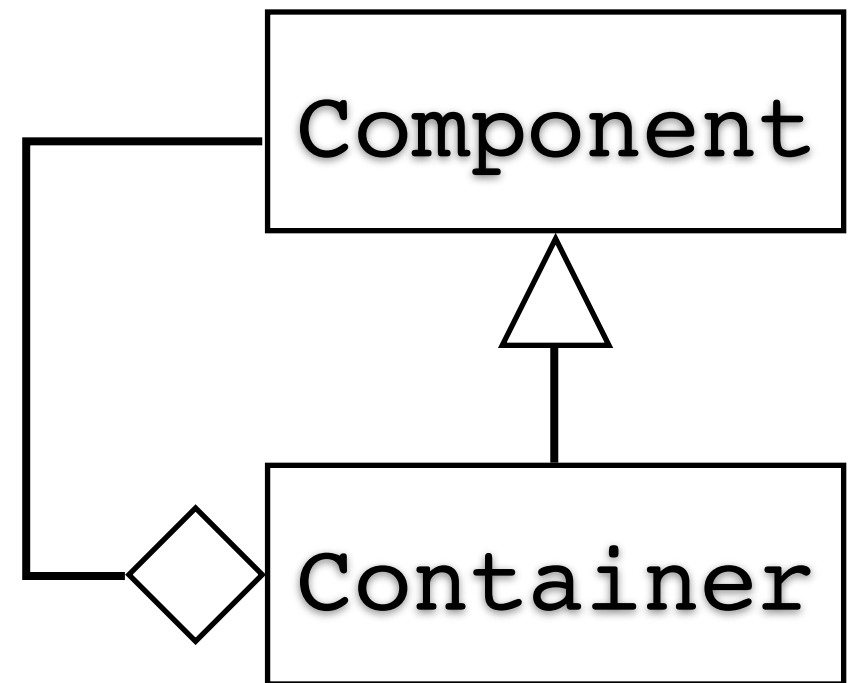
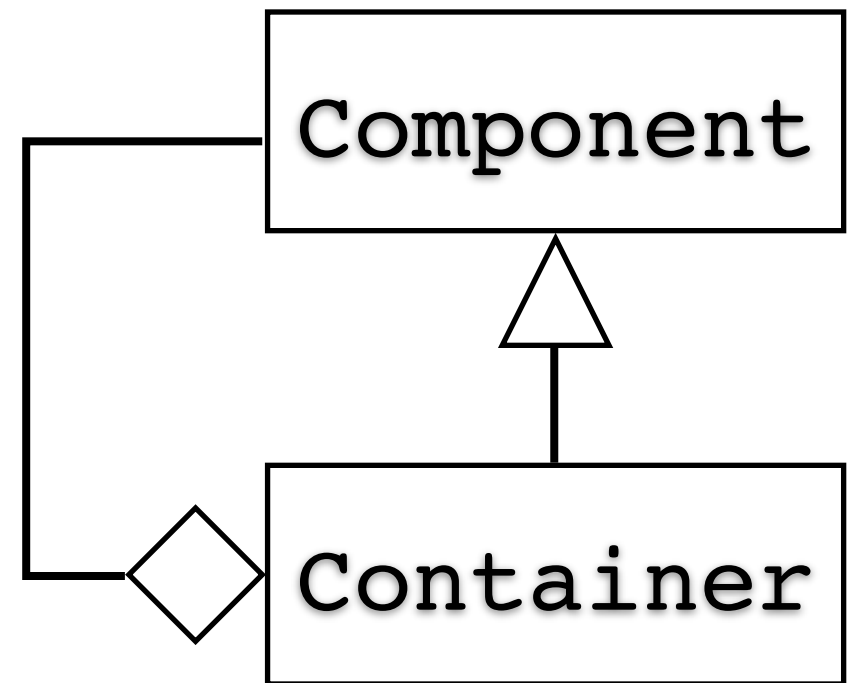


