

Swing

Java Swing 1

Entorno gráfico


Tanto AWT como Swing proporciona componentes básicos de GUI para utilizarlos, tanto en los applets como en las aplicaciones.

Existen superclases que se pueden extender y sus propiedades se pueden heredar; las clases pueden ser abstractas. Proporciona componentes básicos de GUI para utilizarlos, tanto en los applets como en las aplicaciones.

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Java Swing 2

Frames



```

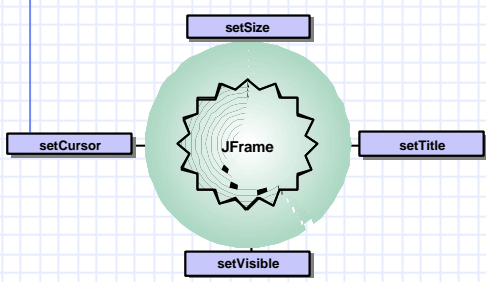
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;

private static void createAndShowGUI() {
    JFrame.setDefaultLookAndFeelDecorated(true);
    JFrame frame = new JFrame("FrameDemo");
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    JLabel emptyLabel = new JLabel("");
    emptyLabel.setPreferredSize(new Dimension(175, 100));
    frame.getContentPane().add(emptyLabel, BorderLayout.CENTER);
    frame.pack();
    frame.setVisible(true);
}

public static void main(String[] args) {
    javax.swing.SwingUtilities.invokeLater(new Runnable() {public void run()
    createAndShowGUI();
    });
}
    
```

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JFrame

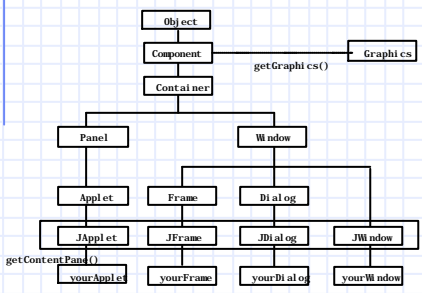


```

graph TD
    JFrame((JFrame)) --- setSize[setSize]
    JFrame --- setTitle[setTitle]
    JFrame --- setVisible[setVisible]
    JFrame --- setCursor[setCursor]
    
```

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Containers

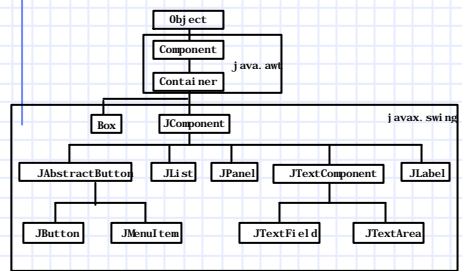


```

graph TD
    Object --> Component
    Component --> Container
    Component --> Graphics[Graphics]
    Container --> Panel
    Container --> Window
    Panel --> Applet
    Panel --> Frame
    Panel --> Dialog
    Window --> JApplet
    Window --> JFrame
    Window --> JDialog
    Window --> JWindow
    Applet --> yourApplet[yourApplet]
    Frame --> yourFrame[yourFrame]
    Dialog --> yourDialog[yourDialog]
    Window --> yourWindow[yourWindow]
    
```

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Jerarquía

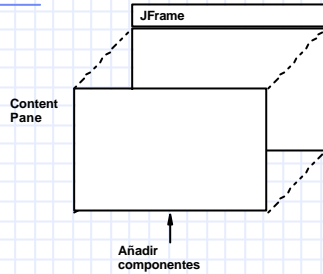


```

graph TD
    Object --> Component
    Component --> Container
    Component --> Box
    Component --> JComponent
    Component --> JavaxSwing[javax.swing]
    Container --> JAbstractButton
    Container --> JList
    Container --> JPanel
    Container --> JTextComponent
    Container --> JLabel
    JAbstractButton --> JButton
    JAbstractButton --> JMenuItem
    JTextComponent --> JTextField
    JTextComponent --> JTextArea
    
```

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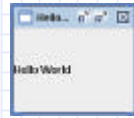
ContentPane



Java Swing

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Hola Mundo

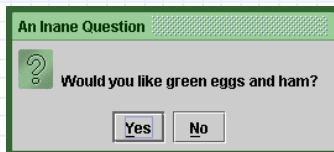


```
import javax.swing.*;
public class HelloWorldSwing {
    private static void createAndShowGUI() {
        JFrame.setDefaultLookAndFeelDecorated(true);
        JFrame frame = new JFrame("HelloWorldSwing");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        JLabel label = new JLabel("Hello World");
        frame.getContentPane().add(label);
        frame.pack();
        frame.setVisible(true);
    }
    public static void main(String[] args) {
        javax.swing.SwingUtilities.invokeLater(new Runnable() {
            public void run() {
                createAndShowGUI();
            }
        });
    }
}
```

