

INTERFACE GRÁFICO

JAVA



PACOTES

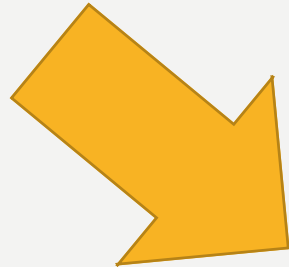
Java.awt

Java.swing
(extensão)

COMPONENTES

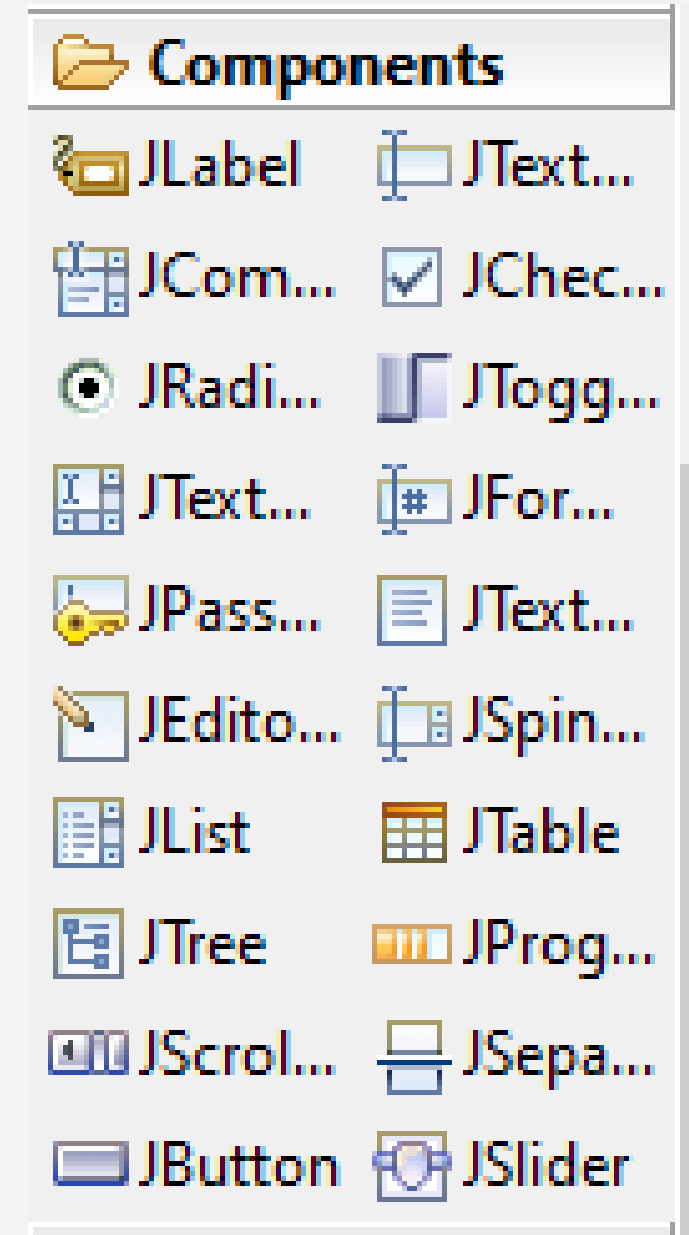
Os objetos da Classe `Java.swing` denominam-se componentes

Todas as interfaces gráficas constroem-se através de componentes denominados de contentores (Janelas e painéis)