Interfaces Graphiques

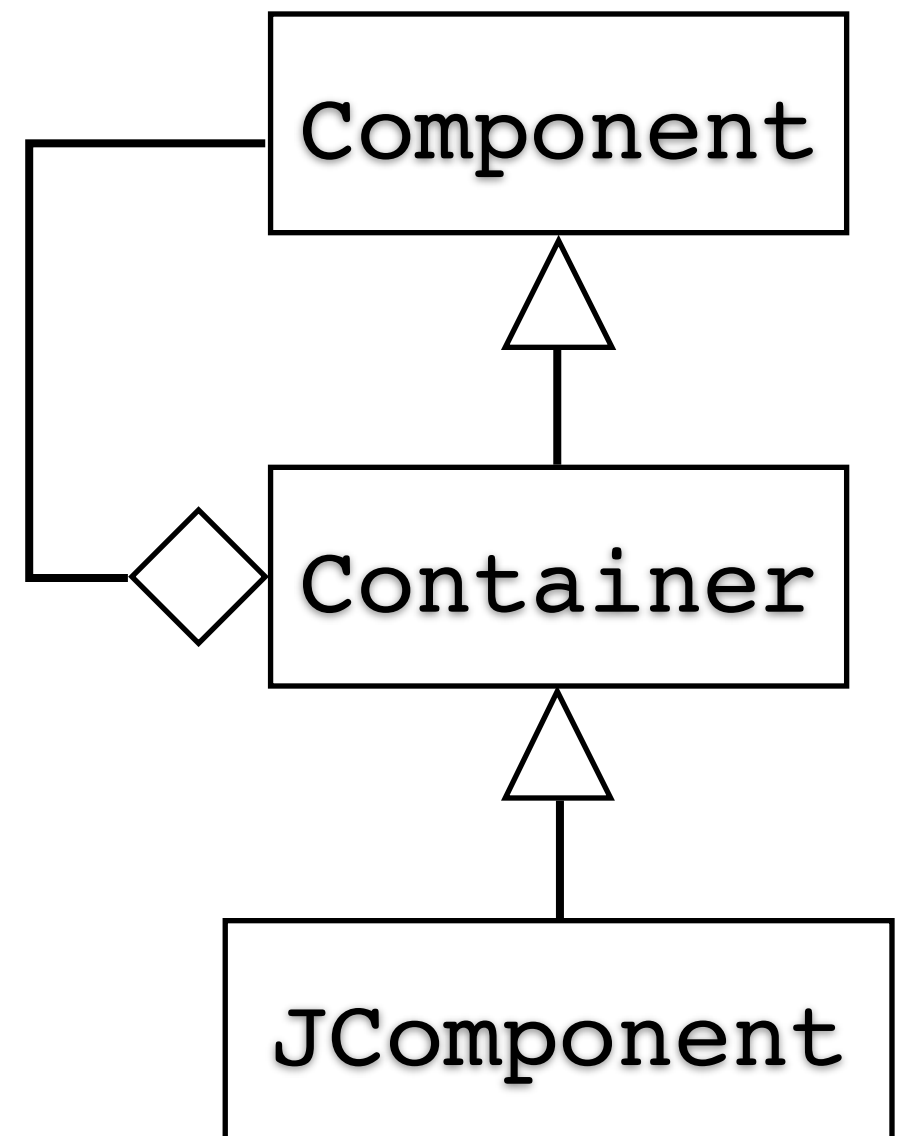
Les Composants

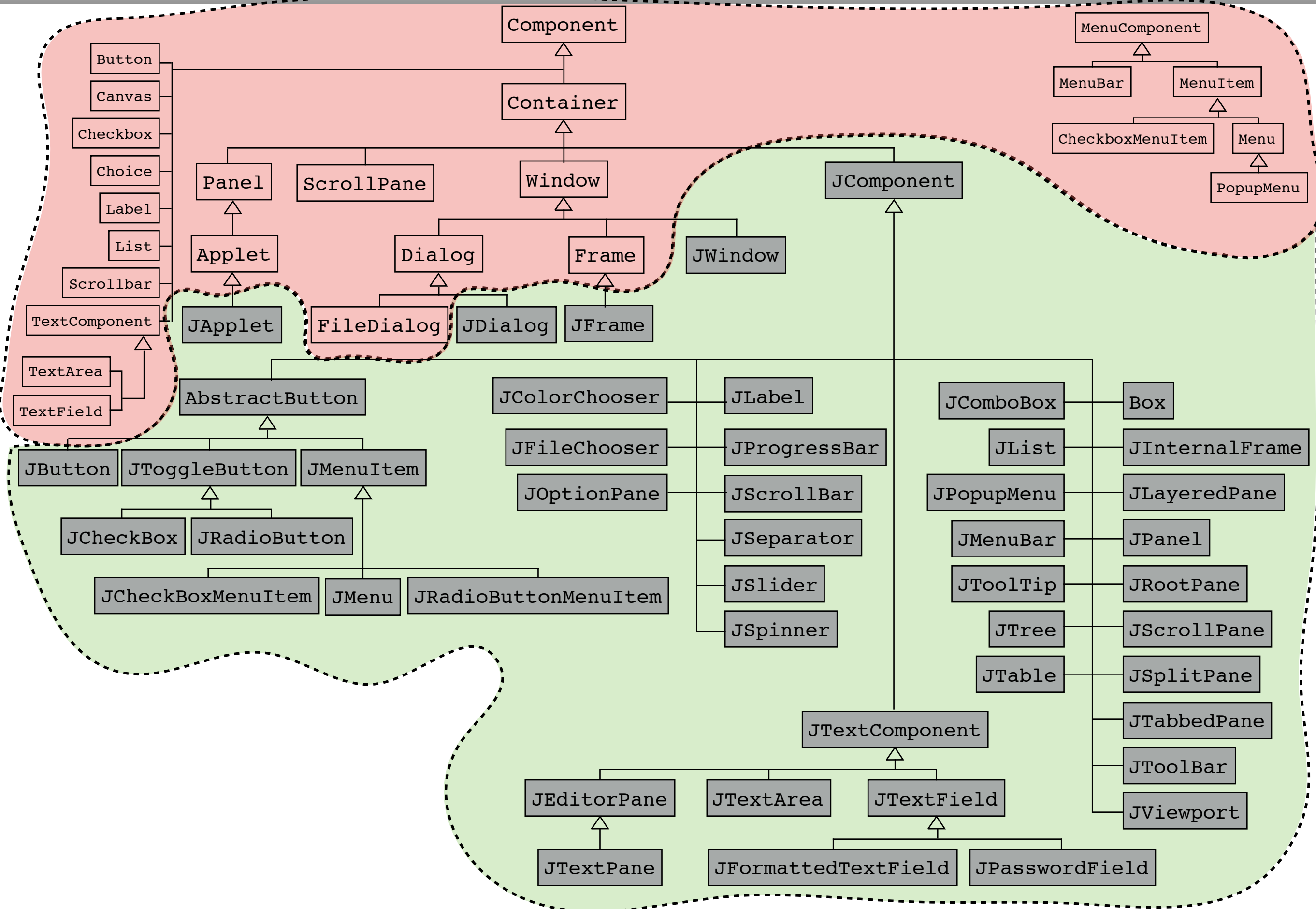




JComponent
Container

containers





`awt.Component`

`name`

`x y width height`

`size location`

`visible`

très important de rendre visible

`awt.Container`

`add remove GetComponent`

`GetComponentCount GetComponentAt`

`getComponents`

JComponent

opaque boolean

background foreground Color

font Font

String

JLabel JComponentExample.java

JLabel

