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import java.awt.*;
import java.awt.geom.*;
import javax.swing.*;
import javax.swing.event.*;

class myIcon implements Icon{
    private int width;

    private Color myColor;
    public myIcon(int aWidth, Color c)
    {
        width = aWidth;
        myColor = c;
    }

    public int getIconWidth()
    {
        return width;
    }
    public int getIconHeight()
    {
        return width;
    }
    public void setIconWidth(int w){
        width=w;
    }

    public void paintIcon(Component c, Graphics g, int x, int y){
        Graphics2D g2 = (Graphics2D) g;
        Ellipse2D.Double myC = new Ellipse2D.Double(0,0, width, width);
        g2.setColor(myColor);
        g2.fill(myC);
    }
}

public class slider
{
    private static final int FRAME_WIDTH = 300;
    private static final int FRAME_HEIGHT = 300;

    private static final int MIN_ICON_SIZE = 0;
    private static final int MAX_ICON_SIZE = FRAME_WIDTH;

    private static myIcon icon1;
    private static JLabel label1;
    private static myIcon icon2;
    private static JLabel label2;
    private static JSlider zoomSlider;
    private static JLabel textDisplay;

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public static void main(String[] args)
{
    JFrame frame = new JFrame();

    frame.setSize(FRAME_WIDTH, FRAME_HEIGHT);

    Container contentPane = frame.getContentPane();
    //frame.setLayout(new FlowLayout());
    frame.setLayout(new BorderLayout(contentPane, BorderLayout.Y_AXIS));
    zoomSlider = new JSlider(MIN_ICON_SIZE, MAX_ICON_SIZE);
    zoomSlider.addChangeListener(createZoomSliderListener\(\));
    textDisplay=new JLabel("Diameter of Red Circle: " +Integer.toString(zoomSlider.getValue()));
    icon1 = new myIcon(MAX_ICON_SIZE, new Color(1.0f, 0.0f, 0.0f));
    label1 = new JLabel(icon1);
    icon2 = new myIcon(FRAME_WIDTH, new Color(0.0f, 1.0f, 0.0f));
    label2 = new JLabel(icon2);

    frame.add(zoomSlider);
    /*
    frame.add(label);
    frame.add(label2);
    frame.add(textDisplay);
    */
    JComponent box1 = new JPanel();
    box1.setLayout(new BorderLayout(box1, BorderLayout.Y_AXIS));
    JPanel panel1 = new JPanel();
    frame.add(box1);
    box1.add(panel1);
    panel1.add(label1);

    JComponent box2 = new JPanel();
    box2.setLayout(new BorderLayout(box2, BorderLayout.Y_AXIS));
    JPanel panel2 = new JPanel();
    frame.add(box2);
    box2.add(panel2);
    panel2.add(label2);

    JComponent box3 = new JPanel();
    box3.setLayout(new BorderLayout(box3, BorderLayout.Y_AXIS));
    JPanel panel3 = new JPanel();
    frame.add(box3);
    box3.add(panel3);
    panel3.add(textDisplay);

    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.pack();

    icon1.setIconWidth(zoomSlider.getValue());

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        icon2.setIconWidth(FRAME_WIDTH - zoomSlider.getValue());
        frame.setVisible(true);
    }

    /**
     * Creates a change listener for a slider that changes the width of
     * an icon.
     */
    public static ChangeListener createZoomSliderListener()
    {
        return new
            ChangeListener()
            {
                public void stateChanged(ChangeEvent event) {
                    icon1.setIconWidth(zoomSlider.getValue());
                    icon2.setIconWidth(FRAME_WIDTH - zoomSlider.getValue());
                    textDisplay.setText("Diameter of Red Circle: "
+Integer.toString(zoomSlider.getValue()));
                    label1.repaint();
                    label2.repaint();
                }
            };
    }
}

```