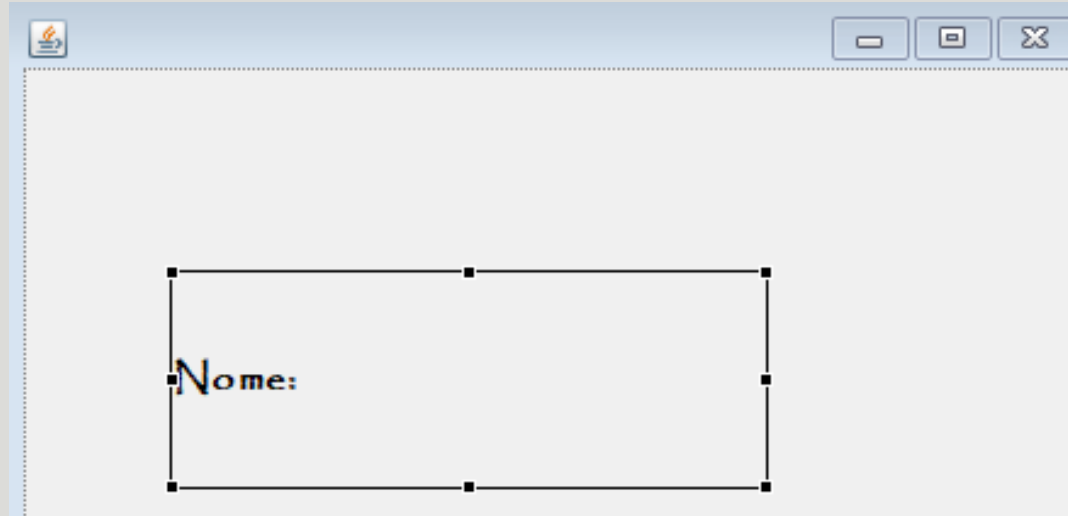


Botões, Rótulos, Caixas de Texto

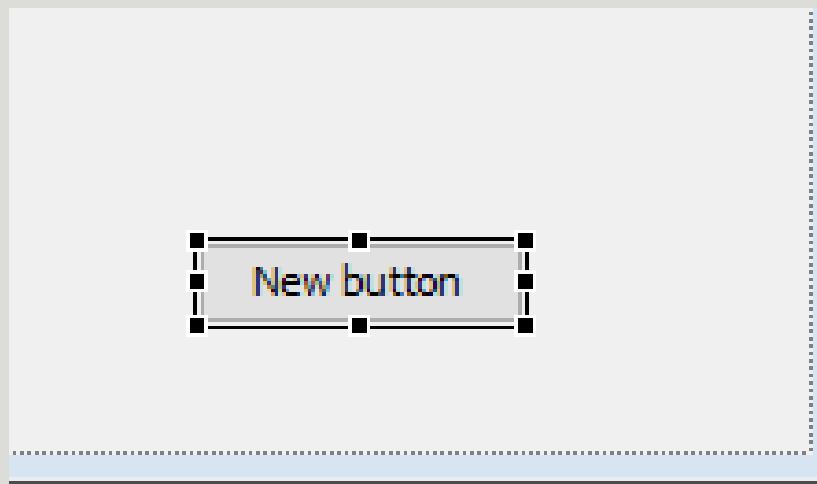
COMPONENTES



PROPRIEDADES



Variable	lblNewLabel
Construc...	(Constructor pr...
Bounds	(61, 84, 244, 88)
Class	javax.swing.JLa...
backgrou...	<input type="checkbox"/> 240,240,240 ...
displaye...	
enabled	<input checked="" type="checkbox"/> true
font	Papyrus 16 B... ...
foreground	<input type="checkbox"/> 0,0,0 ...
horizonta...	LEADING
icon	...
labelFor	...
text	Nome: ...
toolTipText	...
verticalAl...	CENTER



Proper	
Variable	btnNewButton
Construc...	(Constructor pr...
Bounds	(267, 203, 89, 23)
x	267
y	203
width	89
height	23
Class	javax.swing.JBu...
backgrou...	<input type="checkbox"/> 240,240,240 ...
enabled	<input checked="" type="checkbox"/> true
font	Tahoma 11 ...
foreground	<input type="checkbox"/> 0,0,0 ...
horizonta...	CENTER
icon	...
mnemon...	
selectedl...	...
text	New button ...
toolTipText	...
verticalAl...	CENTER

