//GOPIKRISHNA V | S3 CSE A | 52

import java.awt.\*;  
import java.awt.event.\*;  
import java.util.\*;  
import javax.swing.\*;  
  
public class traffic extends JFrame implements ItemListener  
{  
 JRadioButton jr1;  
 JRadioButton jr2;  
 JRadioButton jr3;  
  
 ButtonGroup b = new ButtonGroup();  
  
 int x = 0, y = 0, z = 0;  
 public traffic()  
 {  
 super();  
 setLayout(new FlowLayout());  
  
 jr1 = new JRadioButton("Red");  
 jr2 = new JRadioButton("Yellow");  
 jr3 = new JRadioButton("Green");  
  
 jr1.addItemListener(this);  
 jr2.addItemListener(this);  
 jr3.addItemListener(this);  
  
 add(jr1);  
 add(jr2);  
 add(jr3);  
 b.add(jr1);  
 b.add(jr2);  
 b.add(jr3);  
  
 addWindowListener(new WindowAdapter()  
 {  
 public void windowClosing(WindowEvent e)  
 {  
 System.exit(0);  
 }  
 });  
 }  
  
 public void itemStateChanged(ItemEvent ie)  
 {  
 if (ie.getSource() == jr1)  
 {  
 if (ie.getStateChange() == 1)  
 {  
 x = 1;  
 repaint();  
 }  
 }  
  
 if (ie.getSource() == jr2)  
 {  
 if (ie.getStateChange() == 1)  
 {  
 y = 1;  
 repaint();  
 }  
 }  
  
 if (ie.getSource() == jr3)  
 {  
 if (ie.getStateChange() == 1)  
 {  
 z = 1;  
 repaint();  
 }  
 }  
 }  
  
 public void paint(Graphics g)  
 {   
 g.fillRect(200,130,100,260);  
 g.setColor(Color.BLACK);  
 g.fillRect(235,390,30,110);  
 g.setColor(Color.BLACK);  
 g.drawOval(220, 150, 62, 62);  
 g.drawOval(220, 230, 62, 62);  
 g.drawOval(220, 310, 62, 62);  
  
 if (x == 1)  
 {  
 g.setColor(Color.RED);  
 g.fillOval(220, 150, 60, 60);  
 g.setColor(Color.WHITE);  
 g.fillOval(220, 230, 60, 60);  
 g.setColor(Color.WHITE);  
 g.fillOval(220, 310, 60, 60);  
 x = 0;  
 }  
  
 if (y == 1)  
 {  
 g.setColor(Color.WHITE);  
 g.fillOval(220, 150, 60, 60);  
 g.setColor(Color.YELLOW);  
 g.fillOval(220, 230, 60, 60);  
 g.setColor(Color.WHITE);  
 g.fillOval(220, 310, 60, 60);  
 y = 0;  
 }  
  
 if (z == 1)  
 {  
 g.setColor(Color.WHITE);  
 g.fillOval(220, 150, 60, 60);  
 g.setColor(Color.WHITE);  
 g.fillOval(220, 230, 60, 60);  
 g.setColor(Color.GREEN);  
 g.fillOval(220, 310, 60, 60);  
 z = 0;  
 }  
 }  
  
 public static void main(String args[])  
 {  
 JFrame jf = new traffic();  
  
 jf.setSize(500, 500);  
 jf.setVisible(true);  
 }  
}  
  
**OUTPUT**

