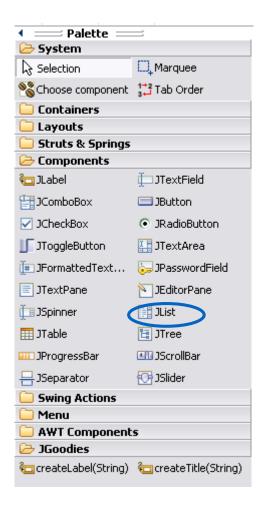
Theory pills Lab 9



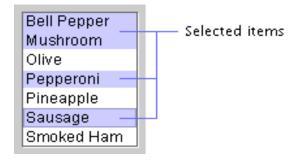
Other components.

- Menus (JMenuBar)
- Lists (JList)
- Sliders (JSlider)
- Progress bars (*JProgressBar*)
- Spinners (*JSpinner*)
- Tables (*JTable*)
- Trees (*JTree*)

Lists (JList)



• It shows a set of textual and /or graphical items

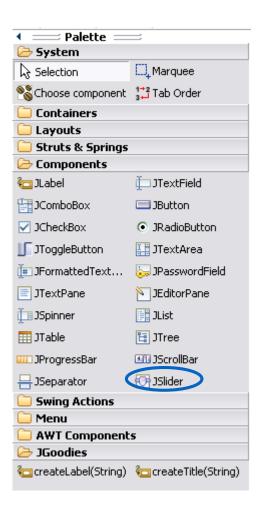


- Items must be capitalized and ordered!
- Three selection modes
 - Simple items
 - Simple range
 - Multiple ranges

Lists (II)

- Some interesting properties and methods...
 - Properties
 - selectionMode (single_selection, single_interval_selection, multiple_interval_selection)
 - Methods
 - getSelectedValue // Only for simple selection
 - getSelectedIndex
 - getSelectedValues
 - getSelectedIndexes
 - getModel

Sliders (JSlider)

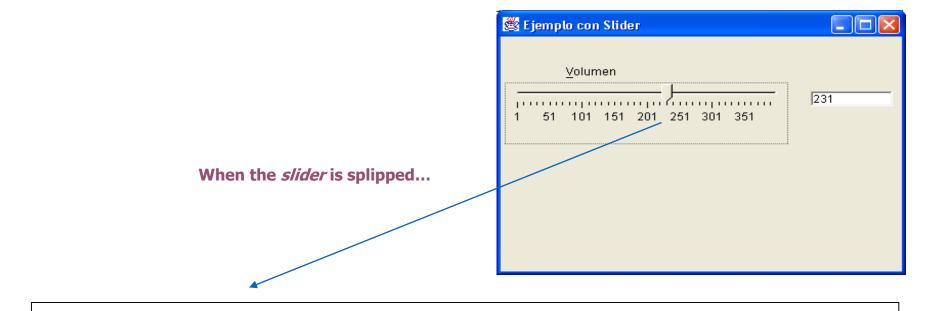


- It allow us to select a numeric number within a continuous or discontinuous range of values
- Pointer position pointes out the current value



- If the *slider* represents a continuous or a huge number of discrete values, be careful, the selected value must be exact!
 - So, a good practice is using a text field to show the selected value to the users, allowing them to key directly the value in the text field.

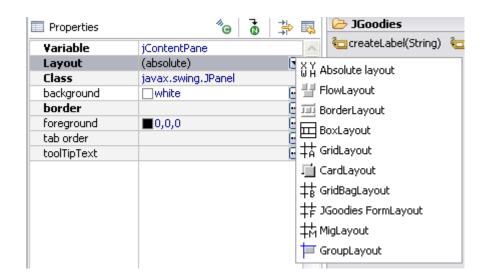
Sliders - Example



txVolumen.setText(Integer.toString(slVolumen.getValue()));

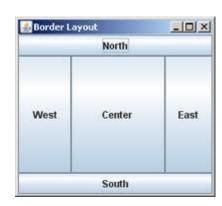
Types of Layouts

- The most popular are...
 - FlowLayout
 - BorderLayout
 - CardLayout
 - GridLayout
 - BoxLayout
 - GridBagLayout
- By default...
 - JFrame, JDialog → BorderLayout
 - JPanel, JScrollPane → FlowLayout



BorderLayout

- It uses 5 areas to place components: North, South, East, West and Center.
- When a component is added to that positions...
 - North or south: the component is resized to fill the width of the container.
 - East of West: the component resized to fill the height of the container
 - Center: The component fills all the available space
- The property constraints of the components can determine their position
- Properties:
 - hgap: horizontal distance
 - vgap: vertical distance



Main types of containers

- Frame (JFrame)
- Dialog (JDialog)
- Panel (JPanel)
- Scroll Panel (JScrollPane)
- Tabbed panel (JTabbedPane)
- Tool bar (JToolBar)

Dialog (II)

- In Swing, several standard classes supporting dialogs:
 - JOptionPane
 - JColorChooser
 - JFileChooser
- All of them are modal

JFileChooser

- File selection dialog.
- It only manages the selection of the file. The application must face with its processing (open it, save it, print it or whatever).
- Available uses:
 - showDialog
 - showOpenDialog
 - showSaveDialog



multiSelectionEnabled property determines the availability of multiple file selection

JFileChooser (II)

Example with showOpenDialog

showOpenDialog returns APPROVE_OPTION whenever a file was selected and we finish with the option "Open", and CANCEL_OPTION if the dialog is closed by means of the "Cancel" option.

```
private JFileChooser selectorFicheros = new JFileChooser();
. . .
               (selectorFicheros.showOpenDialog(this) == selectorFicheros.APPROVE OPTION)
                                  txOpcion.setText("El usuario seleccionó ABRIR");
                                  txFichero.setText(selectorFicheros.getSelectedFile().getName());
                      else
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                                  txOpcion.setText("El usuario seleccionó CANCELAR");
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