**Experiment8BCA-4A**

**UID-18BCA3024**

**NAME-Aryan verma**

import java.awt.\*;

import java.awt.event.\*;

import java.net.URL;

import javax.swing.\*;

@SuppressWarnings("serial")

public class SwingJComponentSetterTest extends JFrame {

private String imgCrossFilename = "images/cross.gif";

private String imgNoughtFilename = "images/nought.gif";

public SwingJComponentSetterTest() {

ImageIcon iconCross = null;

ImageIcon iconNought = null;

URL imgURL = getClass().getClassLoader().getResource(imgCrossFilename);

if (imgURL != null) {

iconCross = new ImageIcon(imgURL);

} else {

System.err.println("Couldn't find file: " + imgCrossFilename);

}

imgURL = getClass().getClassLoader().getResource(imgNoughtFilename);

if (imgURL != null) {

iconNought = new ImageIcon(imgURL);

} else {

System.err.println("Couldn't find file: " + imgNoughtFilename);

}

Container cp = getContentPane();

cp.setLayout(new FlowLayout(FlowLayout.CENTER, 10, 10));

JLabel label = new JLabel("JLabel", iconCross, SwingConstants.CENTER);

label.setFont(new Font(Font.DIALOG, Font.ITALIC, 14));

label.setOpaque(true); // needed for JLabel to show the background color

label.setBackground(new Color(204, 238, 241)); // light blue

label.setForeground(Color.RED); // foreground text color

label.setPreferredSize(new Dimension(120, 80));

label.setToolTipText("This is a JLabel"); // Tool tip

cp.add(label);

// Create a JButton with text and icon and set its appearances

JButton button = new JButton(); // use setter to set text and icon

button.setText("Button");

button.setIcon(iconNought);

button.setVerticalAlignment(SwingConstants.BOTTOM); // of text and icon

button.setHorizontalAlignment(SwingConstants.RIGHT); // of text and icon

button.setHorizontalTextPosition(SwingConstants.LEFT); // of text relative to icon

button.setVerticalTextPosition(SwingConstants.TOP); // of text relative to icon

button.setFont(new Font(Font.SANS\_SERIF, Font.BOLD, 15));

button.setBackground(new Color(231, 240, 248));

button.setForeground(Color.BLUE);

button.setPreferredSize(new Dimension(150, 80));

button.setToolTipText("This is a JButton");

button.setMnemonic(KeyEvent.VK\_B); // can activate via Alt-B (buttons only)

cp.add(button);

// Create a JTextField with text and icon and set its appearances

JTextField textField = new JTextField("Text Field", 15);

textField.setFont(new Font(Font.DIALOG\_INPUT, Font.PLAIN, 12));

textField.setForeground(Color.RED);

textField.setHorizontalAlignment(JTextField.RIGHT); // Text alignment

textField.setToolTipText("This is a JTextField");

cp.add(textField);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setTitle("JComponent Test");

setLocationRelativeTo(null); // center window on the screen

setSize(500, 150); // or pack()

setVisible(true);

// Print description of the JComponents via toString()

System.out.println(label);

System.out.println(button);

System.out.println(textField);

}

/\*\* The entry main() method \*/

public static void main(String[] args) {

// Run the GUI codes on Event-Dispatching thread for thread safety

SwingUtilities.invokeLater(new Runnable() {

@Override

public void run() {

new SwingJComponentSetterTest(); // Let the constructor do the job

}

});

}

}