Con aine



- JApplet
- JDialog
- JFrame
- JWindow

JFrame JWindow

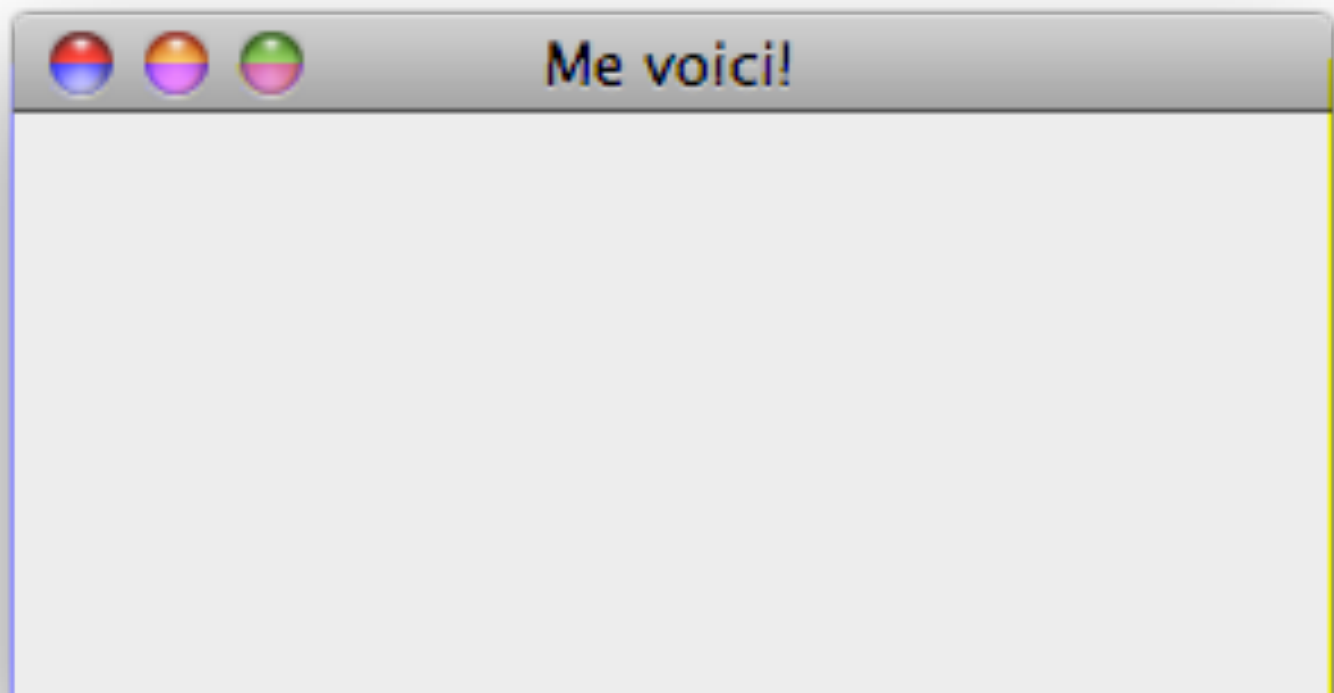
JDialog

JApplet

- `JFrame(String title)`

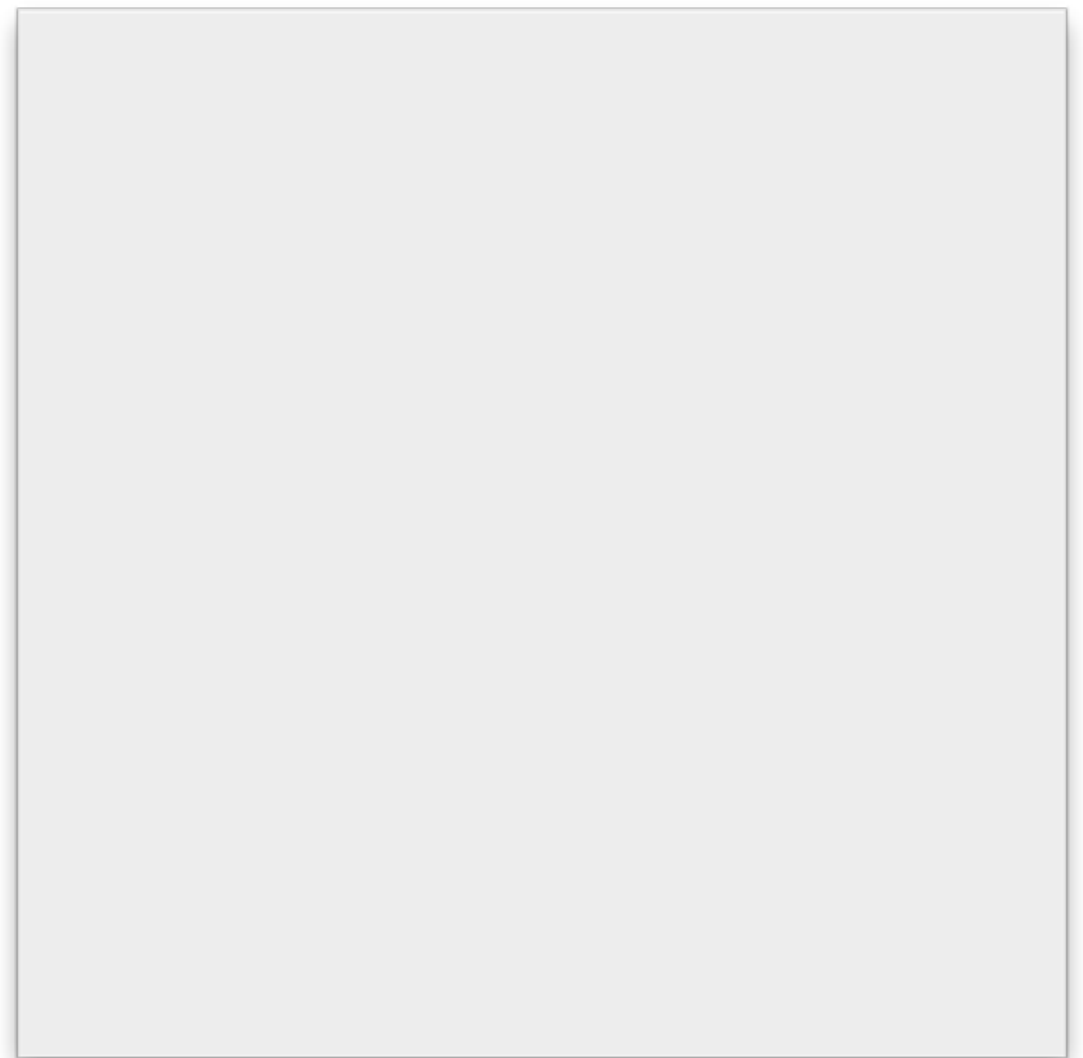
`JRootPane`

`JMenuBar`



- `JWindow()` / `JWindow(Frame owner)` /
`JWindow(Window owner)`

`JRootPane`



- JApplet

JRootPane



- `setVisible(boolean)`

ne faut pas oublier

ne faut pas

JWindow JFrame

utilisateur

JRootPane

via

- Container getContentPane()
- setContentPane(Container)

