



INSTITUTO FEDERAL
DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA
Bahia

Linguagem de Programação II

Introdução às Interfaces Gráficas de
Usuário (GUI) em Java: Pacote Swing
(JFrame, JPanel, JLabel, JTextField,
JPasswordField e JButton)



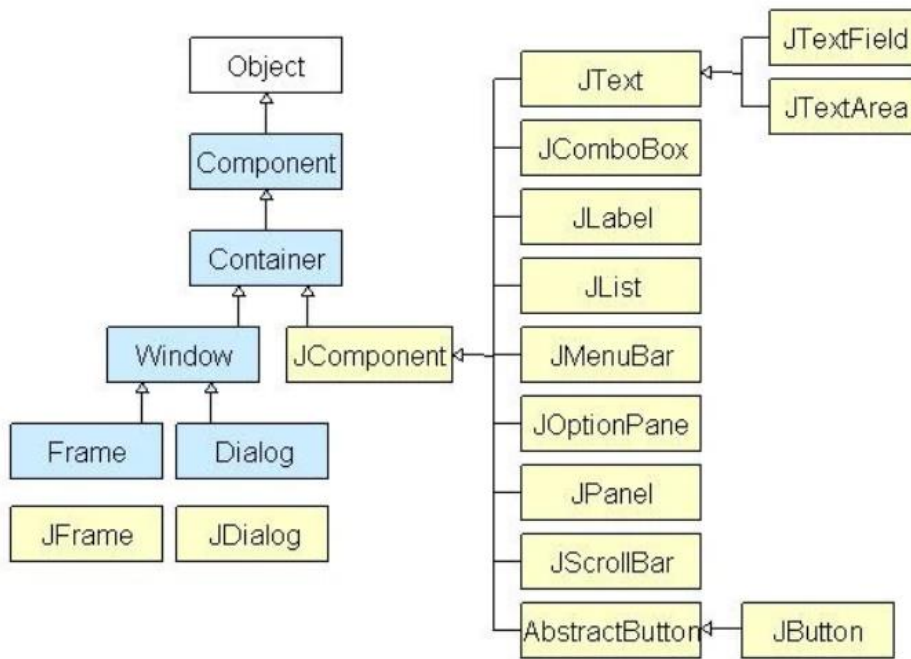
Roteiro

- Introdução às Interfaces Gráficas de Usuário (GUI) em Java (Swing):
 - Introdução;
 - Componentes;
 - JFrame (Janela);
 - Netbeans e Swing
 - JButton (Botão)
 - JLabel (Rótulo ou Etiquetas);
 - JTextField (Campo de Texto);
 - JPasswordField (Campo de Senha);



Java Swing - Introdução

- **Java Swing** é um conjunto classes disponíveis no Java para o desenvolvimento de interfaces gráficas.



Java Swing - Introdução

- Na **Interface Gráfica** é necessário definir quais **componentes (objetos)** serão utilizados e a **disposição** que **eles** terão na **janela (objeto)**.