COMBOBOX

RADIOBUTTON

CHECKBOX

`comboBox.getSelectedItem()`



```
JOptionPane.showMessageDialog(null, "Nacionalidade: " + comboBox.getSelectedItem());
```

```
ButtonGroup group = new ButtonGroup();  
group.add(rdbtnFeminino);  
group.add(rdbtnMasculino);
```

`NomeDoRadioButton.isSelected()`

Genero:

☐ Masculino

☒ Feminino

`chckbxNewCheckBox_1.isSelected()`

☐ 10%

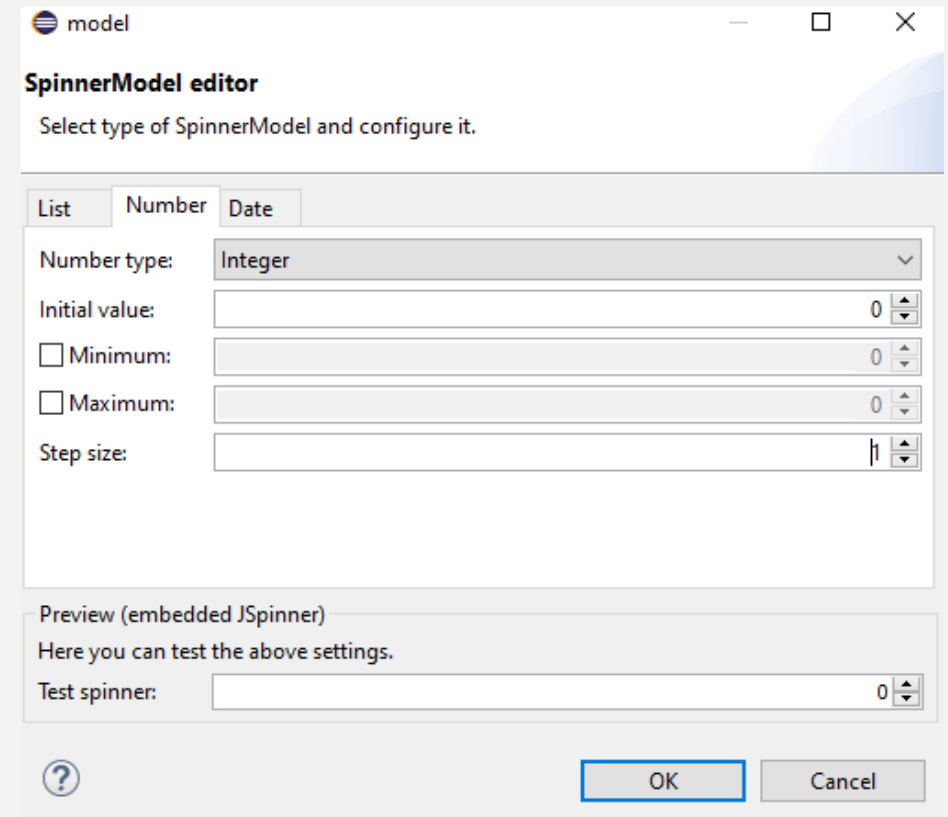
☐ 15%

```
ButtonGroup group = new ButtonGroup();  
    group.add(rdbtnFeminino);  
    group.add(rdbtnMasculino);  
  
Nomedobutton.SetActionCommand("chá");
```


SPINNER

spinner.getValue();

```
JOptionPane.showMessageDialog(null, "\n Ano de Licença Médica: "  
+ spinner.getValue());
```



The image shows a Java Swing dialog box titled "model" with a standard window control bar. The main title is "SpinnerModel editor" with a subtitle "Select type of SpinnerModel and configure it." Below this, there are three tabs: "List", "Number", and "Date". The "Number" tab is selected. The "Number" tab contains the following fields:

- "Number type:" with a dropdown menu set to "Integer".
- "Initial value:" with a text field containing "0" and a spinner icon.
- "Minimum:" with a checkbox and a text field containing "0" and a spinner icon.
- "Maximum:" with a checkbox and a text field containing "0" and a spinner icon.
- "Step size:" with a text field containing "1" and a spinner icon.