- JPanel
- JScrollPane
- JSplitPane
- JTabbedPane
- JToolBar

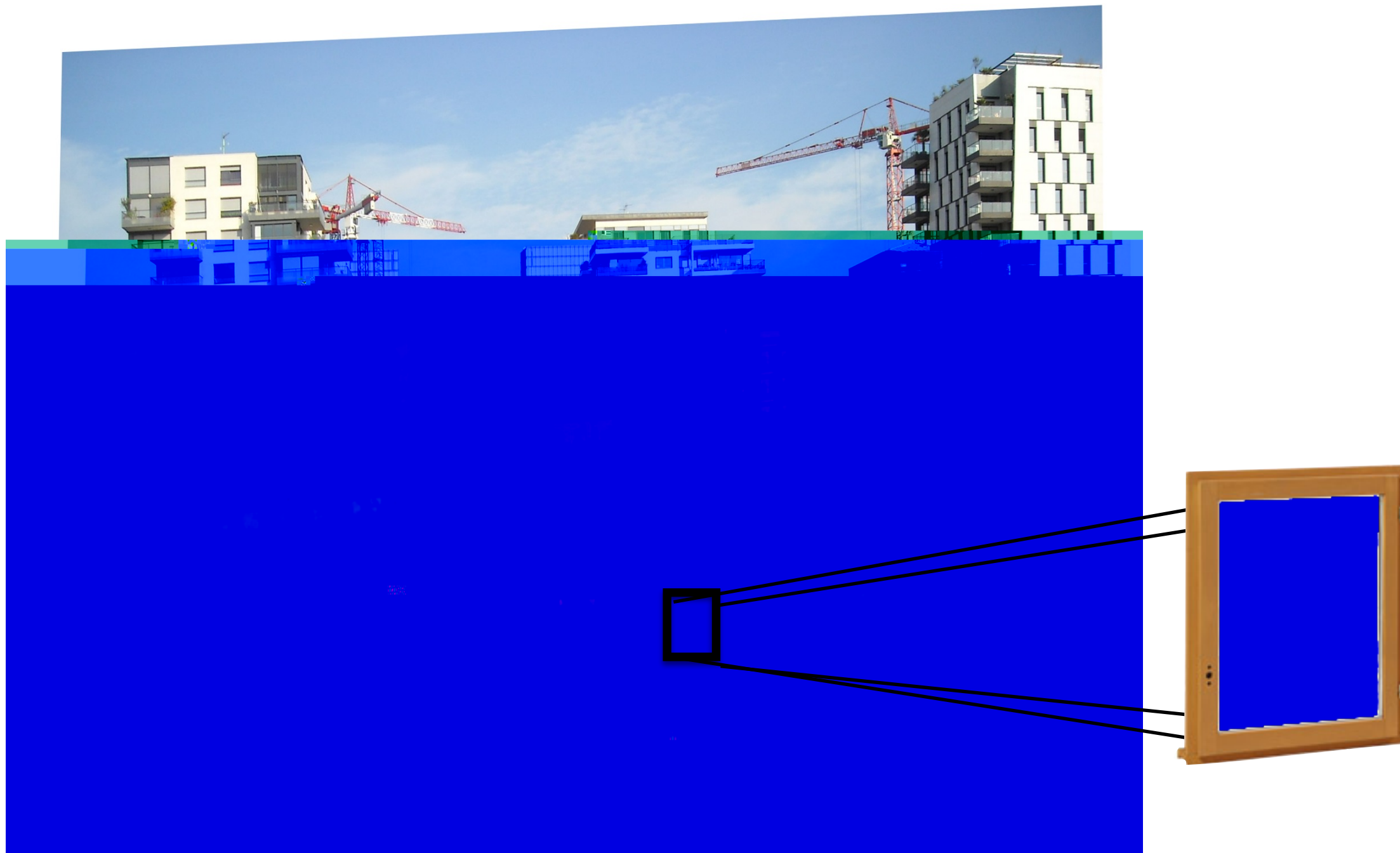
`add (Component) remove (Component)`

- JPanel

JPanelExemple.java
JPanelExemple2.java



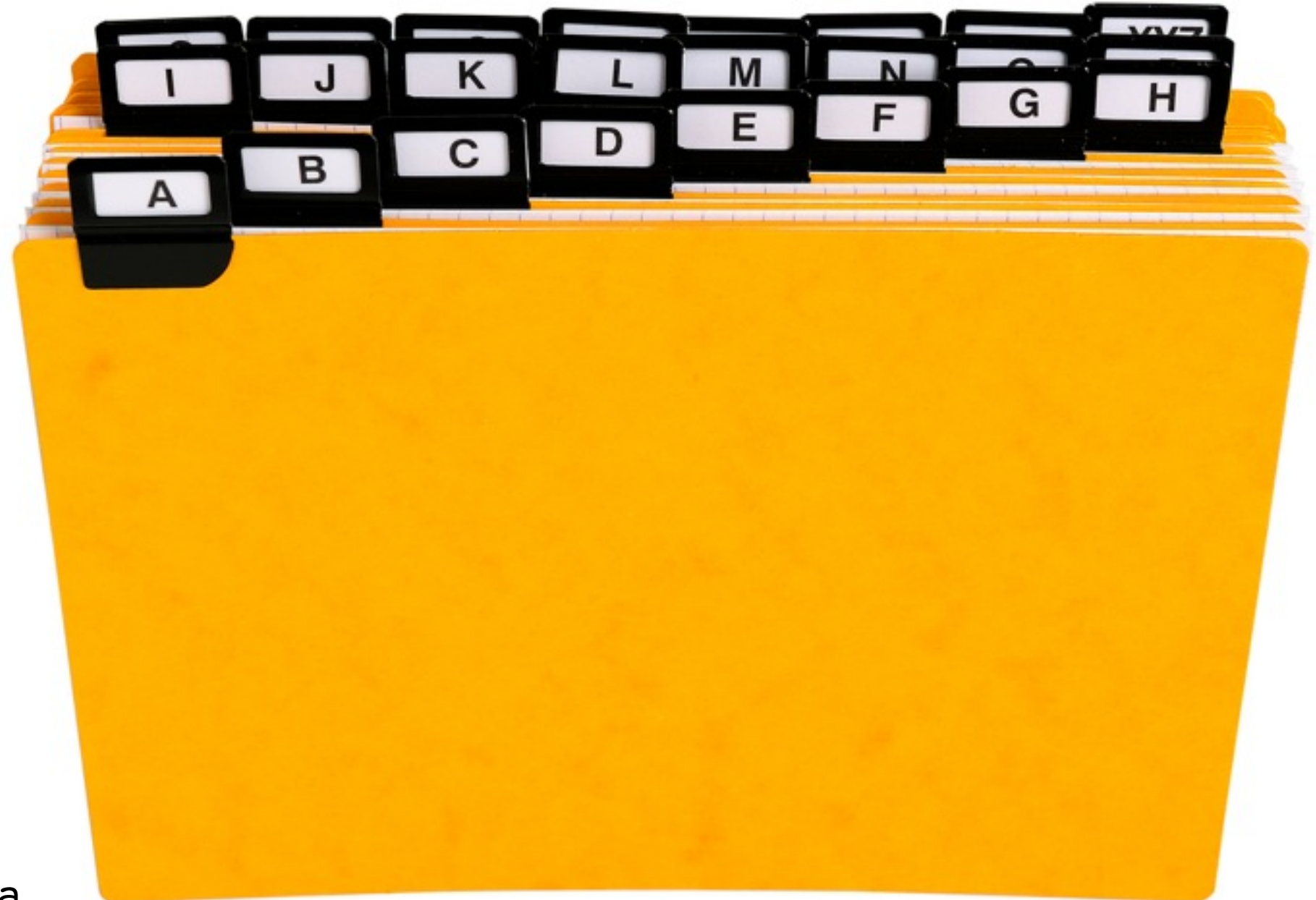
