

EVENT HANDLING 12

```
import javax.swing.JFrame;

import javax.swing.JButton;

import java.awt.FlowLayout;

import java.awt.event.ActionListener;

import java.awt.event.ActionEvent;

class GUI

{

    JFrame frame;

    JButton ok, cancel, exit;

    public GUI()

    {

        frame = new JFrame();

        ok = new JButton("OK");

        cancel = new JButton("CANCEL");

        exit = new JButton("EXIT");

        frame.setLayout(new FlowLayout());

        frame.add(ok);

        frame.add(cancel);

        frame.add(exit);

        frame.setVisible(true);

        frame.setSize(300,300);

        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        ok.addActionListener(new ActionListener()

        {
```

```

    public void actionPerformed(ActionEvent ae)
    {
        System.out.println("You have clicked the OK button");
    }
}

);

cancel.addActionListener(new ActionListener()
{
    public void actionPerformed(ActionEvent ae)
    {
        System.out.println("You have clicked the CANCEL button");
    }
}

);

exit.addActionListener(new ActionListener()
{
    public void actionPerformed(ActionEvent ae)
    {
        System.exit(0);
    }
}

);

```

```
import javax.swing.JFrame;

import javax.swing.JButton;

import javax.swing.JLabel;

import javax.swing.JTextField;

import java.awt.FlowLayout;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

class GUI

{

    JFrame frame;

    JButton btnPlus, btnMul;

    JLabel firstOperand, secondOperand, answer;

    JTextField firstNumber, secondNumber, result;

    String val;

    int num1, num2, res;

    public GUI()

    {

        frame = new JFrame();

        btnPlus = new JButton("+");

        btnMul = new JButton("X");

        firstOperand = new JLabel("First Operand");

        secondOperand = new JLabel("Second Operand");

        answer = new JLabel("Answer");

        firstNumber = new JTextField(10);
```

```
secondNumber = new JTextField(10);

result = new JTextField(10);

frame.setLayout(new FlowLayout());

frame.add(firstOperand);

frame.add(firstNumber);

frame.add(secondOperand);

frame.add(secondNumber);

frame.add(btnPlus);

frame.add(btnMul);

frame.add(answer);

frame.add(result);

frame.setVisible(true);

frame.setSize(115,250);

frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

btnPlus.addActionListener(new ActionListener()

{

    public void actionPerformed(ActionEvent ae)

    {

        val = firstNumber.getText();

        num1 = Integer.parseInt(val);

        val = secondNumber.getText();

        num2 = Integer.parseInt(val);

        res = num1 + num2;

        result.setText(res+"");

    }

}
```

```

    }

    );

    btnMul.addActionListener(new ActionListener()

    {

    public void actionPerformed(ActionEvent ae)

    {

    val = firstNumber.getText();

    num1 = Integer.parseInt(val);

    val = secondNumber.getText();

    num2 = Integer.parseInt(val);

    res = num1 * num2;

    result.setText(res+"");

    }}}

```

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```

import javax.swing.JFrame;

import javax.swing.JLabel;

import java.awt.FlowLayout;

import java.awt.event.MouseMotionListener;

import java.awt.event.MouseEvent;

import java.awt.event.MouseMotionAdapter;

class GUI

{

    JFrame frame;

```

```

JLabel label;

int x, y;

public GUI()
{
    frame = new JFrame();

    label = new JLabel("Move mouse on the frame");

    frame.setLayout(new FlowLayout());

    frame.add(label);

    frame.setVisible(true);

    frame.setSize(400,400);

    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    frame.addMouseMotionListener(new MouseMotionAdapter()
    {
        public void mouseMoved(MouseEvent e)
        {
            x = e.getX();

            y = e.getY();

            label.setText(x + " , " + y);
        }
    })
}

```

EVENT HANDLING 15

```

import java.awt.event.WindowAdapter;

import javax.swing.JFrame;

import java.awt.event.WindowEvent;

```

```

import javax.swing.JOptionPane;

class GUI
{
    JFrame frame;

    public GUI()
    {
        frame = new JFrame();

        frame.setVisible(true);

        frame.setSize(200,200);

        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        frame.addWindowListener(new WindowAdapter()
        {
            public void windowOpened(WindowEvent e)
            {
                JOptionPane.showMessageDialog(null, "Welcome!!!!");
            }

            public void windowClosing(WindowEvent e) {
                JOptionPane.showMessageDialog(null, "Good Bye!!!!");
            }
        });
    }
}

```

EVENT HANDLING 16

```

import javax.swing.JFrame;

```

```
import javax.swing.JButton;

import java.awt.FlowLayout;

import java.awt.event.MouseAdapter;

import java.awt.event.MouseListener;

import java.awt.event.MouseEvent;


class GUI

{

    JFrame frame;

    JButton click,press;

    public GUI()

    {

        frame = new JFrame();

        click = new JButton("CLICK");

        press = new JButton("PRESS");

        frame.setLayout(new FlowLayout());

        frame.add(click);

        frame.add(press);

        frame.setVisible(true);

        frame.setSize(400,200);

        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        click.addMouseListener(new MouseAdapter()

        {

            public void mouseClicked(MouseEvent me)

            {
```



```

        System.out.println("The button was clicked");
    }

});

press.addMouseListener(new MouseAdapter()
{
    public void mousePressed(MouseEvent me)
    {
        System.out.println("The button was pressed");
    }
});

```

EVENT HANDLING 17

```

import java.awt.FlowLayout;

import java.awt.event.MouseAdapter;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JButton;

import java.awt.event.MouseListener;

import java.awt.event.MouseMotionListener;

import java.awt.event.WindowListener;

import java.awt.event.MouseEvent;

import java.awt.event.MouseMotionAdapter;

import java.awt.event.WindowAdapter;

import java.awt.event.WindowEvent;

import javax.swing.JOptionPane;

class GUI

```

```
{  
  
    int x,y;  
  
    JFrame frame;  
  
    JButton exit;  
  
    JLabel label;  
  
    public GUI()  
    {  
  
        frame = new JFrame();  
  
        exit = new JButton("Exit");  
  
        label = new JLabel("Move mouse on the frame");  
  
        frame.setLayout(new FlowLayout());  
  
        frame.add(label);  
  
        frame.add(exit);  
  
        frame.setVisible(true);  
  
        frame.setSize(300,400);  
  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
  
        frame.addWindowListener(new WindowAdapter()  
        {  
  
            public void windowOpened(WindowEvent e) {  
  
                JOptionPane.showMessageDialog(null, "Welcome !!!!");  
  
            }  
  
            public void windowClosing(WindowEvent e) {  
  
                JOptionPane.showMessageDialog(null, "Good Bye !!!!");  
  
            }  
        }  
    }  
}
```

```
}

);

frame.addMouseListener(new MouseMotionAdapter()

{

public void mouseMoved(MouseEvent e)

{

x = e.getX();

y = e.getY();

label.setText(x + " , " + y);

}

}

);

exit.addMouseListener(new MouseAdapter()

{

public void mouseClicked(MouseEvent e)

{

System.exit(0);

}}}
```