

Handling Events on a Combo Box

Here's the code from `ComboBoxDemo.java` that registers and implements an action listener on the combo box:

```
public class ComboBoxDemo ... implements ActionListener {  
    ...  
    petList.addActionListener(this) {  
    ...  
    public void actionPerformed(ActionEvent e) {  
        JComboBox cb = (JComboBox)e.getSource();  
        String petName = (String)cb.getSelectedItem();  
        updateLabel(petName);  
    }  
    ...  
}
```

This action listener gets the newly selected item from the combo box, uses it to compute the name of an image file, and updates a label to display the image. The combo box fires an action event when the user selects an item from the combo box's menu. See [How to Write an Action Listener](#), for general information about implementing action listeners.

Combo boxes also generate item events, which are fired when any of the items' selection state changes. Only one item at a time can be selected in a combo box, so when the user makes a new selection the previously selected item becomes unselected. Thus two item events are fired each time the user selects a different item from the menu. If the user chooses the same item, no item events are fired. Use `addItemListener` to register an item listener on a combo box. [How to Write an Item Listener](#) gives general information about implementing item listeners.

Although `JComboBox` inherits methods to register listeners for low-level events —focus, key, and mouse events, for example—we recommend that you don't listen for low-level events on a combo box. Here's why: A combo box is a compound component—it is comprised of two or more other components. The combo box itself fires high-level events such as action events. Its subcomponents fire low-level events such as mouse, key, and focus events. The low-level events and the subcomponent that fires them are look-and-feel-dependent. To avoid writing look-and-feel-dependent code, you should listen only for high-level events on a compound component such as a combo box. For information about events, including a discussion about high- and low-level events, refer to [Writing Event Listeners](#).