

# AWT WINDOWADAPTER CLASS

[http://www.tutorialspoint.com/awt/awt\\_windowadapter.htm](http://www.tutorialspoint.com/awt/awt_windowadapter.htm)

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## Introduction

The class **WindowAdapter** is an abstract *adapter* class for receiving window events. All methods of this class are empty. This class is convenience class for creating listener objects.

## Class declaration

Following is the declaration for **java.awt.event.WindowAdapter** class:

```
public abstract class WindowAdapter
    extends Object
    implements WindowListener, WindowStateListener, WindowFocusListener
```

## Class constructors

### S.N. Constructor & Description

- 1 **WindowAdapter**

## Class methods

### S.N. Method & Description

- 1 **void windowActivated***WindowEvent*  
Invoked when a window is activated.
- 2 **void windowClosed***WindowEvent*  
Invoked when a window has been closed.
- 3 **void windowClosing***WindowEvent*  
Invoked when a window is in the process of being closed.
- 4 **void windowDeactivated***WindowEvent*  
Invoked when a window is de-activated.
- 5 **void windowDeiconified***WindowEvent*  
Invoked when a window is de-iconified.
- 6 **void windowGainedFocus***WindowEvent*

Invoked when the Window is set to be the focused Window, which means that the Window, or one of its subcomponents, will receive keyboard events.

7

**void windowIconified***WindowEvent*

Invoked when a window is iconified.

8

**void windowLostFocus***WindowEvent*

Invoked when the Window is no longer the focused Window, which means that keyboard events will no longer be delivered to the Window or any of its subcomponents.

9

**void windowOpened***WindowEvent*

Invoked when a window has been opened.

10

**void windowStateChanged***WindowEvent*

Invoked when a window state is changed.

## Methods inherited

This class inherits methods from the following classes:

- java.lang.Object

## WindowAdapter Example

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

*AwtAdapterDemo.java*

```
package com.tutorialspoint.gui;

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

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

    public AwtAdapterDemo(){
        prepareGUI();
    }

    public static void main(String[] args){
        AwtAdapterDemo awtAdapterDemo = new AwtAdapterDemo();
        awtAdapterDemo.showWindowAdapterDemo();
    }

    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 showWindowAdapterDemo(){
    headerLabel.setText("Listener in action: WindowAdapter");

    Button okButton = new Button("OK");

    final Frame aboutFrame = new Frame();
    aboutFrame.setSize(300,200);
    aboutFrame.setTitle("WindowAdapter Demo");
    aboutFrame.addWindowListener(new WindowAdapter() {
        public void windowClosing(WindowEvent windowEvent){
            aboutFrame.dispose();
        }
    });
    Label msgLabel = new Label("Welcome to tutorialspoint.");
    msgLabel.setAlignment(Label.CENTER);
    msgLabel.setSize(100,100);
    aboutFrame.add(msgLabel);
    aboutFrame.setVisible(true);
}
}
}

```

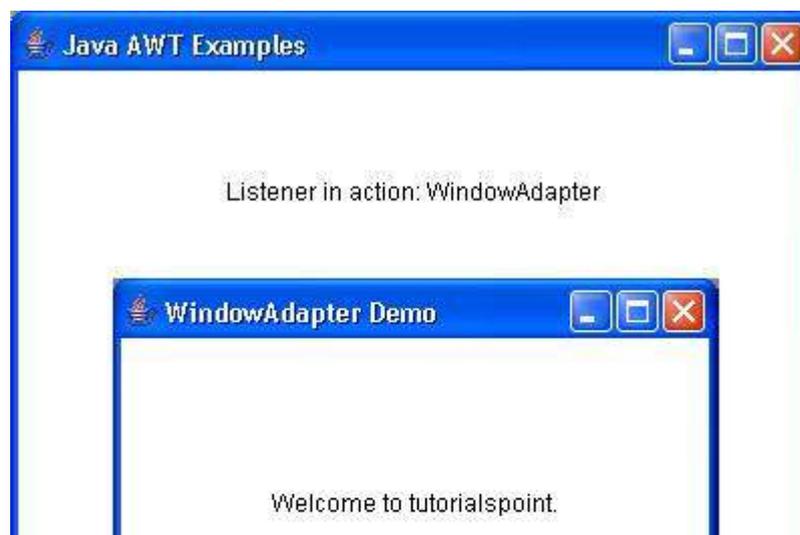
Compile the program using command prompt. Go to **D:/ > AWT** and type the following command.

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

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

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

Verify the following output





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