

AWT KEYLISTENER INTERFACE

http://www.tutorialspoint.com/awt/awt_key_listener.htm

Copyright © tutorialspoint.com

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

Interface declaration

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

```
public interface KeyListener
    extends EventListener
```

Interface methods

S.N. Method & Description

- 1 **void keyPressed***KeyEvent*
Invoked when a key has been pressed.
- 2 **void keyReleased***KeyEvent*
Invoked when a key has been released.
- 3 **void keyTyped***KeyEvent*
Invoked when a key has been typed.

Methods inherited

This interface inherits methods from the following interfaces:

- java.awt.EventListener

KeyListener 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;
    private TextField textField;

    public AwtListenerDemo(){
        prepareGUI();
    }
}
```

```

}

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

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 showKeyListenerDemo(){
    headerLabel.setText("Listener in action: KeyListener");

    textField = new TextField(10);

    textField.addKeyListener(new CustomKeyListener());
    Button okButton = new Button("OK");
    okButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            statusLabel.setText("Entered text: " + textField.getText());
        }
    });

    controlPanel.add(textField);
    controlPanel.add(okButton);
    mainFrame.setVisible(true);
}

class CustomKeyListener implements KeyListener{
    public void keyTyped(KeyEvent e) {
    }

    public void keyPressed(KeyEvent e) {
        if(e.getKeyCode() == KeyEvent.VK_ENTER){
            statusLabel.setText("Entered text: " + textField.getText());
        }
    }

    public void keyReleased(KeyEvent e) {
    }
}
}

```

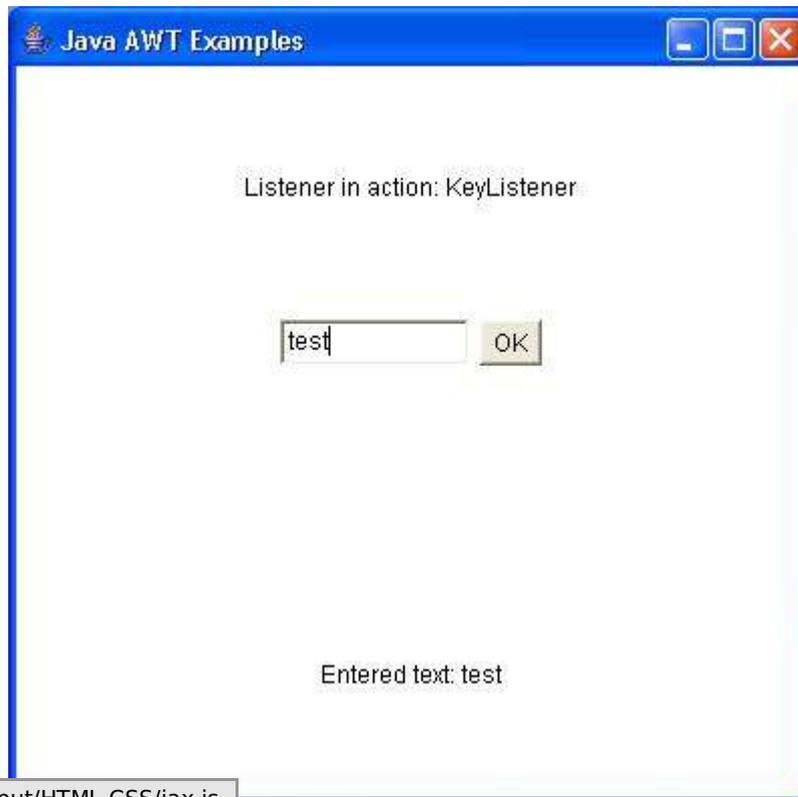
Compile the program using command prompt. Go to **D:/ > AWT** and type the following command.

```
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



Loading [MathJax]/jax/output/HTML-CSS/jax.js