- JScrollPane



- JSplitPane



- JTabbedPane



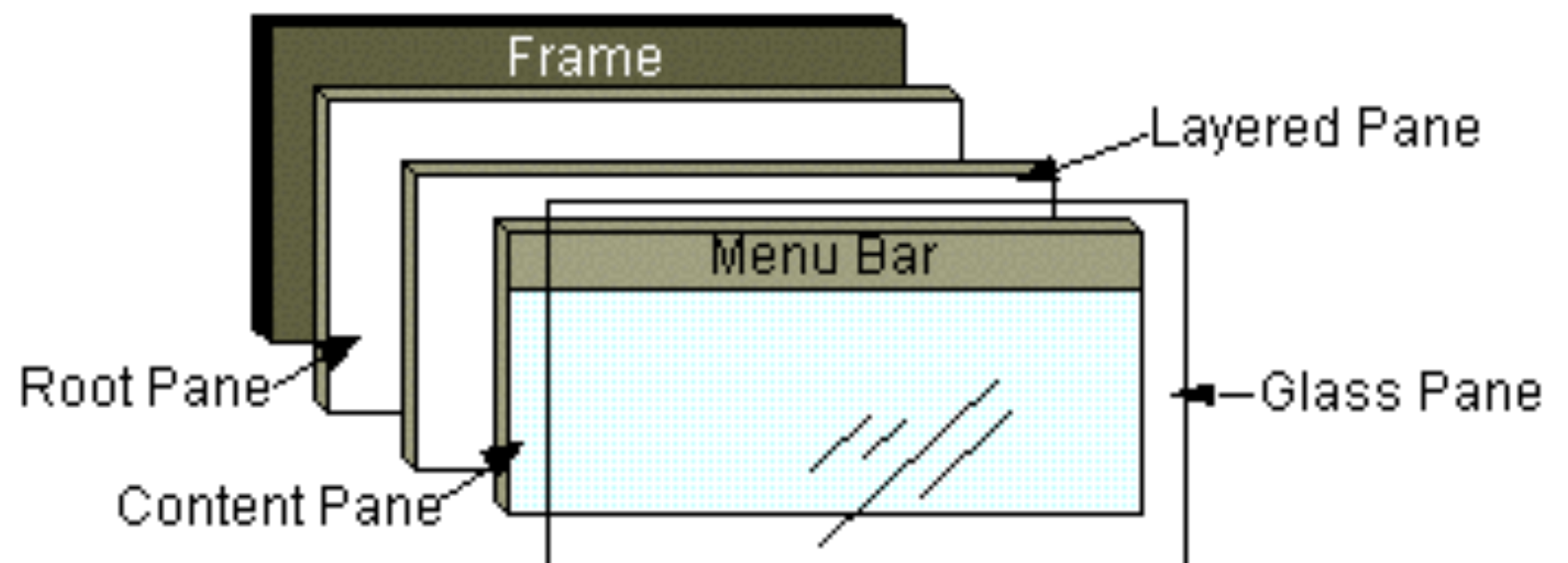
- JToolBar

Action

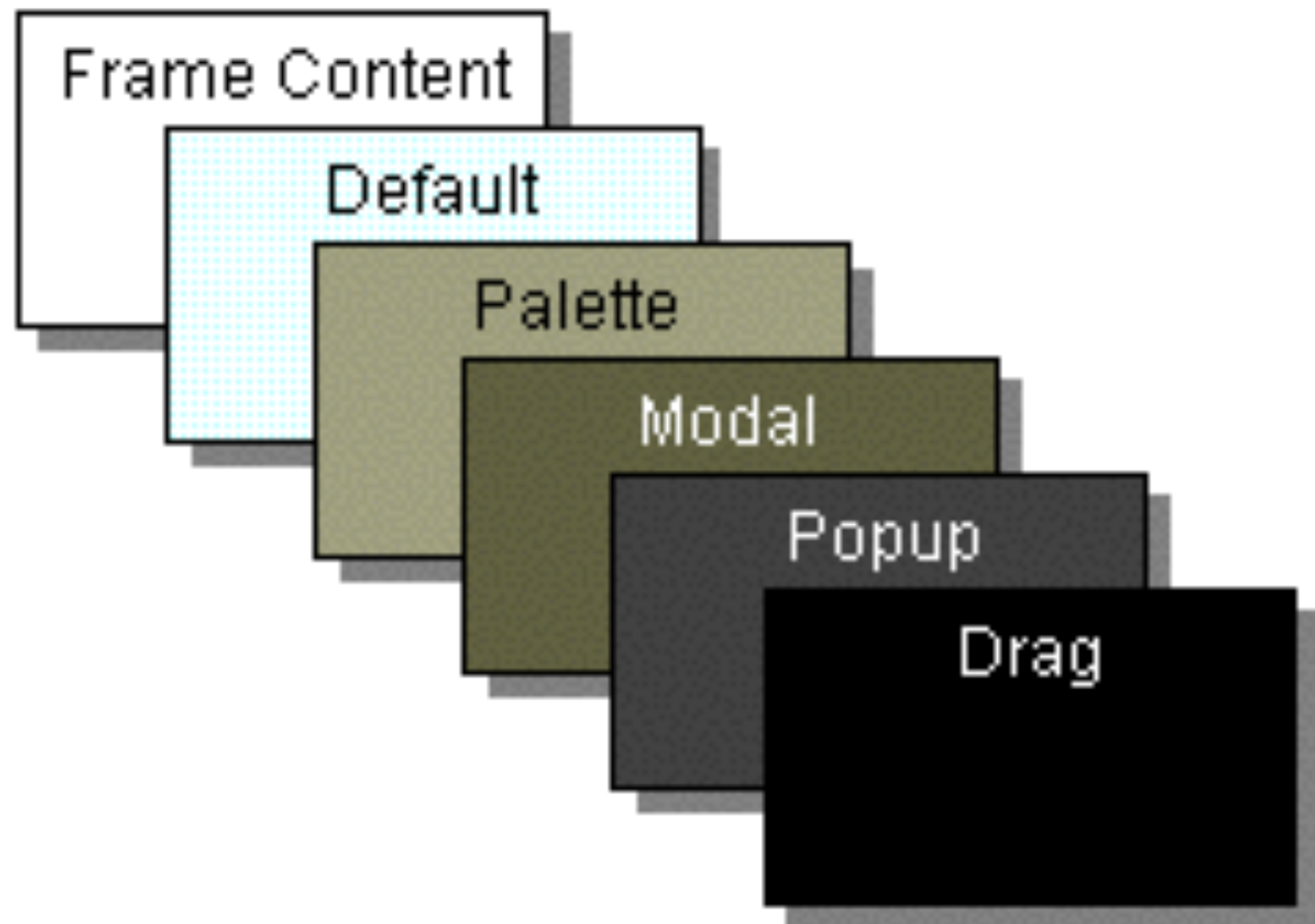


- JRootPane
- JLayeredPane
- JInternalFrame
- JDesktopPane

- JRootPane



