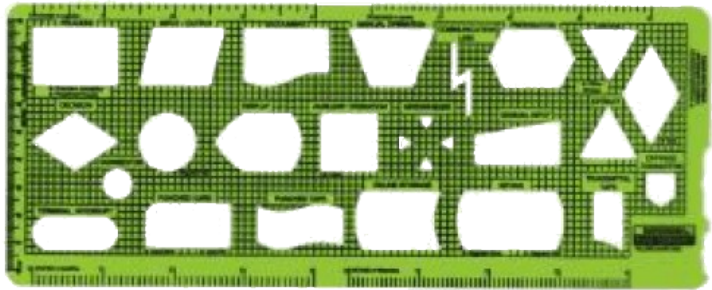


# Lógica e Programação Java



Programadores {+ Inovadores ;}

[www.x25.com.br](http://www.x25.com.br)

- Visualização gráfica
- Classe `javax.swing.JOptionPane`



## Abstract Window Toolkit – AWT

Classe gráfica baseada nos padrões da GUI

## Containers e Componentes

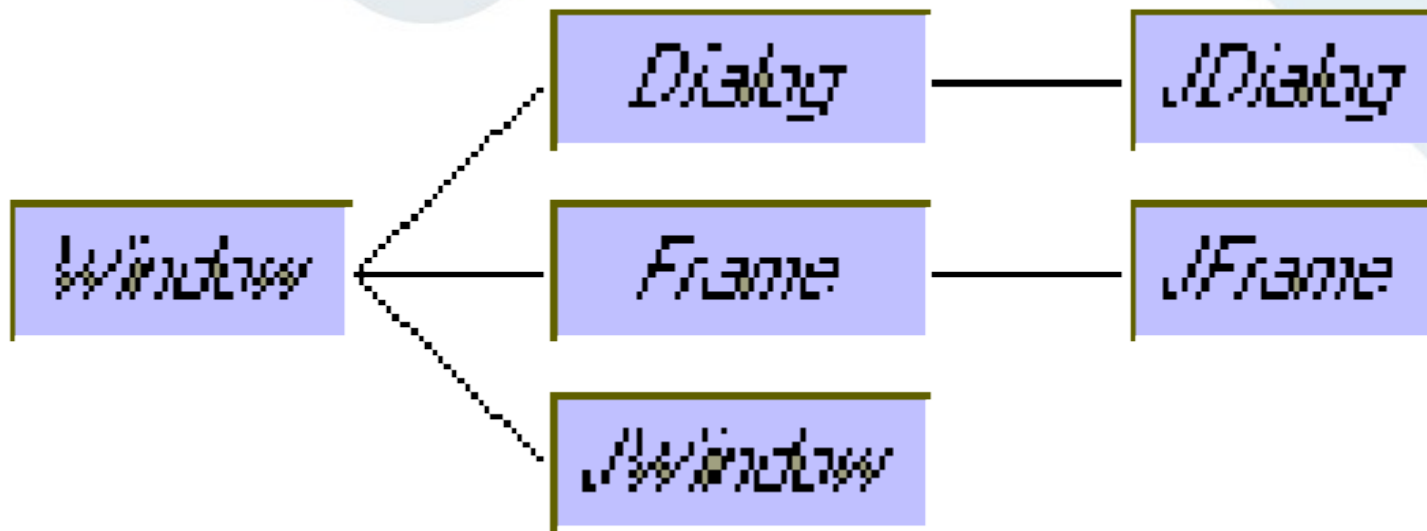
Containers são objetos que podem conter componentes

