

AWT WINDOWLISTENER INTERFACE

http://www.tutorialspoint.com/awt/awt_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:/ > AWT > com > tutorialspoint > gui >**

AwtListenerDemo.java

```
package com.tutorialspoint.gui;

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

public class AwtListenerDemo {
    private Frame mainFrame;
    private Label headerLabel;
    private Label statusLabel;
    private Panel controlPanel;

    public AwtListenerDemo(){
        prepareGUI();
    }

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

    private void prepareGUI(){
        mainFrame = new Frame("Java AWT Examples");
        mainFrame.setSize(400,400);
        mainFrame.setLayout(new GridLayout(3, 1));
        mainFrame.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent windowEvent){
                System.exit(0);
            }
        });

        headerLabel = new Label();
        headerLabel.setAlignment(Label.CENTER);
        statusLabel = new Label();
        statusLabel.setAlignment(Label.CENTER);
        statusLabel.setSize(350,100);

        controlPanel = new Panel();
        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");

        Button okButton = new Button("OK");

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

        Label msgLabel = new Label("Welcome to tutorialspoint.");
        msgLabel.setAlignment(Label.CENTER);
        msgLabel.setSize(100,100);
        aboutFrame.add(msgLabel);
        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:/ > AWT** and type the following command.

```
D:\AWT>javac com\tutorialspoint\gui\AwtListenerDemo.java
```

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

```
D:\AWT>java com.tutorialspoint.gui.AwtListenerDemo
```

Verify the following output

