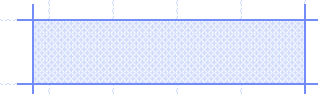


GUI Components

Combo Box



Combo Box

- JComboBox is a part of Java Swing package.
- JComboBox inherits JComponent class .
- JComboBox shows a popup menu that shows a list and the user can select a option from that specified list .
- JComboBox can be editable or read-only depending on the choice of the programmer .

Constructor of the JComboBox

1. **JComboBox()** : creates a new empty JComboBox .
2. **JComboBox(ComboBoxModel M)** : creates a new JComboBox with items from specified ComboBoxModel
3. **JComboBox(E [] i)** : creates a new JComboBox with items from specified array.
4. **JComboBox(Vector items)** : creates a new JComboBox with items from the specified vector

Constructor of the JComboBox

Empty combo box:

```
JComboBox combo1 = new JComboBox();
```

Combo box with an array:

```
String[] theSeven = { "A", "B", "C", "D", "E", "F", "G" };
```

```
JComboBox combo1 = new JComboBox(theSeven);
```

JComboBox Methods

- **addItem(E item)** : adds the item to the JComboBox
- JComboBox c1=new JComboBox();
 - c1.addItem("Riyadh");
 - c1.addItem("Jedda");
 - c1.addItem(text1.getText());

JComboBox Methods

- To add an array to the combo box
 - `import javax.swing.DefaultComboBoxModel;`
 - `.`
 - `.`
 - `String[] a1=new String[] {"aaa", "bbb", "ccc"};`
 - `jComboBox1.setModel(new DefaultComboBoxModel(a1));`

JComboBox Methods

- **insertItemAt(E item, int i)**
 - insert the item at index i
- **getItemAt(int i) :**
 - returns the item at index i
- **getItemCount():**
 - returns the number of items from the list

JComboBox Methods

- **getSelectedItem() :**
 - returns the item which is selected
- **removeItemAt(int i) :**
 - removes the element at index i

JComboBox Methods

- **setEditable(boolean b) :**
 - the boolean b determines whether the combo box is editable or not .If true is passed then the combo box is editable or vice versa.
- **setSelectedIndex(int i):**
 - selects the element of JComboBox at index i.

JComboBox Methods

- **showPopup()** :
 - causes the combo box to display its popup window
- **setSelectedIndex(int a):**
 - selects the item at index an Index.

JComboBox Methods

- **setEnabled(boolean b):**
 - enables the combo box so that items can be selected.
- **removeAllItems():**
 - removes all items from the item list.

Event Handling

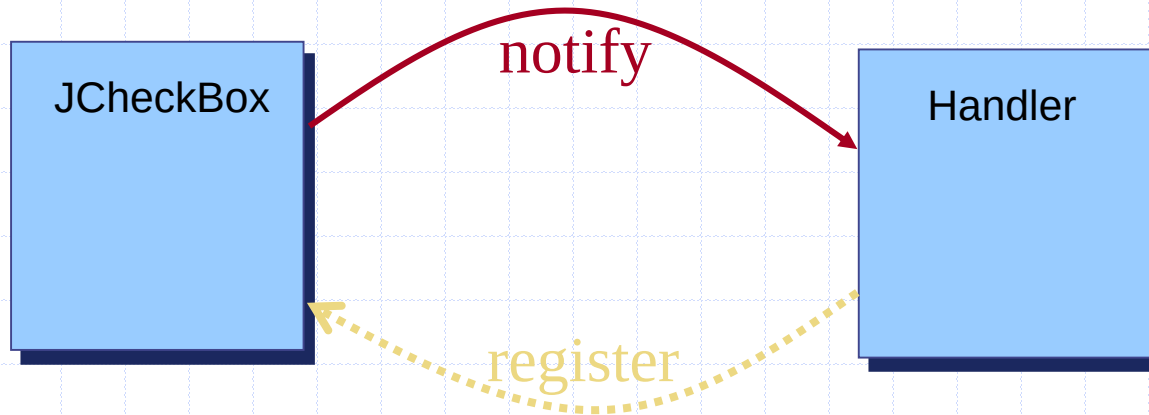
Placing Checkboxes



Connecting Source and Listener

event source

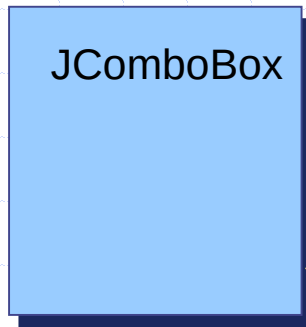
event listener



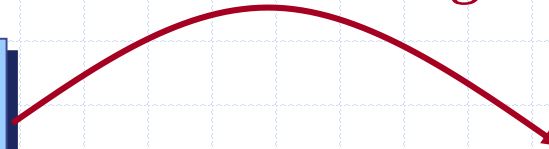
A listener must be **registered** to a event source. Once registered, it will get **notified** when the event source generates events.

Handling Action Events

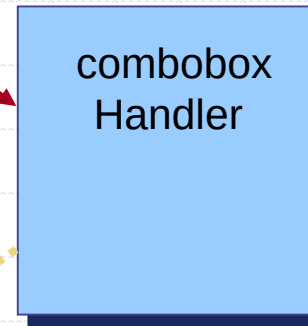
action event
source



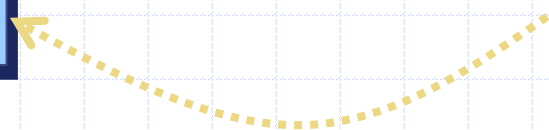
itemStateChanged



action event
listener



addItemListener



ItemListener Interface

- When we call the **addItemListener** method of an event source, we must pass an instance of a class that implements the **ItemListener** interface.
- The ItemListener interface includes one method named **itemStateChanged**.
- A class that implements the ItemListener interface must therefore provide the method body of **itemStateChanged**.
- Since itemStateChanged is the method that will be called when an action event is generated, this is the place where we put a code we want to be executed in response to the generated events.

Combo Box Exercise 1



Combo Box Exercise 2

The screenshot shows a Java Swing window titled "Form Editor" with a light gray background. It contains two combo boxes. The first combo box is labeled "Select Your City" in red text. It has a white text field containing "Riyadh" and a small downward arrow button. To the right of the text field, the text "Riyadh selected" is displayed in blue. The second combo box is labeled "Select your meal" in black text. It has a white text field containing "Meat" and a small downward arrow button. A dropdown menu is open below the text field, showing three options: "Fish", "Meat", and "Chicken". The "Meat" option is highlighted with a blue background. To the right of the dropdown menu, the text "Meat selected" is displayed in red.

Combo Box Exercise 3

Select Your Color

Yellow ▼ **Yellow selected**

Type a color to add or to remove

Add **Remove**