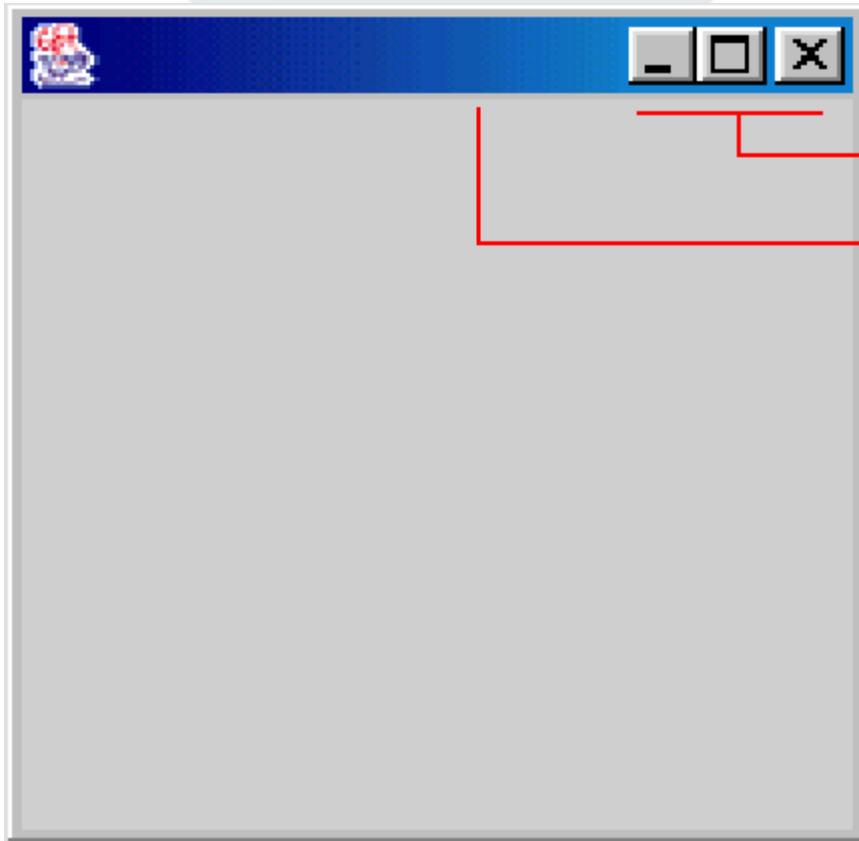
## SWING

Nova classe gráfica derivada da AWT



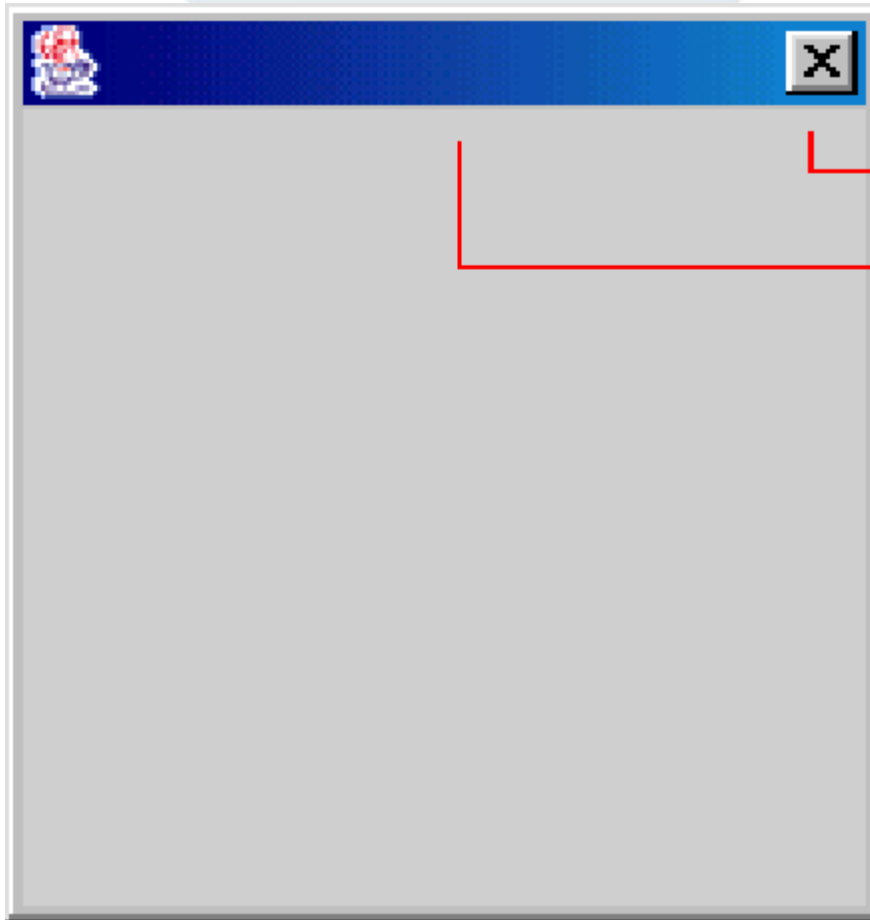
# Containers





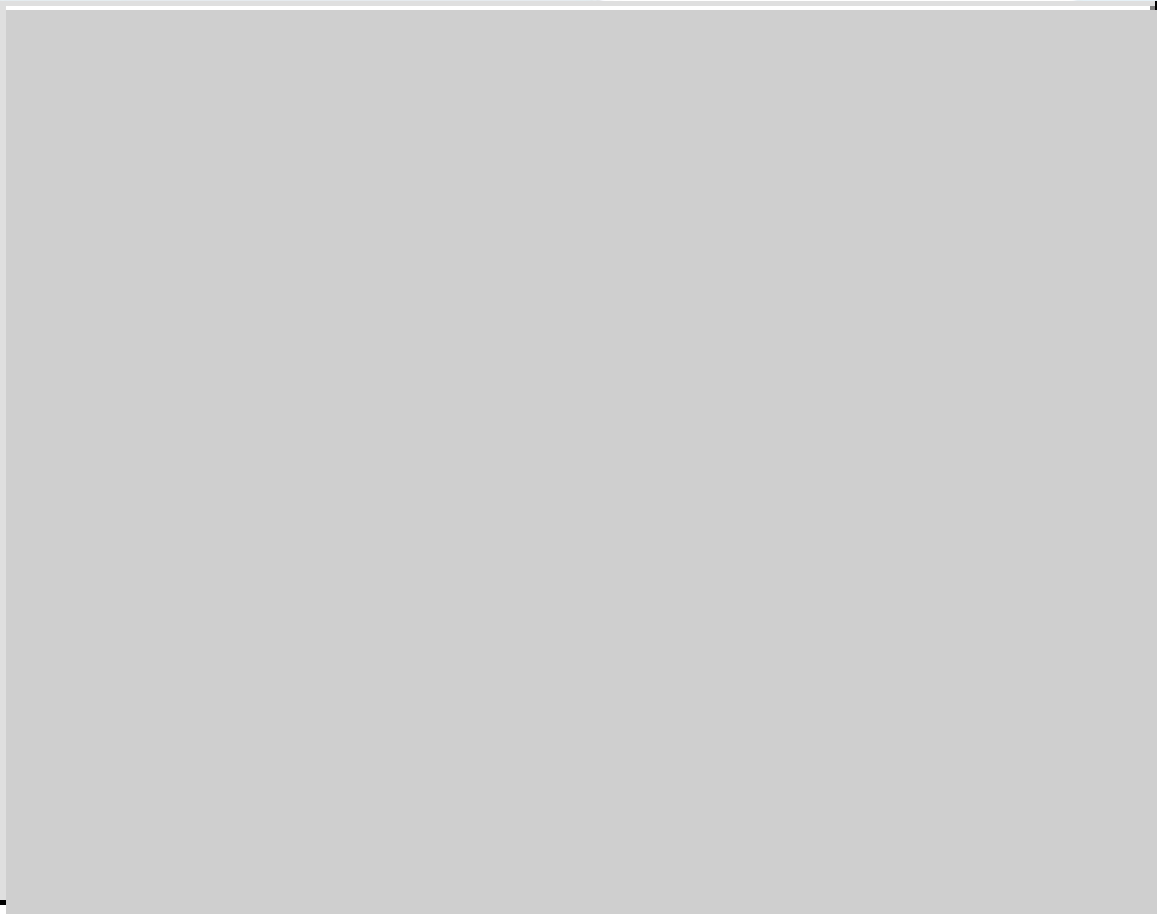
Botões de Controle  
Título





Botões de Controle  
Título











### Os tipos padrões de Layouts são:

FlowLayout - Esquerda para direita na ordem  
BorderLayout - Norte, Sul, Leste, Oeste e Centro  
GridLayout - Em linhas e colunas ajustando objetos