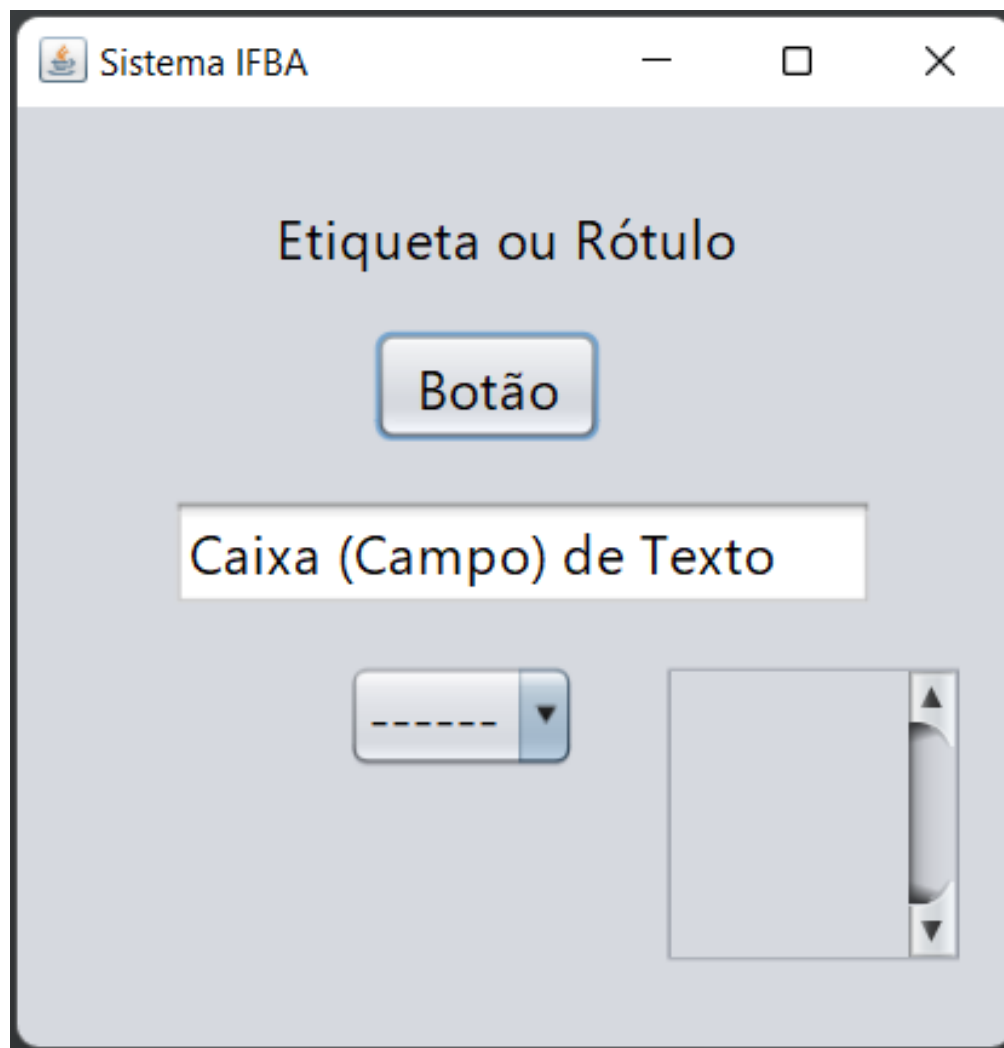


Java Swing – Componentes

- Um **componente** da **Interface Gráfica** é um **objeto visual (Java)** que possibilita realizar a **interação com o programa** por meio do **mouse** e do **teclado**.
- Ex.: **etiquetas, botões, caixas de texto, painéis de rolagem, menus, objetos de múltipla escolha**, entre outros.



