

JAVA EXAMPLES - DISPLAY A PIE CHART

http://www.tutorialspoint.com/javaexamples/gui_piechart.htm

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Problem Description:

How to display a pie chart using a frame?

Solution:

Following example displays how to display a piechart by making Slices class & creating arc depending on the slices.

```
import java.awt.Color;
import java.awt.Graphics;
import java.awt.Graphics2D;
import java.awt.Rectangle;

import javax.swing.JComponent;
import javax.swing.JFrame;

class Slice {
    double value;
    Color color;
    public Slice(double value, Color color) {
        this.value = value;
        this.color = color;
    }
}

class MyComponent extends JComponent {
    Slice[] slices = { new Slice(5, Color.black),
        new Slice(33, Color.green),
        new Slice(20, Color.yellow), new Slice(15, Color.red) };
    MyComponent() {}
    public void paint(Graphics g) {
        drawPie((Graphics2D) g, getBounds(), slices);
    }
    void drawPie(Graphics2D g, Rectangle area, Slice[] slices) {
        double total = 0.0D;
        for (int i = 0; i < slices.length; i++) {
            total += slices[i].value;
        }
        double curValue = 0.0D;
        int startAngle = 0;
        for (int i = 0; i < slices.length; i++) {
            startAngle = (int) (curValue * 360 / total);
            int arcAngle = (int) (slices[i].value * 360 / total);
            g.setColor(slices[i].color);
            g.fillArc(area.x, area.y, area.width, area.height,
                startAngle, arcAngle);
            curValue += slices[i].value;
        }
    }
}

public class Main {
    public static void main(String[] argv) {
        JFrame frame = new JFrame();
        frame.getContentPane().add(new MyComponent());
        frame.setSize(300, 200);
        frame.setVisible(true);
    }
}
```

Result:

The above code sample will produce the following result.

Displays a piechart in a frame.