### Por padrão:

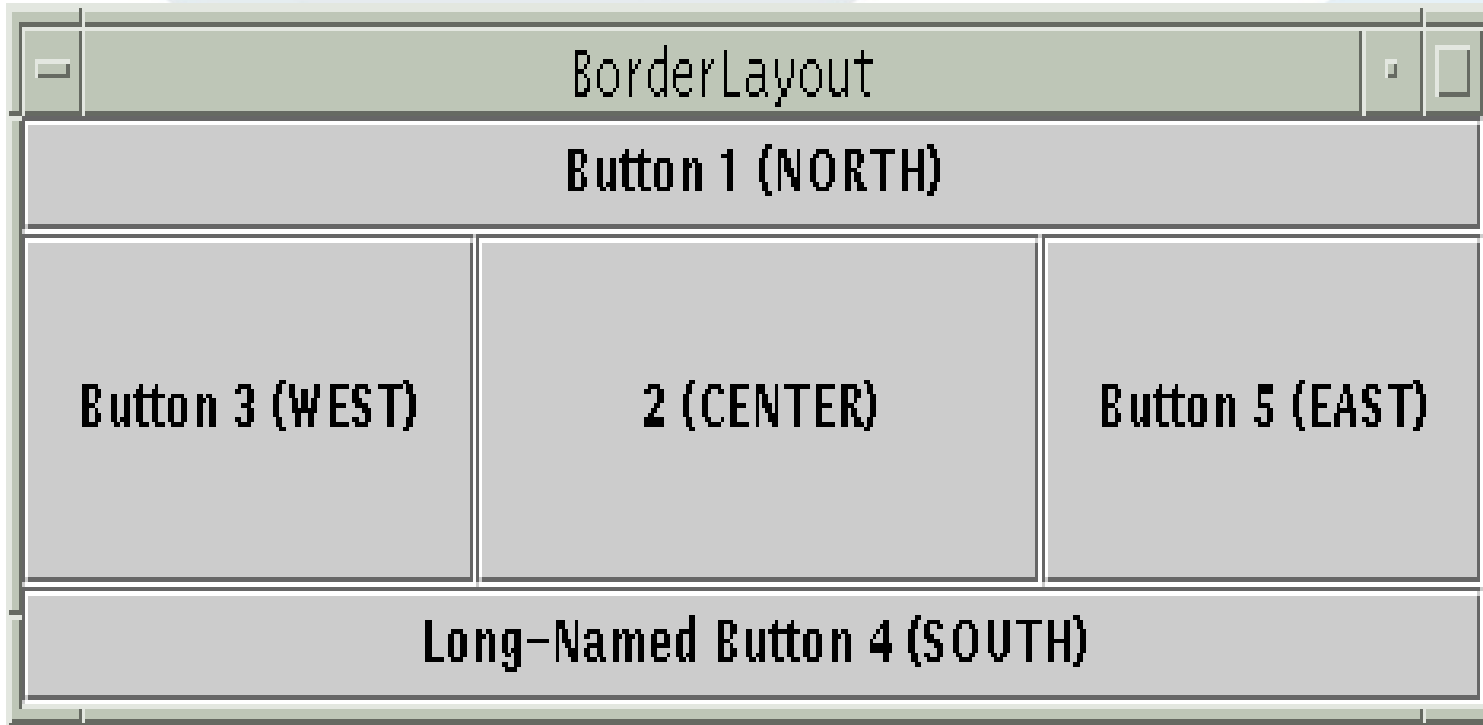
**FlowLayout** - Applet, Panel e JPanel  
**BorderLayout** - Window, Frame, JFrame e JApplet