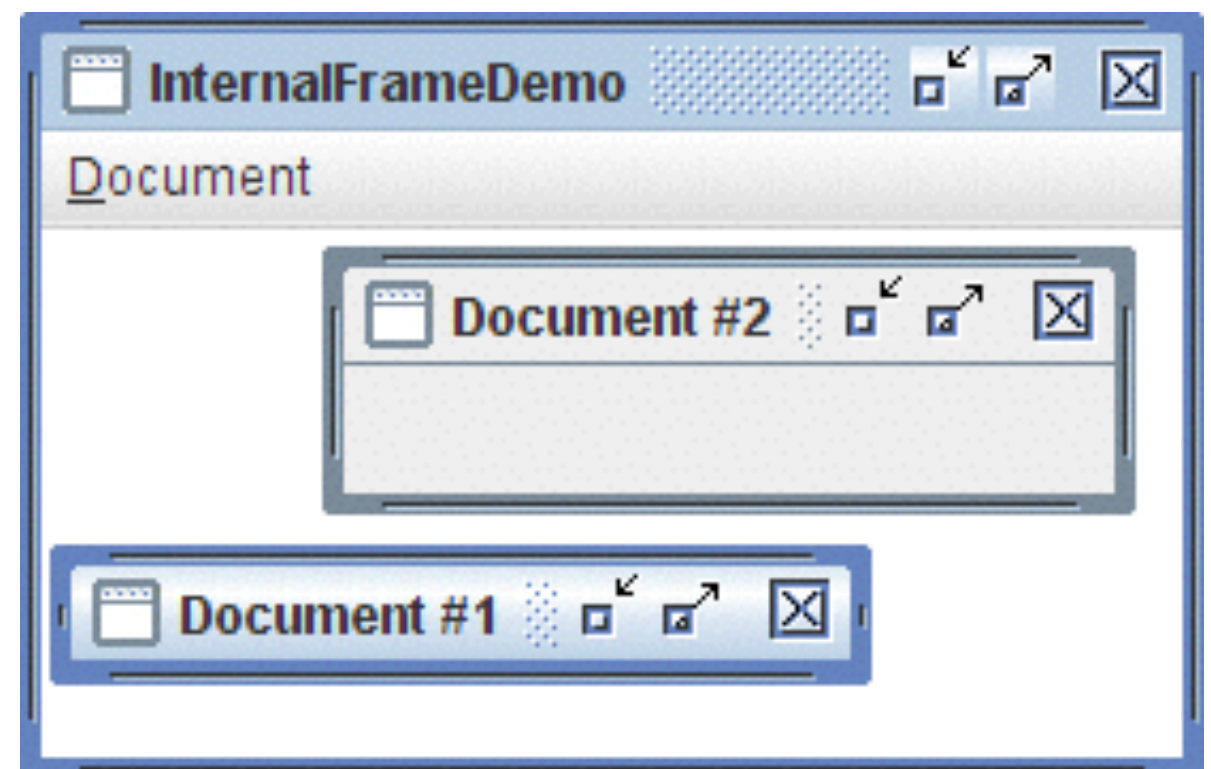
- JLayeredPane



- JInternalFrame

- JDesktopPane

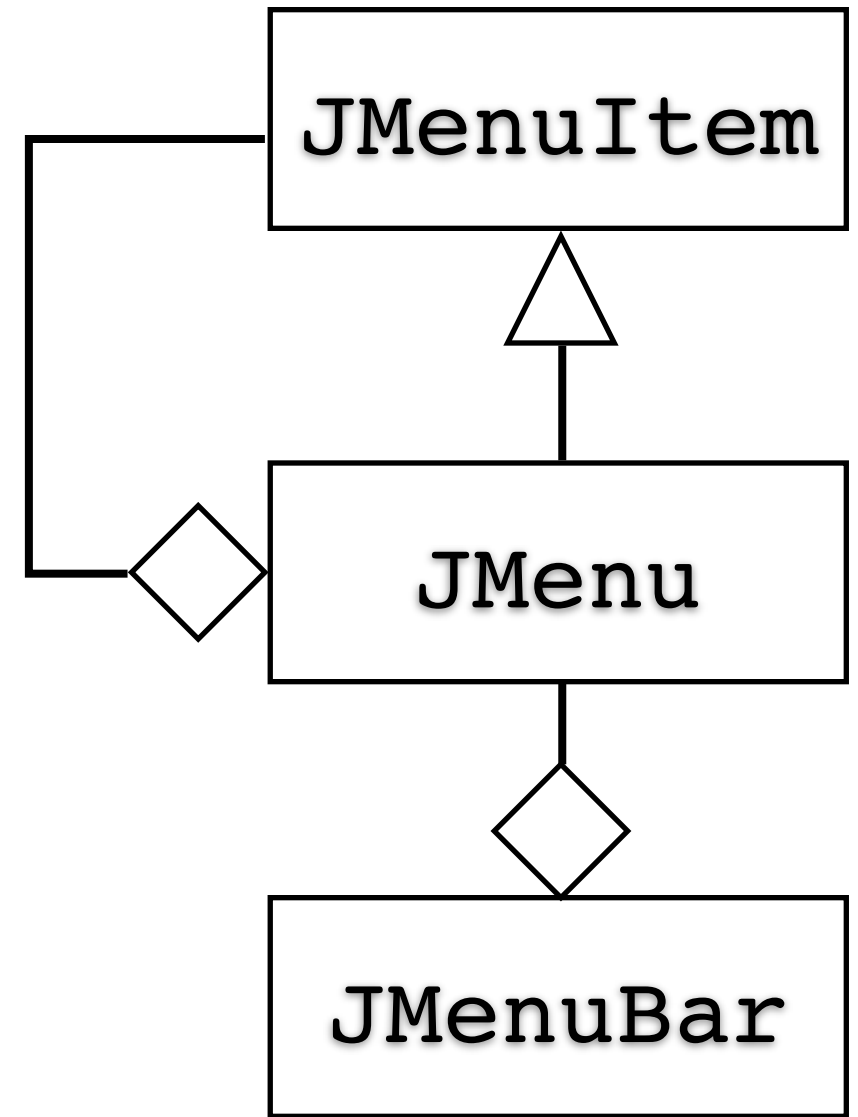
JInternalFrame



- JMenuItem

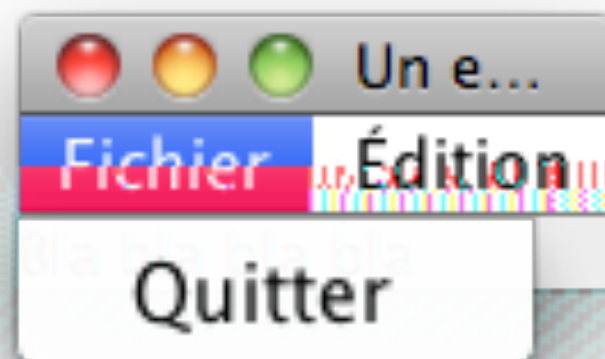
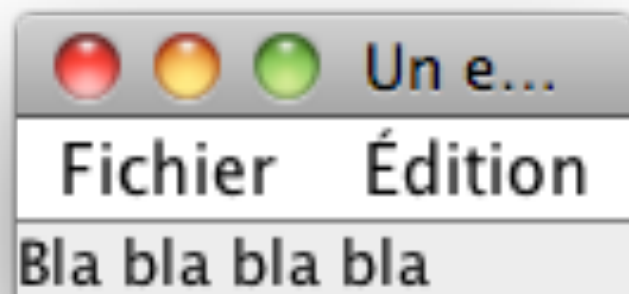
- JMenu