Java Swing – Componentes

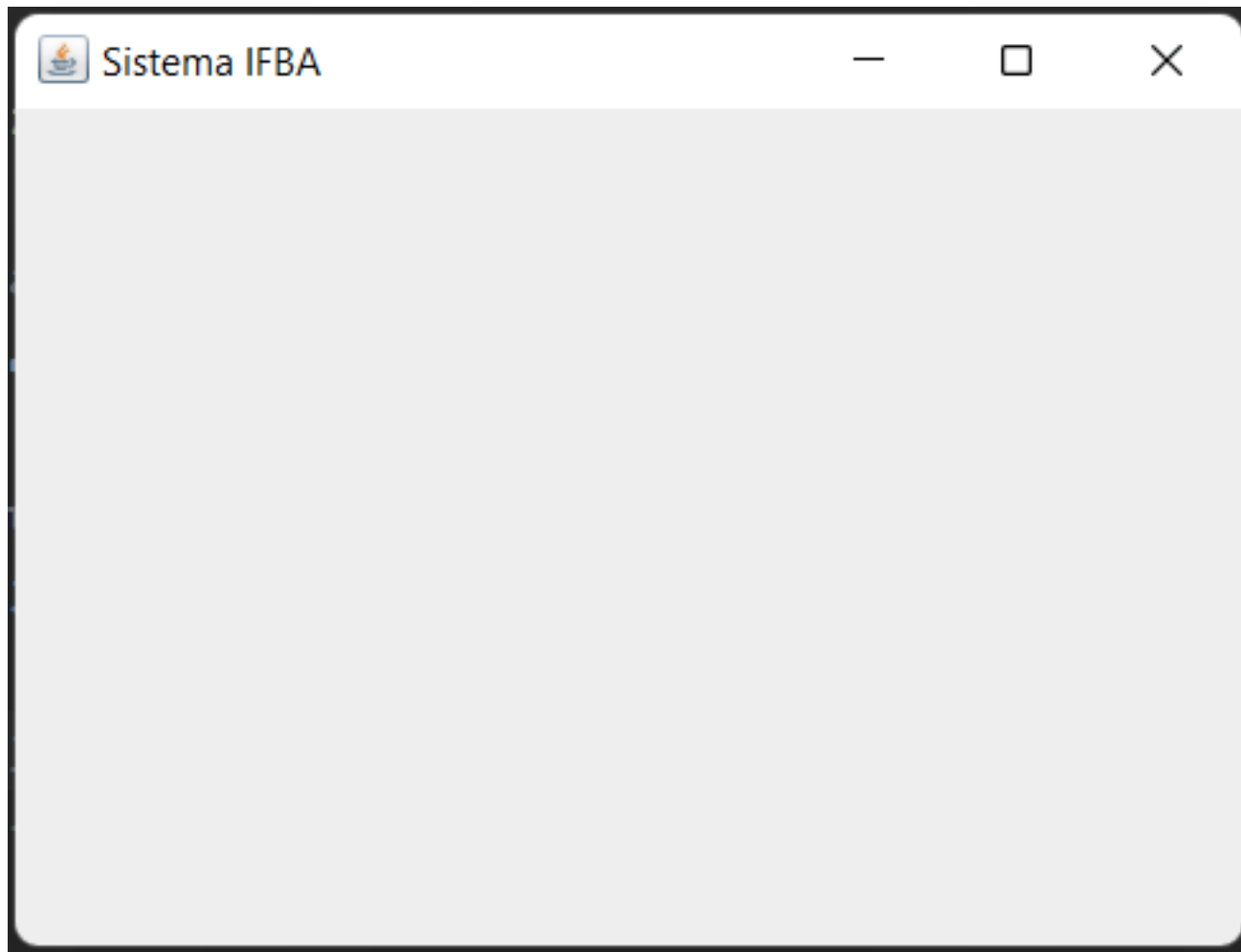


Java Swing – JFrame

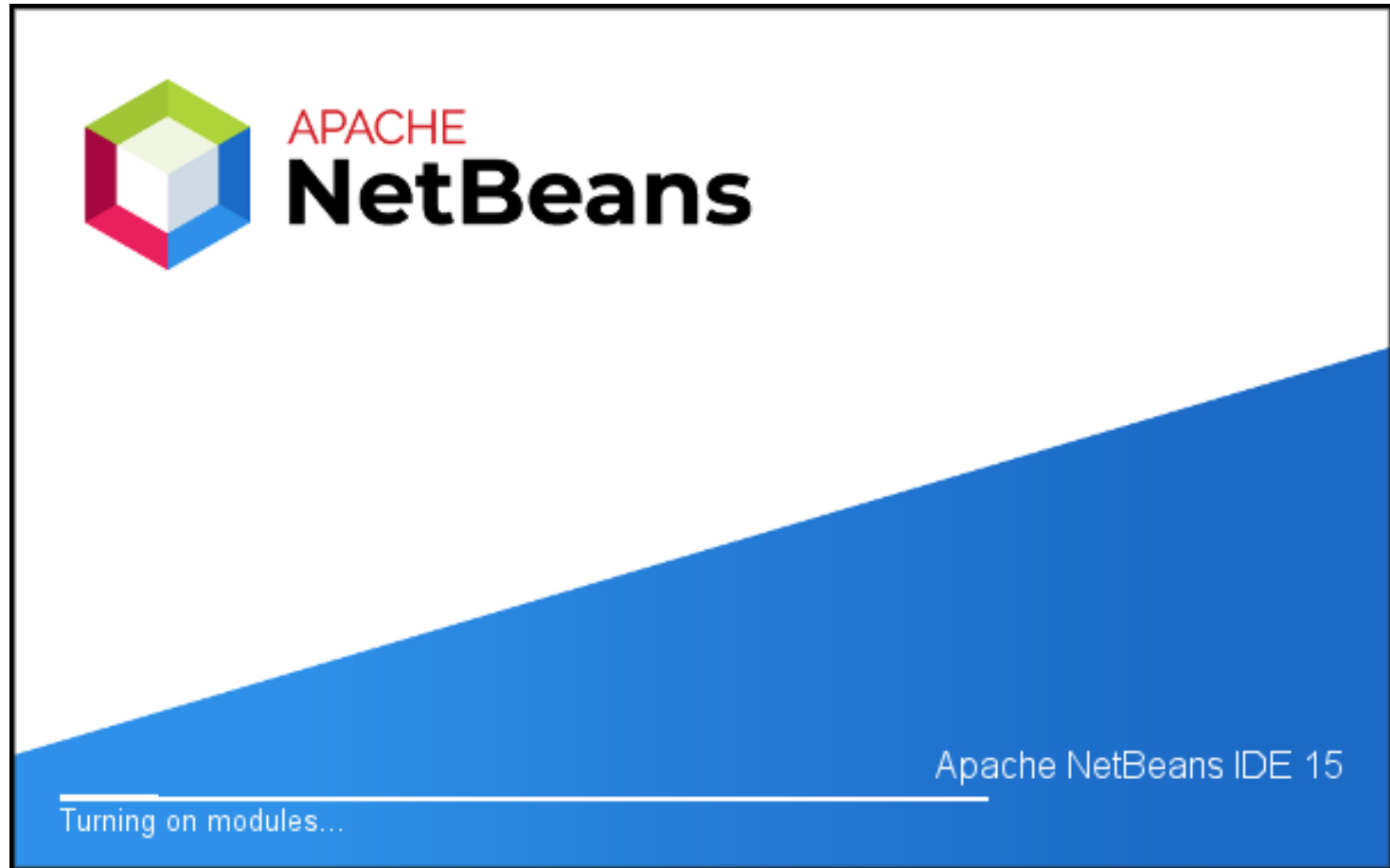
- Para criar **Janelas** utilizaremos a classe **JFrame** disponível no pacote **swing**, a qual gera uma **janela** com **barra de título**, **bordas** e eventualmente outros **componentes visuais**.

