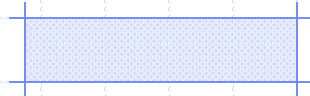


GUI Components

JList



JList

- JList is part of Java Swing package.
- JList is a component that displays a set of Objects and allows the user to select one or more items .
- JList inherits JComponent class.
- JList is a easy way to display an array of Vectors .

Constructor of the JList

1. **JList()**: creates an empty blank list
2. **JList(E [] l)** : creates an new list with the elements of the array l.
3. **JList(ListModel d)**: creates a new list with the specified List Model d
4. **JList(Vector v)**: creates a new list with the elements of the vector v

Constructor of the JList

Empty combo box:

```
JList list1 = new JList();
```

JList with an array:

```
String[] days = { "Monday", "Tuesday", "Wednesday",  
"Thursday", "Friday", "Saturday", "Sunday"};  
JList list1 = new JList(days);
```

JList Methods

- **getSelectedIndex()** :
 - returns the index of selected item of the list.
- **getSelectedValue()**
 - returns the selected value of the element of the list

JList Methods

- **setSelectedIndex(int i) :**
 - sets the selected index of the list to i.
- **setSelectionBackground(Color c)**
 - sets the background Color of the selected item in the list

JList Methods

- **setSelectionForeground(Color c) :**
 - Changes the foreground color of the selected item in the list
- **setListData(E [] l)**
 - Changes the elements of the list to the elements of l

JList Methods

- **isSelectedIndex(int i) :**
 - returns true if the specified index is selected, else false.
- **getSelectedValuesList()**
 - returns a list of all the selected items

Set Selection Mode for JList

- The selection mode defines the way elements can be selected. There are totally 3 selection modes available to be set for JList:
 - **SINGLE_SELECTION**: This mode specifies that only a single item can be selected at any point of time.
 - **SINGLE_INTERVAL_SELECTION**: This mode specifies that multiple items can be selected, but they have to be contiguous. Items can be selected contiguously by pressing down the shift key and selecting elements with the mouse.

Set Selection Mode for JList

- **MULTIPLE_INTERVAL_SELECTION**: This mode is the default mode. This mode specifies that multiple items can be selected and they may or may not be contiguous.

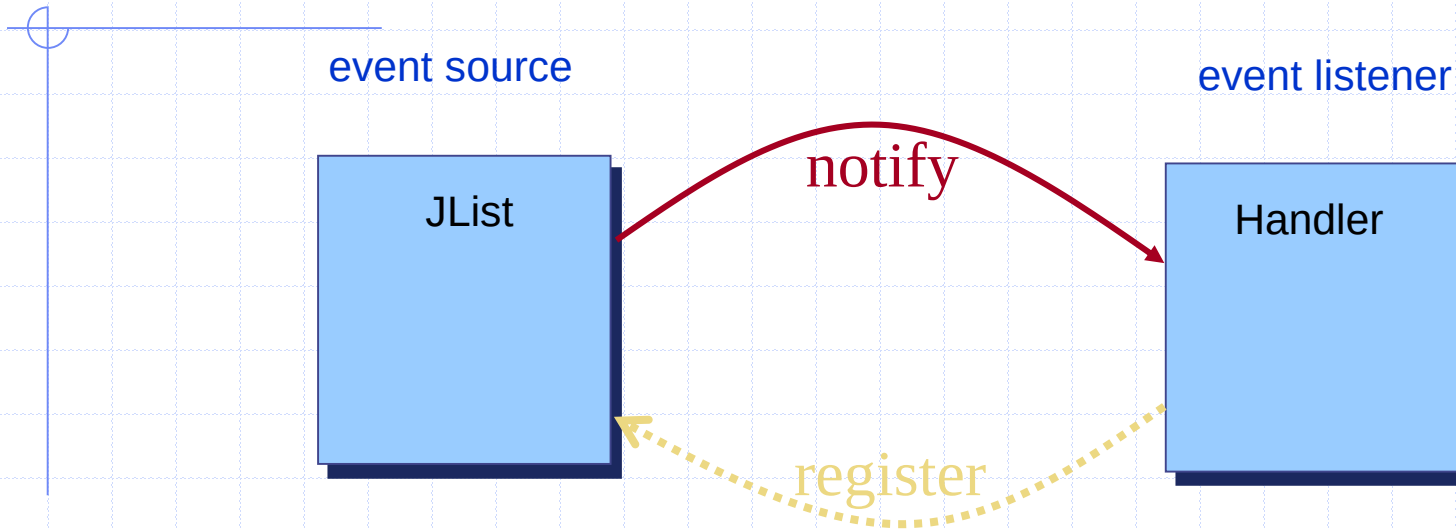
Changing the Selection Mode:

- `Jlist List = new Jlist();`
- `List.setSelectionMode(ListSelectionModel.SINGLE_SELECTION);`

Event Handling

Placing Lists

Connecting Source and Listener



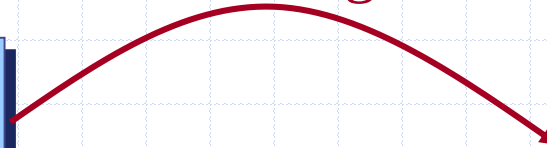
A listener must be **registered** to a event source. Once registered, it will get **notified** when the event source generates events.

Handling Action Events

action event
source



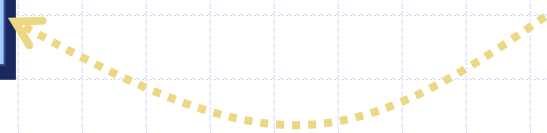
valueChanged



action event
listener



addListSelectionListener



ListSelectionListener Interface

- When we call the **addListSelectionListener** method of an event source, we must pass an instance of a class that implements the **ListSelectionListener** interface.
- The ItemListener interface includes one method named **valueChanged**.
- A class that implements the ItemListener interface must therefore provide the method body of **valueChanged**.
- Since **valueChanged** 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.

Jlist Exercise 1

Birthday selection



Jlist Exercise 2