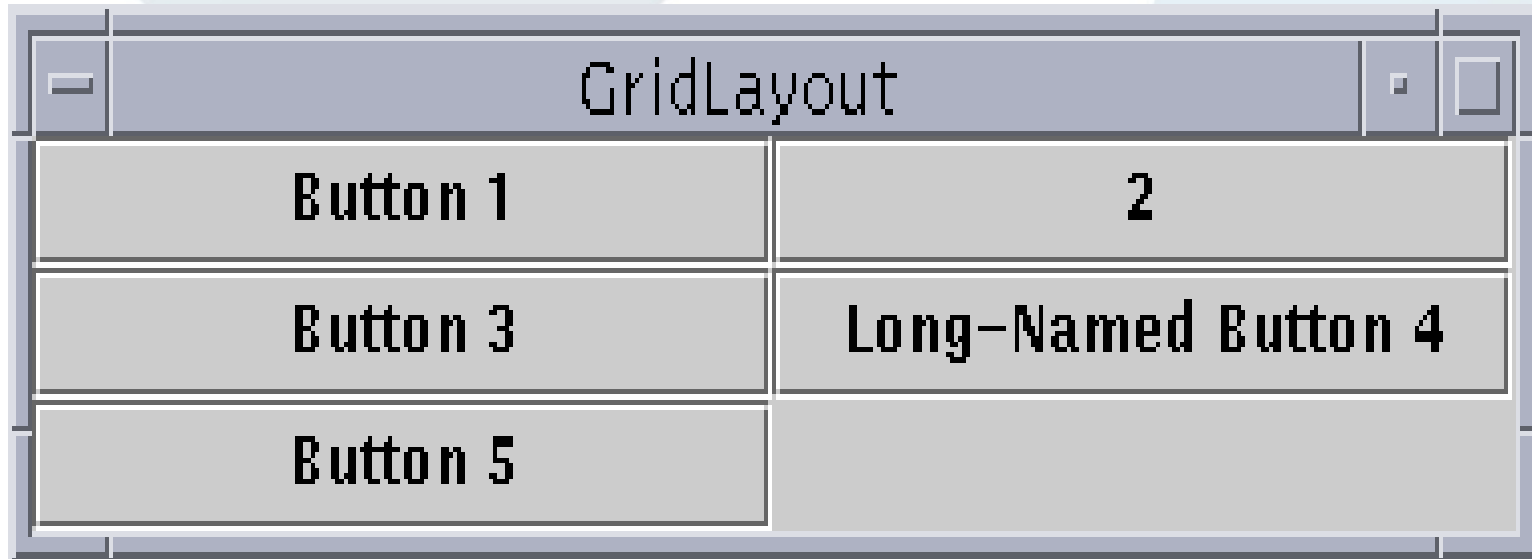


Encaixa os objetos na janela na ordem de criação da esquerda para a direita



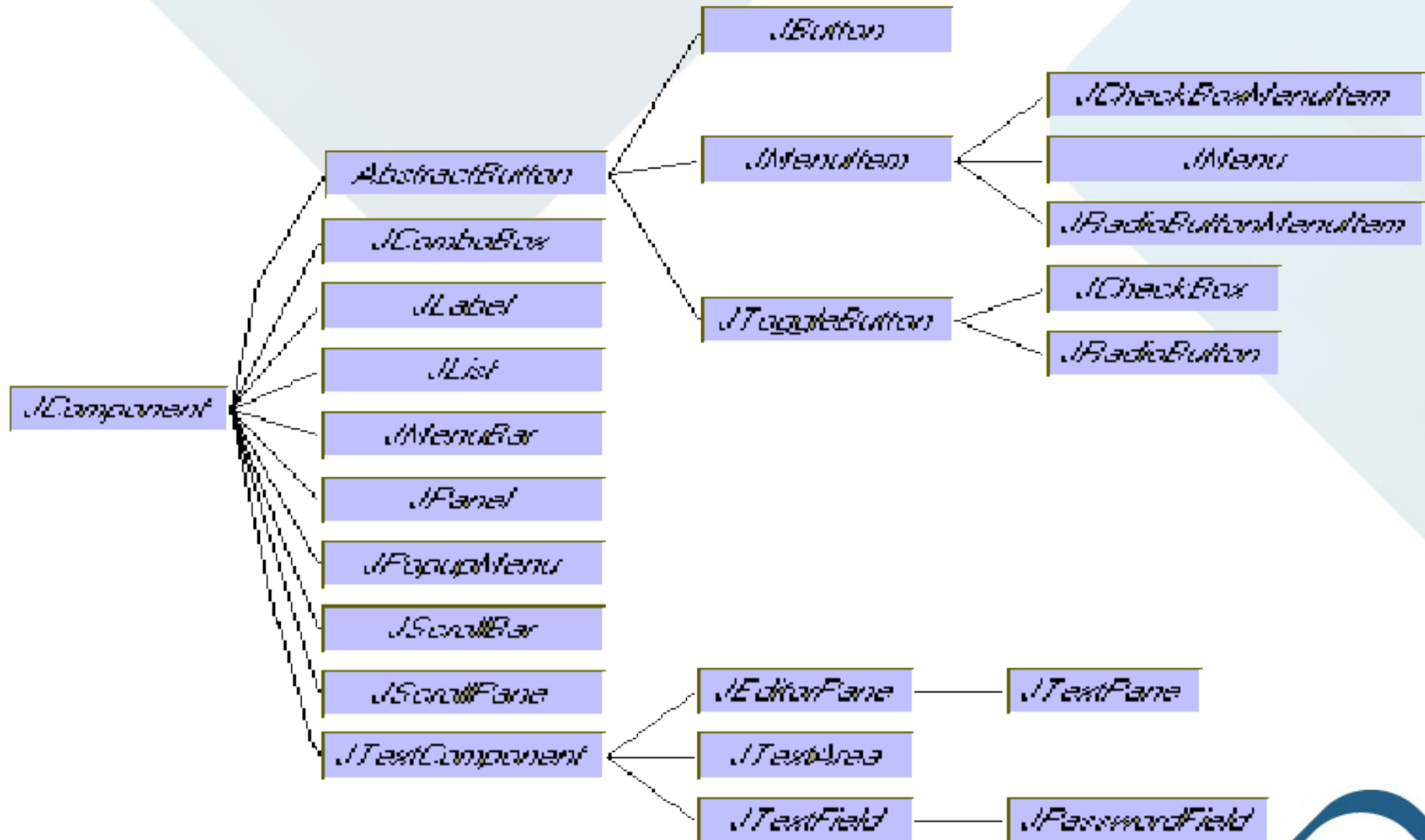


Encaixa os objetos por coordenadas geográficas, se a coordenada for omitida por padrão força o centro