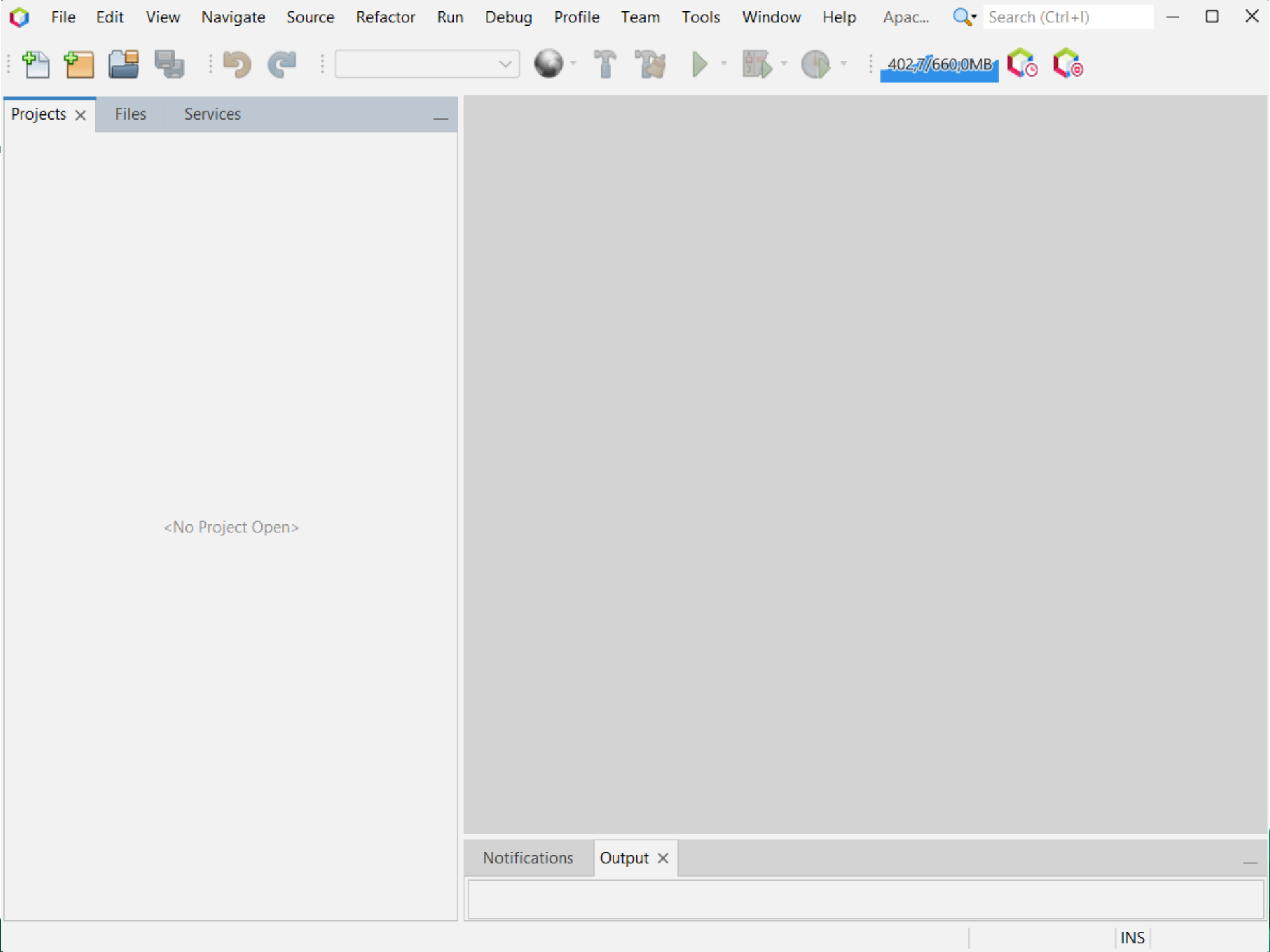


Java Swing – JFrame

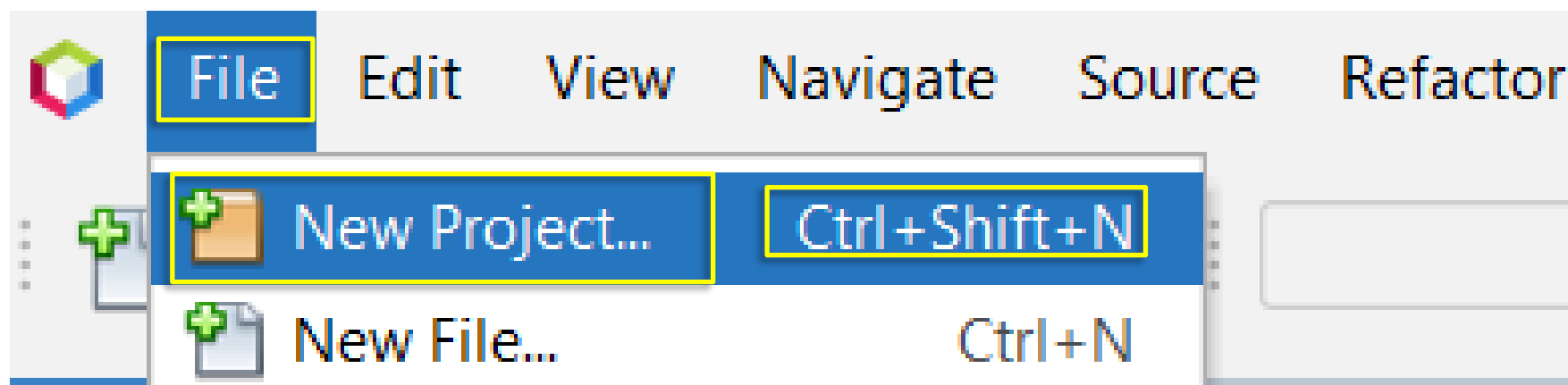


Netbeans: IDE





Netbeans: Novo Projeto



Netbeans: Novo Projeto

Choose Project



Filter:

Categories:

- Java with Maven
- Java with Gradle
- Java with Ant
- JavaFX
- Java Web

Projects:

