**Frame Visibility on Mouse Events**

import javax.swing.\*;

import java.awt.event.\*;

public class MouseEventFrame extends JFrame {

private JFrame frame;

public MouseEventFrame() {

frame = new JFrame("Child Frame");

frame.setSize(300, 200);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setVisible(false);

JPanel panel = new JPanel();

panel.addMouseListener(new MouseAdapter() {

@Override

public void mouseEntered(MouseEvent e) {

frame.setVisible(true);

}

@Override

public void mouseExited(MouseEvent e) {

frame.setVisible(false);

}

});

**Display String in Frame with Pink Background**

import javax.swing.\*;

import java.awt.\*;

public class PinkBackgroundFrame extends JFrame {

public PinkBackgroundFrame() {

this.setTitle("Pink Background Frame");

this.setSize(300, 200);

this.getContentPane().setBackground(Color.PINK);

JLabel label = new JLabel("Hello, this is a pink background!", SwingConstants.CENTER);

this.add(label);

this.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

this.setVisible(true);

}

public static void main(String[] args) {

new PinkBackgroundFrame();

}

}

**Applet with Color Changing Buttons**

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class ColorChangingApplet extends JFrame {

private JPanel panel;

public ColorChangingApplet() {

panel = new JPanel();

JButton redButton = new JButton("Red");

JButton blueButton = new JButton("Blue");

redButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) {

panel.setBackground(Color.RED);

}

});

blueButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) {

panel.setBackground(Color.BLUE);

}

});

panel.add(redButton);

panel.add(blueButton);

this.add(panel);

this.setSize(300, 200);

this.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

this.setVisible(true);

}

public static void main(String[] args) {

new ColorChangingApplet();

}

}

**Applet Responding to Key Typed Event**

**import javax.swing.\*;**

**import java.awt.event.\*;**

**public class KeyTypedApplet extends JFrame {**

**private JLabel statusLabel;**

**public KeyTypedApplet() {**

**statusLabel = new JLabel("Press a key...");**

**this.add(statusLabel);**

**this.setSize(300, 200);**

**this.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);**

**this.setVisible(true);**

**this.addKeyListener(new KeyAdapter() {**

**@Override**

**public void keyTyped(KeyEvent e) {**

**statusLabel.setText("Typed character is: " + e.getKeyChar());**

**}**

**});**

**}**

**public static void main(String[] args) {**

**new KeyTypedApplet();**

**}**

**}**

**Applet with Buttons for Personal Information**

**import javax.swing.\*;**

**import java.awt.event.\*;**

**public class PersonalInfoApplet extends JFrame {**

**private JTextArea textArea;**

**public PersonalInfoApplet() {**

**textArea = new JTextArea(5, 20);**

**JButton buttonA = new JButton("A");**

**JButton buttonB = new JButton("B");**

**buttonA.addActionListener(new ActionListener() {**

**@Override**

**public void actionPerformed(ActionEvent e) {**

**textArea.setText("Name: John Doe\nCourse: Computer Science\nRoll No: 12345\nCollege: XYZ University");**

**}**

**});**

**buttonB.addActionListener(new ActionListener() {**

**@Override**

**public void actionPerformed(ActionEvent e) {**

**textArea.setText("CGPA: 3.8");**

**}**

**});**

**this.add(buttonA);**

**this.add(buttonB);**

**this.add(textArea);**

**this.setLayout(new FlowLayout());**

**this.setSize(300, 200);**

**this.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);**

**this.setVisible(true);**

**}**

**public static void main(String[] args) {**

**new PersonalInfoApplet();**

**}**

**}**

**Scrolling Banner**

**import javax.swing.\*;**

**import java.awt.\*;**

**public class ScrollingBanner extends JFrame {**

**private JLabel label;**

**private int x = 300;**

**public ScrollingBanner() {**

**label = new JLabel("Welcome to the Scrolling Banner!", SwingConstants.CENTER);**

**label.setFont(new Font("Arial", Font.BOLD, 20));**

**this.add(label);**

**this.setSize(600, 100);**

**this.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);**

**this.setVisible(true);**

**new Thread(() -> {**

**while (true) {**

**x--;**

**label.setLocation(x, 30);**

**if (x < -label.getWidth()) {**

**x = this.getWidth();**

**}**

**try {**

**Thread.sleep(10);**

**} catch (InterruptedException e) {**

**e.printStackTrace();**

**}**

**}**

**}).start();**

**}**

**public static void main(String[] args) {**

**new ScrollingBanner();**

**}**

**}**