Divide a janela em linhas e colunas

# Componentes da Swing



JLabel

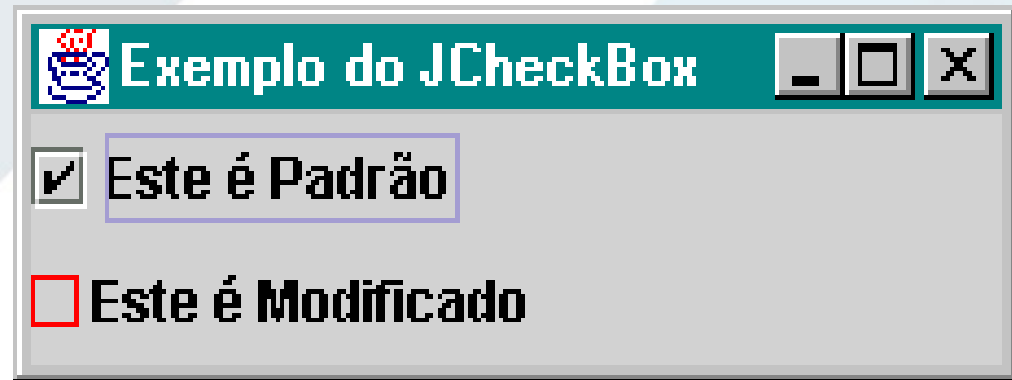


JButton

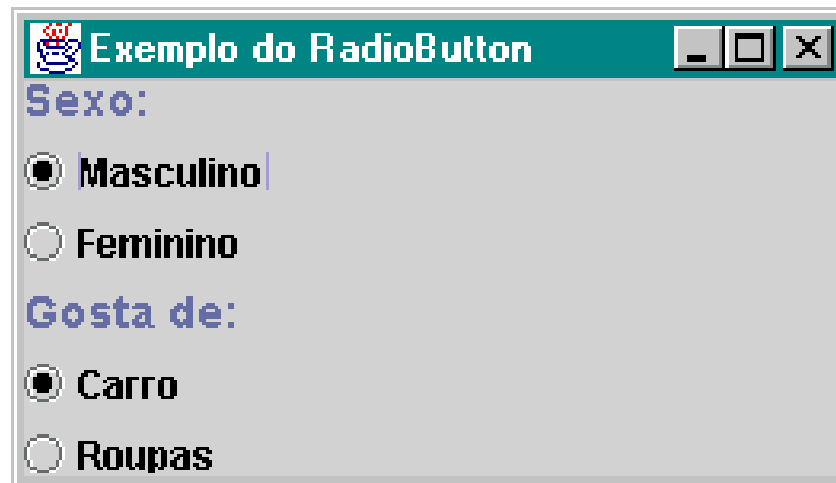


# JCheckBox e JRadioButton

## JCheckBox



## JRadioButton





# JScrollPane e JTextField

JScrollPane



JTextField

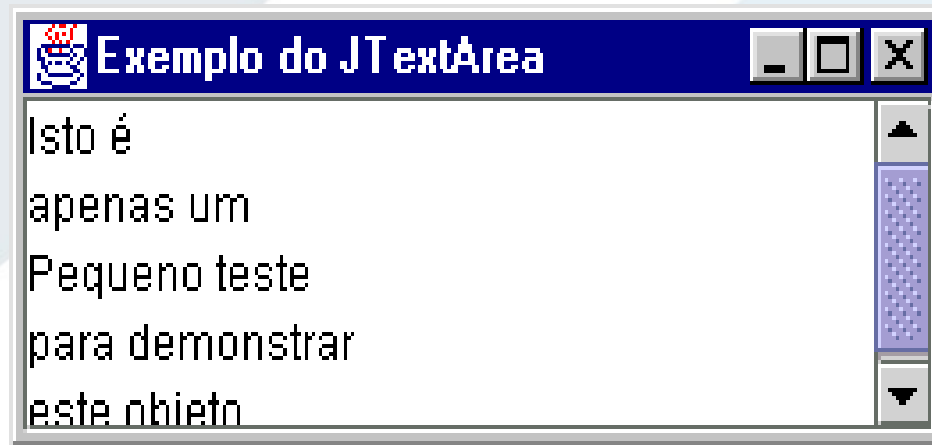


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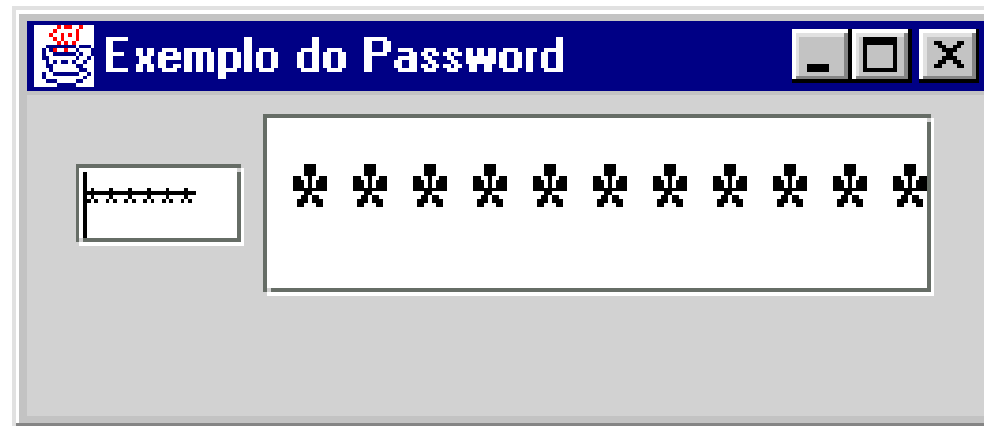
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# JTextArea e JPasswordField