- Java Application
- Java Class Library
- Java Project with Existing Sources
- Java Modular Project
- Java Free-Form Project



Netbeans: Novo Projeto

Name and Location

Project Name:

Project Location:

Project Folder:

☐ Use Dedicated Folder for Storing Libraries

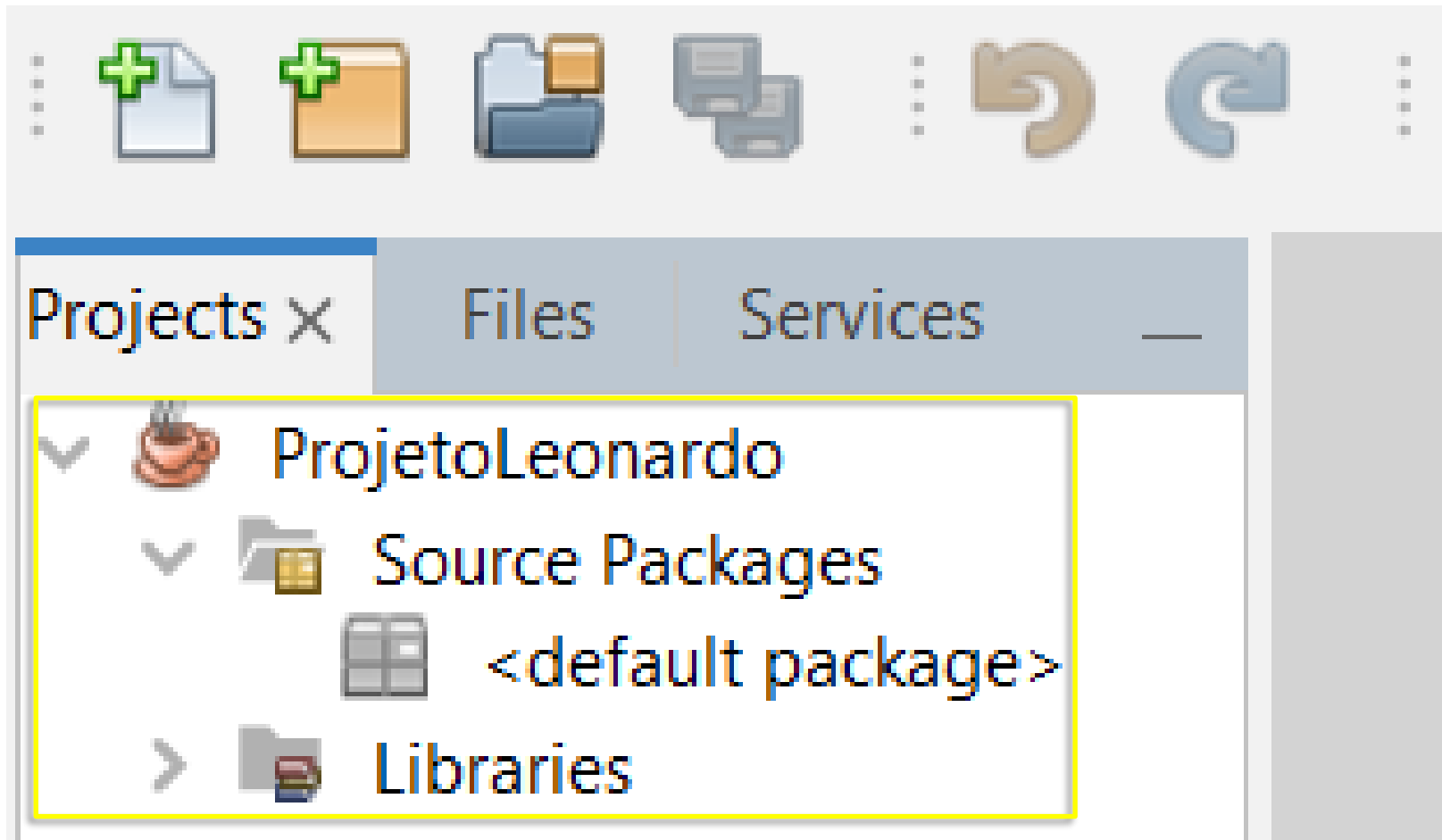
Libraries Folder:

Different users and projects can share the same compilation libraries (see Help for details).

