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import java.awt.Color;
import java.awt.Graphics;
import java.awt.Image;
import javax.swing.JPanel;
import javax.swing.ImageIcon;
import javax.swing.JFrame;
/**
 * Class that draws wireframe graphics using the Graphics class.
 * The class
 * extends JPanel in order to override
 * the method paintComponent(Graphics g) to draw custom graphics.
 * This is
 * standard practice in Swing.
 */
public class AWTGraphics extends JPanel {
    // Unique version ID for this class to ensure saved objects can
    // be loaded safely
    private static final long serialVersionUID = 1L;
    // main method to launch the program as a standalone application
    // - no need to modify
    public static void main(String[] args) {
        AWTGraphics panel = new AWTGraphics();
        JFrame frame = new JFrame("AWT Graphics"); // Title of frame
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setSize(1000, 650); // Match your drawing dimensions width
        // and height
        frame.add(panel);
        frame.setVisible(true);
    }
    /**
     * Draws a cube.
     * @param g the Graphics object used for drawing shapes, text, and
     * images
     */
    public void drawCube(Graphics g) {

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        g.drawRect(125,100, 200 ,200);
        g.drawRect(50,25,200,200);
        g.drawLine(50,25,125,100);
        g.drawLine(250,25,325,100);
        g.drawLine(50,225,125,300);
        g.drawLine(250,225,325,300);
    }

    /**
    * Draws a sphere.
    * @param g the Graphics object used for drawing shapes, text, and
    images
    */
    public void drawSphere(Graphics g) {
        g.drawOval(((125+50)/2, (100+25)/2, 200,200);
        g.drawOval(((125+50)/2)+75,(100+25)/2,50,200);
        g.drawOval(((125+50)/2)+50,(100+25)/2,100,200);
        g.drawOval(((125+50)/2)+25,(100+25)/2,150,200);
        g.drawOval((125+50)/2,((100+25)/2)+75,200,50);
        g.drawOval((125+50)/2,((100+25)/2)+50,200,100);
        g.drawOval((125+50)/2,((100+25)/2)+25,200,150);
    }

    /**
    * Draws an inscribed and circumscribed triangle.
    * @param g the Graphics object used for drawing shapes, text, and
    images
    */
    public void drawTriangle(Graphics g) {
        g.drawOval(770,330,200,200);
        g.drawLine(770,430,930,350);
        g.drawLine(930,350,900,525);
        g.drawLine(770,430,900,525);
        g.drawOval(815,389,99,99);
    }

    /**
    * Draws block letters.

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* @param g the Graphics object used for drawing shapes, text, and
images
*/
public void drawBlockLetters(Graphics g) {
    g.setColor(Color.RED);
    g.fillRect(20,350,90,30);
    g.fillRect(20,380,30,60);
    g.fillRect(50,410,60,30);
    g.fillRect(80,440,30,60);
    g.fillRect(20,470,60,30);

    g.setColor(Color.ORANGE);
    g.fillRect(120,350,30,150);
    g.fillRect(150,350,30,30);
    g.fillRect(150,410,30,30);
    g.fillRect(180,350,30,150);

    g.setColor(Color.YELLOW);
    g.fillRect(220,350,30,150);
    g.fillRect(250,470,60,30);

    g.setColor(Color.GREEN);
    g.fillRect(320,350,30,150);
    g.fillRect(350,470,30,30);
    g.fillRect(380,350,30,150);

    g.setColor(Color.BLUE);
    g.fillRect(420,350,90,30);
    g.fillRect(450,380,30,120);

    g.setColor(Color.magenta);
    g.fillRect(520,350,30,90);
    g.fillRect(520,470,30,30);
}
/**
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* Draws a Pacmen flower.
* @param g the Graphics object used for drawing shapes, text, and
images
*/
public void drawPacmenFlower(Graphics g) {
    g.setColor(Color.YELLOW);
    g.fillRect(640, 420, 45, 45);
    g.setColor(Color.PINK);
    g.fillArc(620, 350, 75, 75, 135, 270);
    g.fillArc(670, 400, 75, 75, 45, 270);
    g.fillArc(620, 450, 75, 75, 315, 270);
    g.fillArc(570, 400, 75, 75, 225, 270);
}

public void drawImage(Graphics g) {
    Image HakujiKoyuki = new
ImageIcon("/Users/donyadarawcheh/eclipse-workspace/Labs/src/HakujiKoyuki.png").getImage();
    Image UpperMoons = new
ImageIcon("/Users/donyadarawcheh/eclipse-workspace/Labs/src/UpperMoons.png").getImage();
    g.drawImage(HakujiKoyuki, 375, 50, 825, 300, 0, 0, 855, 481,
this);
    g.drawImage(UpperMoons, 700, 50, 1175, 300, 0, 0,
1000, 481, this);
}

/**
* Overrides JPanel's paintComponent method to perform custom
drawing.
* @param g the Graphics object used for drawing shapes, text, and
images
*/
@Override
protected void paintComponent(Graphics g) {
    super.paintComponent(g); // Clears the panel before drawing
drawCube(g);
}

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drawSphere(g);  
drawTriangle(g);  
drawBlockLetters(g);  
drawPacmenFlower(g);  
drawImage(g);  
}  
}
```