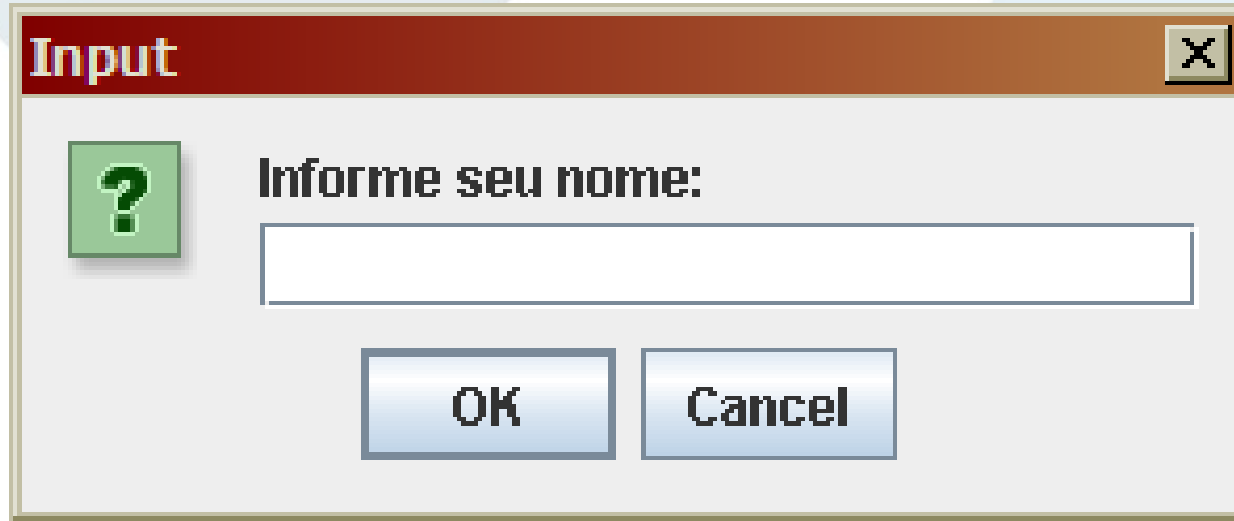
JTextArea



JPasswordField



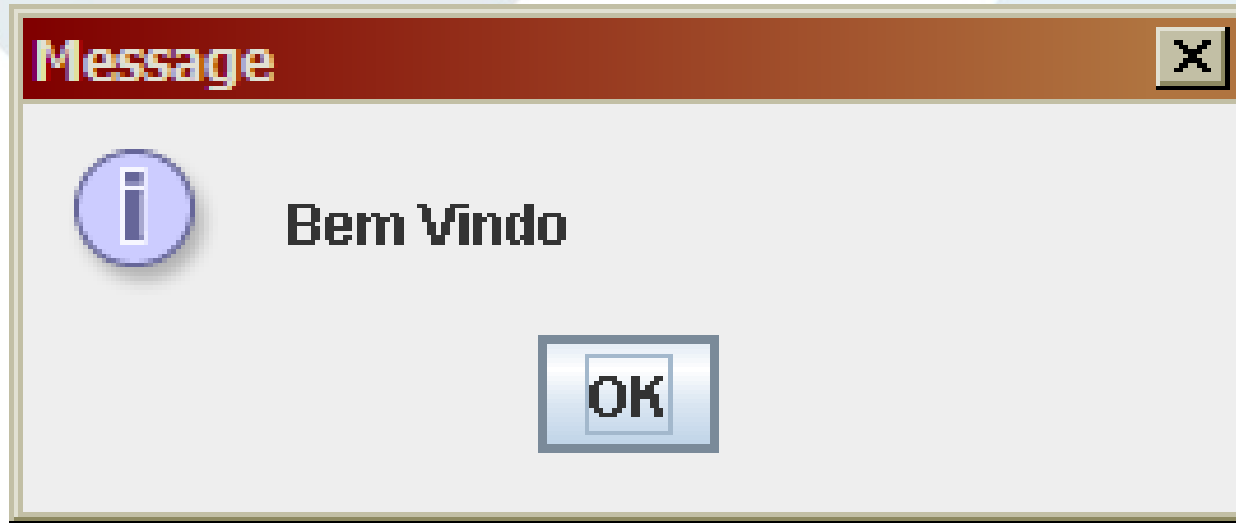
## Entrada de Informação – Via Janela



```
String retorno =  
    javax.swing.JOptionPane.showInputDialog( null,  
    "Mensagem");
```



## Saída de Informação – Via Janela



```
javax.swing.JOptionPane.showMessageDialog( null,  
    "Mensagem", ["Título"], [ícone]);
```

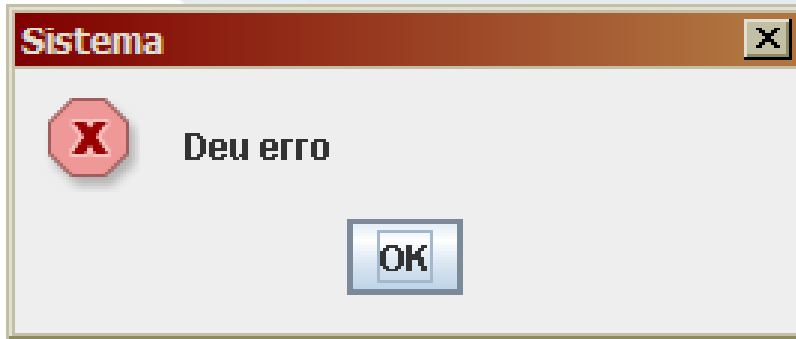
