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package Homework3.window;
import javax.swing.*;
import javax.swing.border.Border;
import java.awt.*;
import java.awt.event.*;
public class RadioButtons extends JPanel {
    private JFrame window;
    private JPanel panel, panel1, panel2, panel3, panel4;
    private JTextArea textOutput;
    private JRadioButton green, red, orange, blue, yellow, black;
    public RadioButtons() {
        //create the window
        window = new JFrame("GridLayout structure");
        //create the main panel
        panel = new JPanel(new GridLayout(4, 0, 20, 10));
        window.add(panel);
        //create a border
        Border whiteBorder = BorderFactory.createLineBorder(Color.white, 5);
        panel.setBorder(whiteBorder);
        //create the radio buttons
        green = new JRadioButton("Green", false);
        red = new JRadioButton("Red", false);
        orange = new JRadioButton("Orange", false);
        blue = new JRadioButton("Blue", false);
        yellow = new JRadioButton("Yellow", false);
        black = new JRadioButton("Black", false);
        //create a radio group
        ButtonGroup buttonGroup = new ButtonGroup();
        //add radio buttons to the radio group
        buttonGroup.add(green);
        buttonGroup.add(red);
        buttonGroup.add(orange);
        buttonGroup.add(blue);
        buttonGroup.add(yellow);
        buttonGroup.add(black);
        //create the text field
        textOutput = new JTextArea();
        panel1 = new JPanel();
        panel1.setLayout(new GridLayout());
        panel1.add(green);
        panel1.add(red);
        //attach and add the event handler to radio buttons green and red
        green.addItemListener(new ItemListener() {
            @Override
            public void itemStateChanged(ItemEvent e) {
                if (green.isSelected()) {
                    textOutput.setText("Green");
                } else {
                    textOutput.setText("");
                }
            }
        });
        red.addItemListener(new ItemListener() {
            @Override
            public void itemStateChanged(ItemEvent e) {
                if (red.isSelected()) {
                    textOutput.setText("Red");
                } else {
                    textOutput.setText("");
                }
            }
        });
        panel.add(panel1);
        panel2 = new JPanel();
        panel2.setLayout(new GridLayout());
        panel2.add(orange);
        panel2.add(blue);
        //attach and add the event handler to radio buttons orange and blue
        orange.addItemListener(new ItemListener() {
            @Override
            public void itemStateChanged(ItemEvent e) {
                if (orange.isSelected()) {
                    textOutput.setText("Orange");
                } else {
                    textOutput.setText("");
                }
            }
        });
    }
}

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    }
});
blue.addItemListener(new ItemListener() {
    @Override
    public void itemStateChanged(ItemEvent e) {
        if (blue.isSelected()) {
            textOutput.setText("Blue");
        } else {
            textOutput.setText("");
        }
    }
});
panel.add(panel2);
panel3 = new JPanel();
panel3.setLayout(new GridLayout());
panel3.add(yellow);
panel3.add(black);
//attach and add the event handler to radio buttons yellow and black
yellow.addItemListener(new ItemListener() {
    @Override
    public void itemStateChanged(ItemEvent e) {
        if (yellow.isSelected()) {
            textOutput.setText("Yellow");
        } else {
            textOutput.setText("");
        }
    }
});
black.addItemListener(new ItemListener() {
    @Override
    public void itemStateChanged(ItemEvent e) {
        if (black.isSelected()) {
            textOutput.setText("Black");
        } else {
            textOutput.setText("");
        }
    }
});
panel.add(panel3);
panel4 = new JPanel();
panel4.setLayout(new GridLayout());
panel4.add(textOutput);
panel.add(panel4);
//creating a pane and set the panel as the content pane of the window
window.add(panel);
//when window is closed, terminate the program as well
window.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
//set window title
window.setTitle("Homework 3.9.16");
//set window size
window.pack();
//make window visible
window.setVisible(true);
}
public static void main(String[] args) {
    new Homework3.window.RadioButtons();
}
}

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