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Dialogs



Java Swing

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Panel



Java Swing

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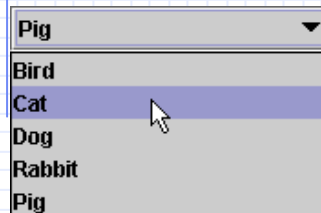
Buttons



Java Swing

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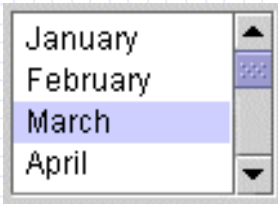
Combo box



Java Swing

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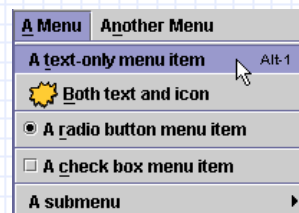
List



Java Swing

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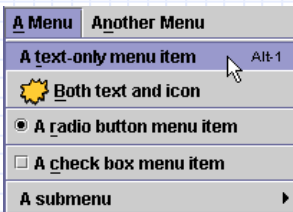
Menu



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Menu



Java Swing

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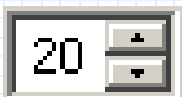
Slider



Java Swing

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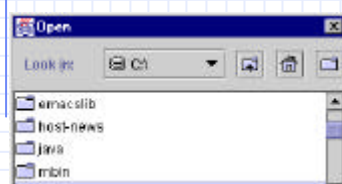
Spinner



Java Swing

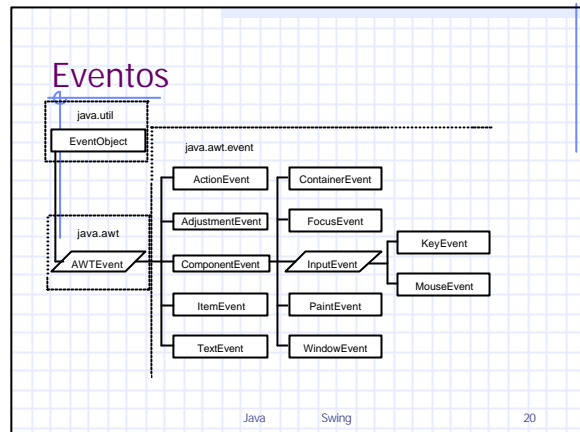
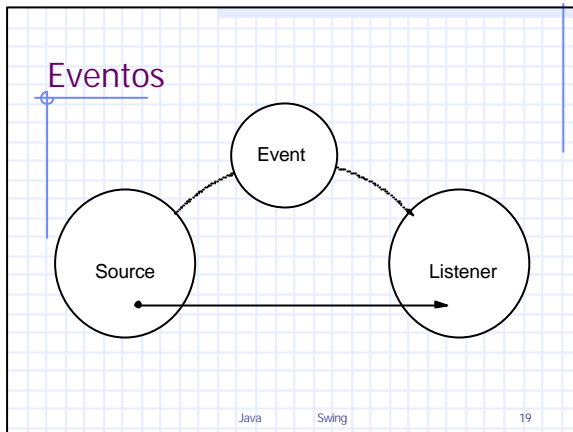
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FileChooser



Java Swing

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Interface Listener

Listener Interface	Event	Listener Methods
ActionListener	ActionEvent	actionPerformed()
AdjustmentListener	AdjustmentEvent	adjustmentValueChanged()
ComponentListener	ComponentEvent	componentHidden() componentMoved() componentResized() componentShown()
ContainerListener	ContainerEvent	componentAdded() componentRemoved()
FocusListener	FocusEvent	focusGained() focusLost()

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Interface Listener

Listener Interface	Event	Listener Methods
KeyListener	KeyEvent	keyPressed() keyReleased() keyTyped()
MouseListener	MouseEvent	mouseClicked() mouseEntered() mouseExited() mousePressed() mouseReleased()
MouseMotionListener	MouseEvent	mouseDragged() mouseMoved()

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Interface Listener

Listener Interface	Event	Listener Methods
TextListener	TextEvent	textValueChanged()
ItemListener	ItemEvent	itemStateChanged()
WindowListener	WindowEvent	windowActivated() windowClosed() windowClosing() windowDeactivated() windowDeiconified() windowIconified() windowOpened()

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