

SWING - WINDOWLISTENER INTERFACE

http://www.tutorialspoint.com/swing/swing_window_listener.htm

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The class which processes the WindowEvent should implement this interface. The object of that class must be registered with a component. The object can be registered using the addWindowListener method.

Interface declaration

Following is the declaration for **java.awt.event.WindowListener** interface:

```
public interface WindowListener
    extends EventListener
```

Interface methods

S.N.	Method & Description
1	void windowActivated <i>WindowEvent</i> Invoked when the Window is set to be the active Window.
2	void windowClosed <i>WindowEvent</i> Invoked when a window has been closed as the result of calling dispose on the window.
3	void windowClosing <i>WindowEvent</i> Invoked when the user attempts to close the window from the window's system menu.
4	void windowDeactivated <i>WindowEvent</i> Invoked when a Window is no longer the active Window.
5	void windowDeiconified <i>WindowEvent</i> Invoked when a window is changed from a minimized to a normal state.
6	void windowIconified <i>WindowEvent</i> Invoked when a window is changed from a normal to a minimized state.
7	void windowOpened <i>WindowEvent</i> Invoked the first time a window is made visible.

Methods inherited

This interface inherits methods from the following interfaces:

- java.awt.EventListener

WindowListener Example

Create the following java program using any editor of your choice in say **D:/ > SWING > com >**

SwingListenerDemo.java

```
package com.tutorialspoint.gui;

import java.awt.*;
import java.awt.event.*;
import javax.swing.*;

public class SwingListenerDemo {
    private JFrame mainFrame;
    private JLabel headerLabel;
    private JLabel statusLabel;
    private JPanel controlPanel;

    public SwingListenerDemo(){
        prepareGUI();
    }

    public static void main(String[] args){
        SwingListenerDemo swingListenerDemo = new SwingListenerDemo();
        swingListenerDemo.showWindowListenerDemo();
    }

    private void prepareGUI(){
        mainFrame = new JFrame("Java SWING Examples");
        mainFrame.setSize(400,400);
        mainFrame.setLayout(new GridLayout(3, 1));

        headerLabel = new JLabel("",JLabel.CENTER );
        statusLabel = new JLabel("",JLabel.CENTER);

        statusLabel.setSize(350,100);
        mainFrame.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent windowEvent){
                System.exit(0);
            }
        });
        controlPanel = new JPanel();
        controlPanel.setLayout(new FlowLayout());

        mainFrame.add(headerLabel);
        mainFrame.add(controlPanel);
        mainFrame.add(statusLabel);
        mainFrame.setVisible(true);
    }

    private void showWindowListenerDemo(){
        headerLabel.setText("Listener in action: WindowListener");

        JButton okButton = new JButton("OK");

        aboutFrame = new JFrame();
        aboutFrame.setSize(300,200);
        aboutFrame.setTitle("WindowListener Demo");
        aboutFrame.addWindowListener(new CustomWindowListener());

        JPanel panel = new JPanel();
        panel.setBackground(Color.white);
        JLabel msgLabel
        = new JLabel("Welcome to Tutorialspoint SWING Tutorial."
        ,JLabel.CENTER);
        panel.add(msgLabel);
        aboutFrame.add(panel);
        aboutFrame.setVisible(true);
    }

    class CustomWindowListener implements WindowListener {
        public void windowOpened(WindowEvent e) {
        }
    }
}
```

```

public void windowClosing(WindowEvent e) {
    aboutFrame.dispose();
}

public void windowClosed(WindowEvent e) {
}

public void windowIconified(WindowEvent e) {
}

public void windowDeiconified(WindowEvent e) {
}

public void windowActivated(WindowEvent e) {
}

public void windowDeactivated(WindowEvent e) {
}
}
}

```

Compile the program using command prompt. Go to **D:/ > SWING** and type the following command.

```
D:\SWING>javac com\tutorialspoint\gui\SwingListenerDemo.java
```

If no error comes that means compilation is successful. Run the program using following command.

```
D:\SWING>java com.tutorialspoint.gui.SwingListenerDemo
```

Verify the following output



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