- JMenuBar

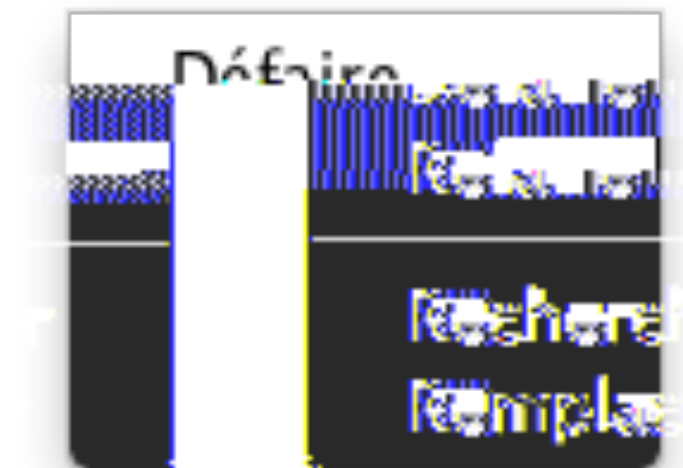


JMenuItem

`setJMenuBar (JMenuBar)`



- JSeparator



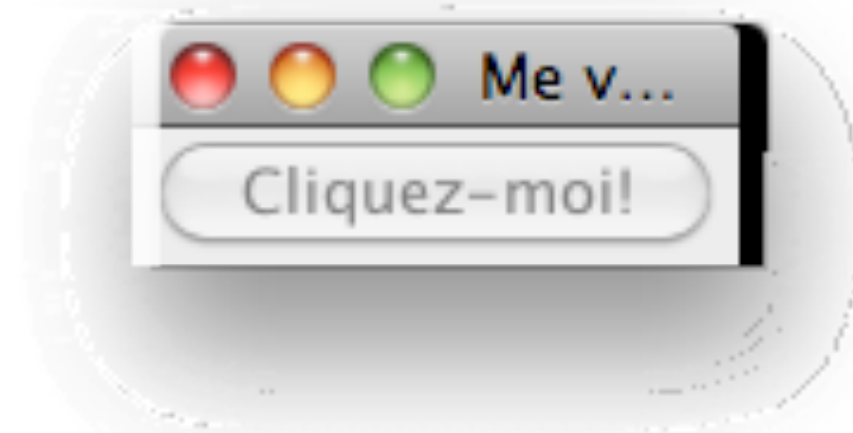
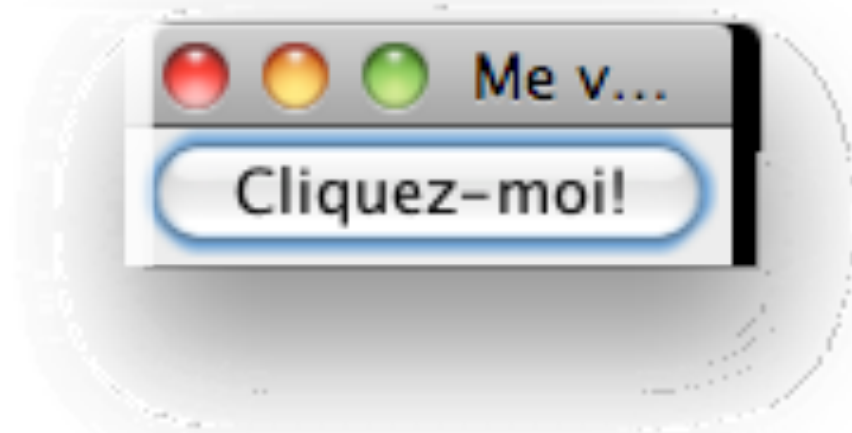
`validate()`

`pack()`

optimal

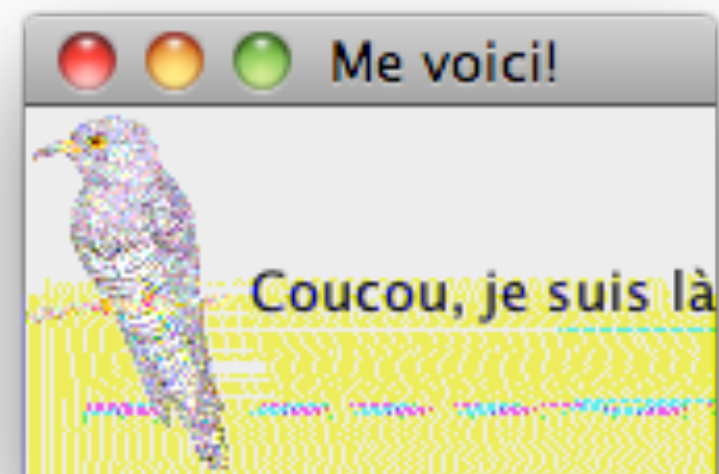
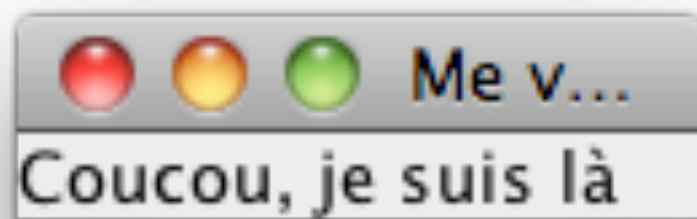
i.e.