default: INFORMATION\_MESSAGE



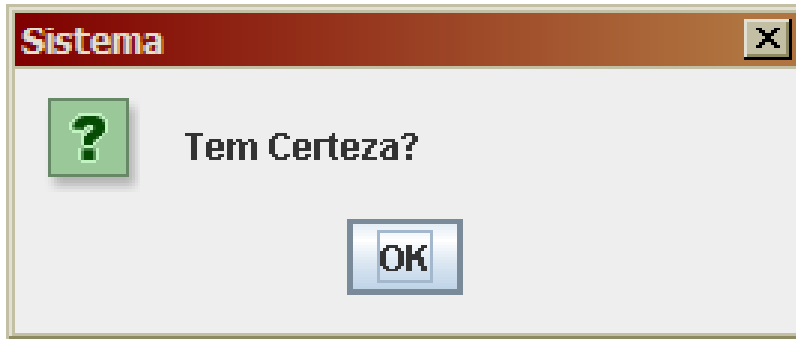
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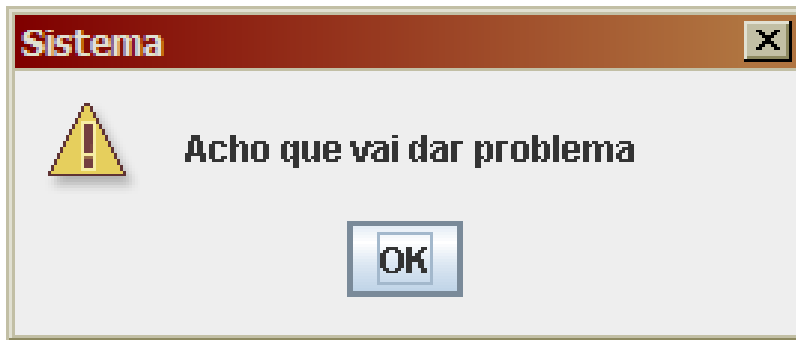
# Parâmetros do Ícone da Janela de Saída



ERROR\_MESSAGE



QUESTION\_MESSAGE



WARNING\_MESSAGE



# *Dúvidas? Agradecimentos*

## *Home Page*

*<http://about.me/fernando.anselmo>*

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