At the bottom of the dialog, there is a "Preview (embedded JSpinner)" section with the text "Here you can test the above settings." and a "Test spinner:" label next to a text field containing "0" and a spinner icon. At the very bottom, there is a help icon (question mark in a circle) on the left, and "OK" and "Cancel" buttons on the right.

PROGRESSBAR

maximum	100
minimum	0
orientation	HORIZONTAL
stringPaint...	<input type="checkbox"/> false
toolTipText	...
value	50



```
String num = textField_1.getText();
int numero = Integer.parseInt(num);
if(numero>=20)
{
    progressBar.setValue(100);
    progressBar.setForeground(Color.GREEN);

}
else
{
    progressBar.setValue(80);
    progressBar.setForeground(Color.BLUE);
}
```

COMPONENTES

- Jtable
- JScrollBar
- JSlider

JTABLE

```
private void initialize() {  
    new TabExemplo();  
}
```

```
public class TabExemplo extends JFrame  
{  
    public TabExemplo()  
    { //Cabeçalho da tabela  
        String[] columns = new String[] {  
            "Id", "Nome", "Idade"  
        };  
        Object[][] data = new Object[][] {  
            {1, "Joao", 40.0 },  
            {2, "Rui", 70.0 },  
            {3, "Pedro", 60.0 },  
        };  
        //create table with data  
        JTable table = new JTable(data, columns);  
        //add the table to the frame  
        this.add(new JScrollPane(table));  
        this.setTitle("Tabela Exemplo");  
        this.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        this.pack();  
        this.setVisible(true);}  
}
```



JAVA E SQL

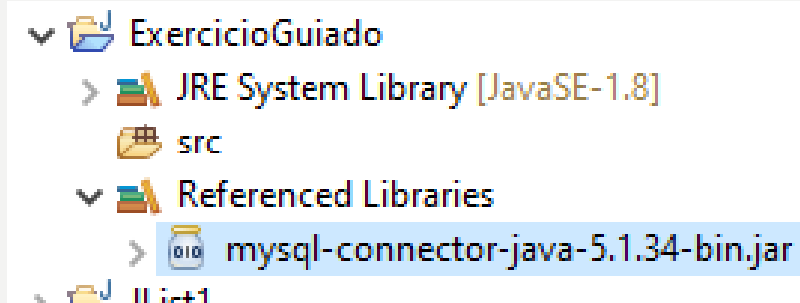
- XAMPP – inclui os principais servidores de código aberto (MYSQL, PHP, PERL, APACHE)
- PHPMyAdmin –
 - Administração da BD através de uma interface web, (para quem não gosta de linha de comandos)
 - Importar e exportar dados

MYSQLWorckBench -

- ferramenta que permite o desenho e gestão de base de dados. Com esta app pode criar **diagramas ER**, gerar scripts SQL, fazer consultas às bases de dados e muito mais
 - Através do scripts SQL, ao exportar o script poderá posteriormente importar no PhpMyAdmin.

LIBRARIES

Necessário ter o conetor do java para mysql, para tal terá de fazer o download mysql-conector-java-5.1.34-bin.jar



Botão direito em cima do PRJ

BuildPath – Add External Archives

mysql-conector-java-5.1.34-bin.jar

- **import java.io.IOException;**
- **import java.sql.Connection;**
- **import java.sql.DriverManager;**
- **import java.sql.PreparedStatement;**
- **import java.sql.SQLException;**
- **import java.sql.ResultSet;**
- **import java.sql.Statement;**

PREPARED STATEMENT VS STATEMENT