KitKat

v4.4-4.4.4, API 19-20



Lollipop

v5.0-5.1.1, API 21-22



Marshmallow

v6.0-6.0.1, API 23



Nougat

v7.0-7.1.2, API 24-25



Oreo

v8.0-8.1, API 26-27

Oreo



Pie

v9.0, API 28

