Understanding Swing Event Listeners

1. Implement a listener interface

Alphabetical list of some event listeners

Listener	Type of Events	Example
Action Listener	Action events	Button clicks
AdjustmentListener	Adjustment events	Scroll bar moves
ChangeListener	Change events	Slider is repositioned
FocusListener	Keyboard focus events	Text field gains or loses focus
ItemListener	Item events	Check box changes status
KeyListener	Keyboard events	Text is entered
MouseListener	Mouse events	Mouse clicks
MouseMotionListener	Mouse movement events	Mouse rolls
WindowListener	Window events	Window closes

E.g. public class GuiApp extends J Frame implements ActionListener

2. Add a listener method to a component

Format is:
theSourceoftheEvent.addListenerMethod(theClassthatShouldRespond)

Some Swing components and their associated listener-registering methods

Components	Associated Listener-Registering Methods
JButton, JCheckBox, JComboBox, JTextField, and JRadioButton	addActionListener ( )
JScrollBar	addAdjustmentListener ( )
All Swing components	addFocusListener ( ), addKeyListener ( ), addMouseListener ( ), and addMouseMotionListener ( )
JButton, JCheckBox, JComboBox, and JRadioButton	addItemListener ( )
All JWindow and JFrame components	addWindowListener ( )
JSlider and JCheckBox	addChangeListener ( )

E.g. yesButton.addActionListener(this);

3. Write a method that accepts the event and reacts to it.

Selected methods that respond to events

Listener	Method
ActionListener	actionPerformed (ActionEvent)
AdjustmentListener	adjustmentValueChanged (AdjustmentEvent)
FocusListener	focusGained (FocusEvent) and focusLost (FocusEvent)
ItemListener	itemStateChanged (ItemEvent)

```
public void actionPerformed (ActionEvent event)
{
Object buttonPressed = event.getSource ( )

If buttonPressed = = yesButton
{
        text.append ("Yes button pressed");
{
else
{
        text.append ("No button pressed");
}
```