Android Simple Graphics Example

The **android.graphics.Canvas** can be used to draw graphics in android. It provides methods to draw oval, rectangle, picture, text, line etc.

The **android.graphics.Paint** class is used with canvas to draw objects. It holds the information of color and style.

In this example, we are going to display 2D graphics in android.

activity\_main.xml

*File: activity\_main.xml*

1. **<RelativeLayout** xmlns:androclass="http://schemas.android.com/apk/res/android"
2. xmlns:tools="http://schemas.android.com/tools"
3. android:layout\_width="match\_parent"
4. android:layout\_height="match\_parent"
5. android:paddingBottom="@dimen/activity\_vertical\_margin"
6. android:paddingLeft="@dimen/activity\_horizontal\_margin"
7. android:paddingRight="@dimen/activity\_horizontal\_margin"
8. android:paddingTop="@dimen/activity\_vertical\_margin"
9. tools:context=".MainActivity" **>**
11. **<TextView**
12. android:layout\_width="wrap\_content"
13. android:layout\_height="wrap\_content"
14. android:text="@string/hello\_world" **/>**
16. **</RelativeLayout>**

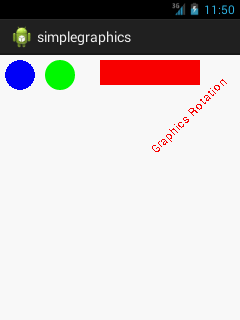
Activity class

*File: MainActivity.java*

1. **package** com.example.simplegraphics;
3. **import** android.os.Bundle;
4. **import** android.app.Activity;
5. **import** android.view.Menu;
6. **import** android.content.Context;
7. **import** android.graphics.Canvas;
8. **import** android.graphics.Color;
9. **import** android.graphics.Paint;
10. **import** android.view.View;
12. **public** **class** MainActivity **extends** Activity {
14. DemoView demoview;
15. /\*\* Called when the activity is first created. \*/
16. @Override
17. **public** **void** onCreate(Bundle savedInstanceState) {
18. **super**.onCreate(savedInstanceState);
19. demoview = **new** DemoView(**this**);
20. setContentView(demoview);
21. }
23. **private** **class** DemoView **extends** View{
24. **public** DemoView(Context context){
25. **super**(context);
26. }
28. @Override **protected** **void** onDraw(Canvas canvas) {
29. **super**.onDraw(canvas);
31. // custom drawing code here
32. Paint paint = **new** Paint();
33. paint.setStyle(Paint.Style.FILL);
35. // make the entire canvas white
36. paint.setColor(Color.WHITE);
37. canvas.drawPaint(paint);
39. // draw blue circle with anti aliasing turned off
40. paint.setAntiAlias(**false**);
41. paint.setColor(Color.BLUE);
42. canvas.drawCircle(20, 20, 15, paint);
44. // draw green circle with anti aliasing turned on
45. paint.setAntiAlias(**true**);
46. paint.setColor(Color.GREEN);
47. canvas.drawCircle(60, 20, 15, paint);
49. // draw red rectangle with anti aliasing turned off
50. paint.setAntiAlias(**false**);
51. paint.setColor(Color.RED);
52. canvas.drawRect(100, 5, 200, 30, paint);
54. // draw the rotated text
55. canvas.rotate(-45);
57. paint.setStyle(Paint.Style.FILL);
58. canvas.drawText("Graphics Rotation", 40, 180, paint);
60. //undo the rotate
61. canvas.restore();
62. }
63. }
64. @Override
65. **public** **boolean** onCreateOptionsMenu(Menu menu) {
66. // Inflate the menu; this adds items to the action bar if it is present.
67. getMenuInflater().inflate(R.menu.main, menu);
68. **return** **true**;
69. }
70. }

[download this android example](https://static.javatpoint.com/src/android/simplegraphics.zip)

Output:



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