

# List no 9.

## 1. Task Description:

Create an interactive Java application that utilizes event-driven programming. The application should have a simple graphical user interface containing at least one button. Upon clicking the button, the application should respond to this event and perform a specific action.

## 2. Requirements:

- Create a JFrame window with at least one button (e.g., "Click me").
- Implement an ActionListener that reacts to the button click.
- The action upon clicking the button can be anything, such as displaying a message, changing the background color of the window, or updating a UI element.

## 3. Additional Requirements:

- Add more UI components, such as text fields, labels, etc.
- Implement handling of other events, e.g., mouse events, text field changes, etc.
- Utilize different layouts for better arrangement of components in the window.
- Implement input data validation (if applicable to your application).

## 4. Example Starting Code:

```
import javax.swing.JButton;

import javax.swing.JFrame;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;


public class InteractiveApp {

    public static void main(String[] args) {

        JFrame frame = new JFrame("Event-Driven App");

        JButton button = new JButton("Click me");
```

```
button.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e) {  
        // Add code for the button click reaction  
        System.out.println("Button clicked!");  
    }  
});  
  
frame.getContentPane().add(button);  
frame.setSize(300, 200);  
frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
frame.setVisible(true);  
}  
}
```