- `setEnabled(boolean)`
- `boolean getEnabled()`



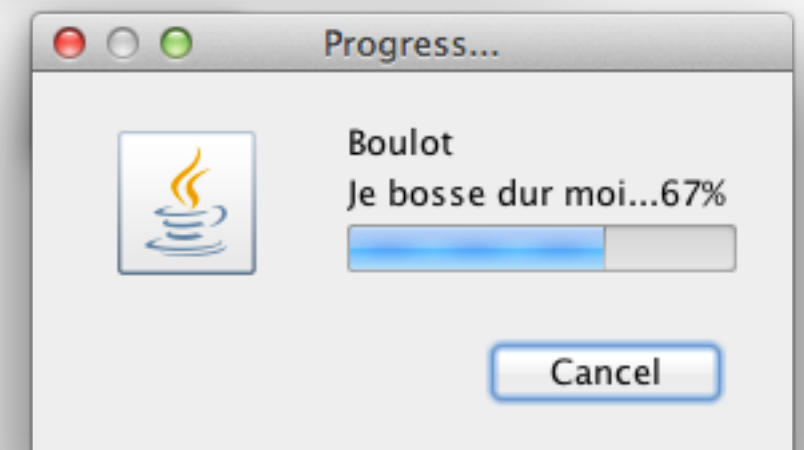
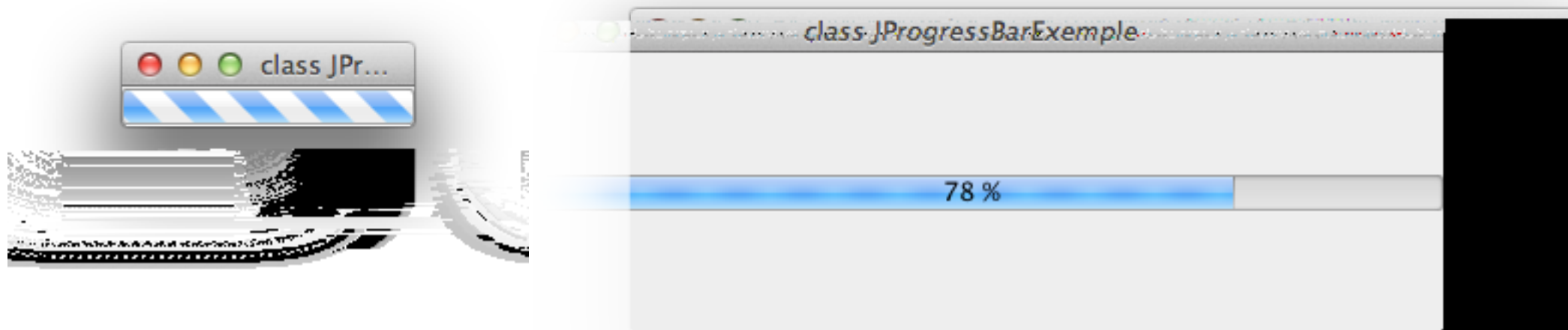
- JLabel
- JProgressBar
- JSeparator
- JToolTip

- JLabel



- JProgressBar

ProgressMonitor
ProgressMonitorInputStream



JProgressBarExemple.java
ProgressMonitorExemple.java

- JButton
 - JMenuItem
 - JCheckBox JCheckBoxMenuItem
 - JRadioButton JRadioButtonMenuItem
 - JToggleButton
-
- JComboBox
 - JList
-
- JTextField JFormattedTextField/JPasswordField
-
- JSlider
 - JSpinner

AbstractButton

via ButtonGroup

JButton JMenuItem

RadioButton

ButtonGroup

ButtonExemple.java

JComboBox

ListCellRenderer<E>

ListExample.java

Te e

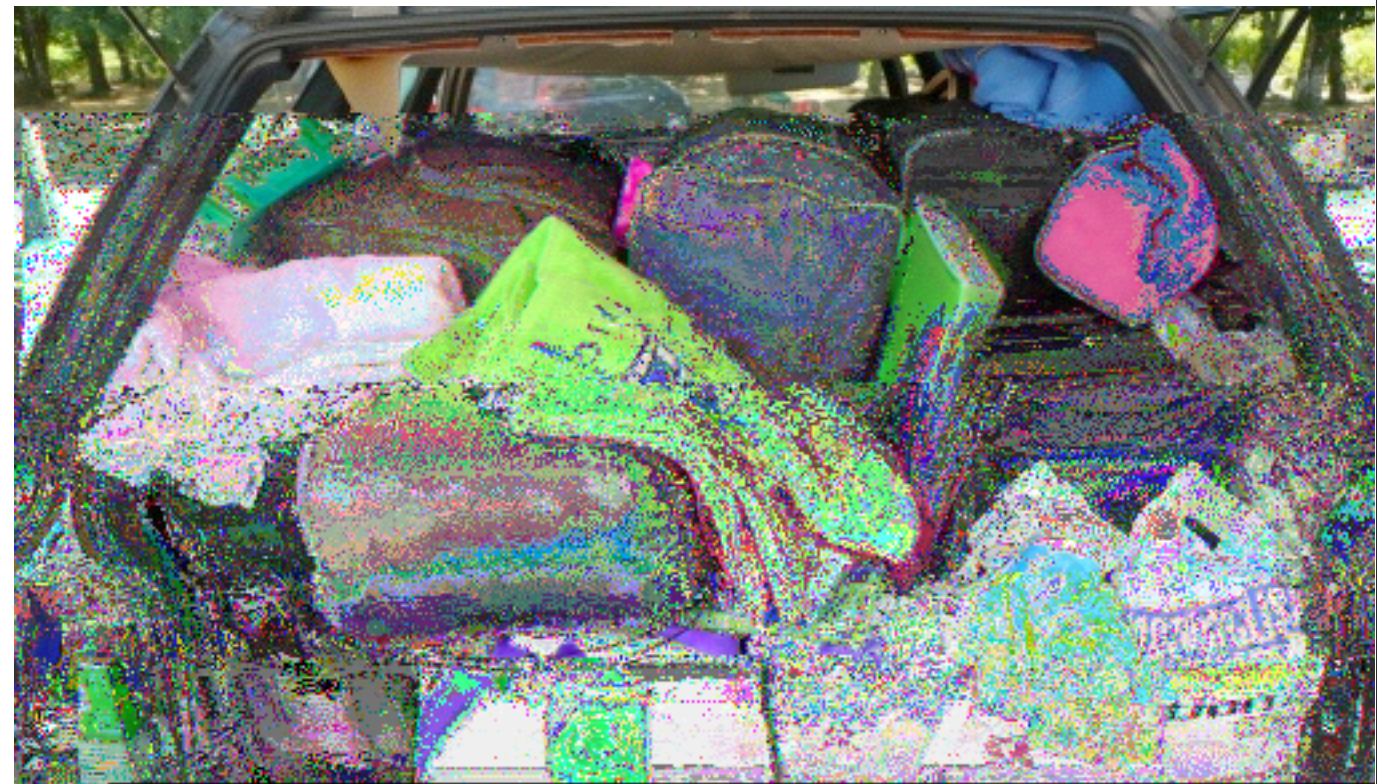
TextExample.java

roulette

`SlSpiExemple.java`

i.e.

- JColorChooser
- JEditorPane
- JTextPane
- JFileChooser
- JTable
- JTextArea
- JTree



```
setLayout (LayoutManager)
```

- BorderLayout
- CardLayout
- GridLayout
- GridBagLayout
- FlowLayout

BoxLayout
GroupLayout
OverlayLayout
ScrollPaneLayout
SpringLayout
ViewportLayout

- BorderLayout

JRootPane

JWindow



contentPane

JFrame

- BorderLayout

Box

BoxLayoutExemple.java



- GroupLayout

- OverlayLayout

CardLayout



OverlayLayoutExemple.java

- SpringLayout



In e nazionali a ion



Localization

traduction

Internationalization

développement

- `java.util.ResourceBundle`

`ResourceBundle.Control`

- `ResourceBundle.getBundle(String name)`

name *suffixe régionalisé* .properties

`Messages_fr_FR.properties`

- `unResourceBundle.getString(String clé)`

LANG LC_*

Run Configurations... ► Environment

InternationalisationExample.java

<ALT>

<RET>

- `setMnemonic(int)`
- `java.awt.event.KeyEvent.VK_*`

- `setAccelerator(KeyStroke)`