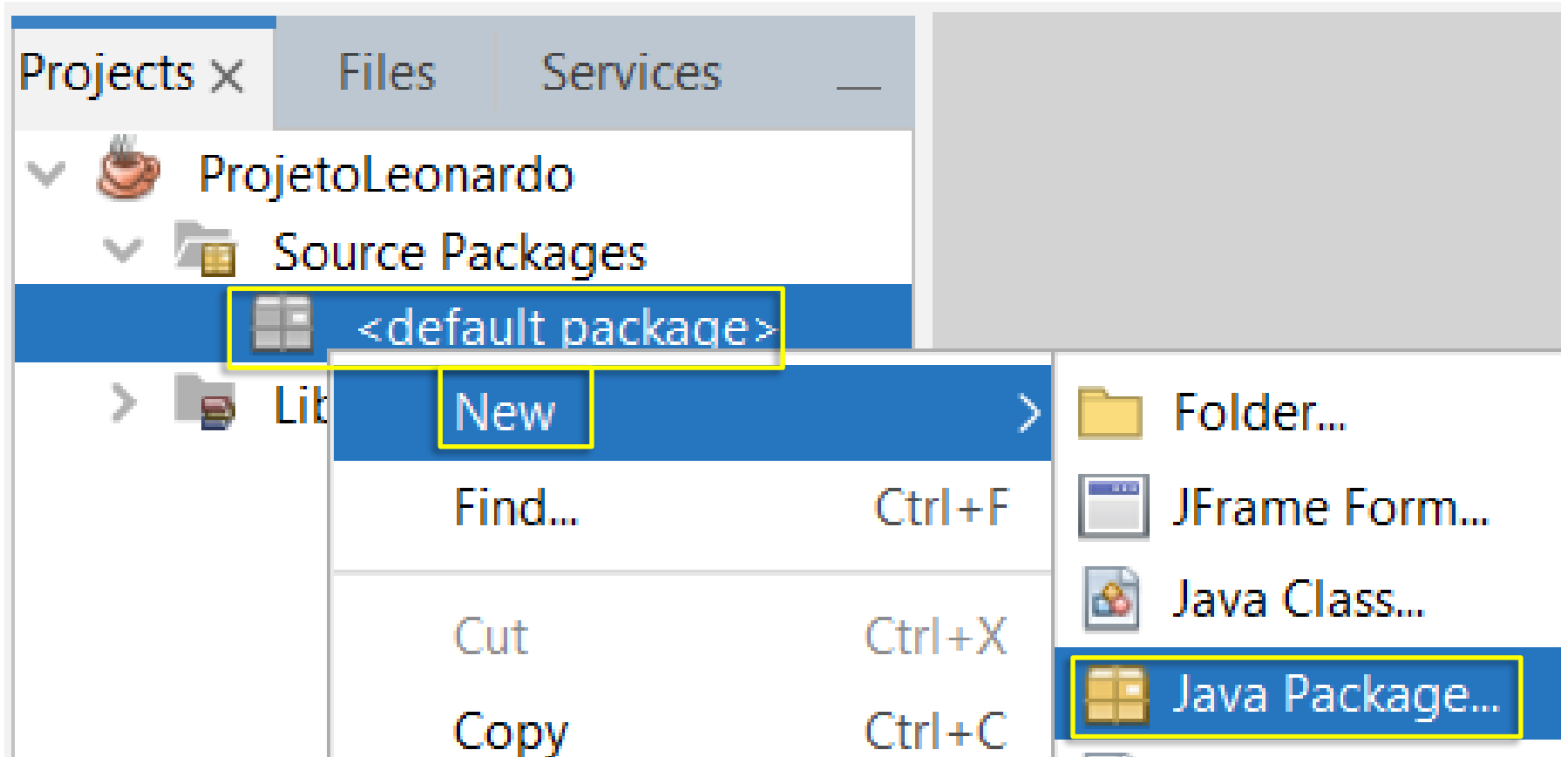
☐ Create Main Class



Netbeans: Novo Projeto



Netbeans: Novo Pacote



Netbeans: Novo Pacote

Name and Location

Package Name:

Principal

Project:

ProjetoLeonardo

Location:

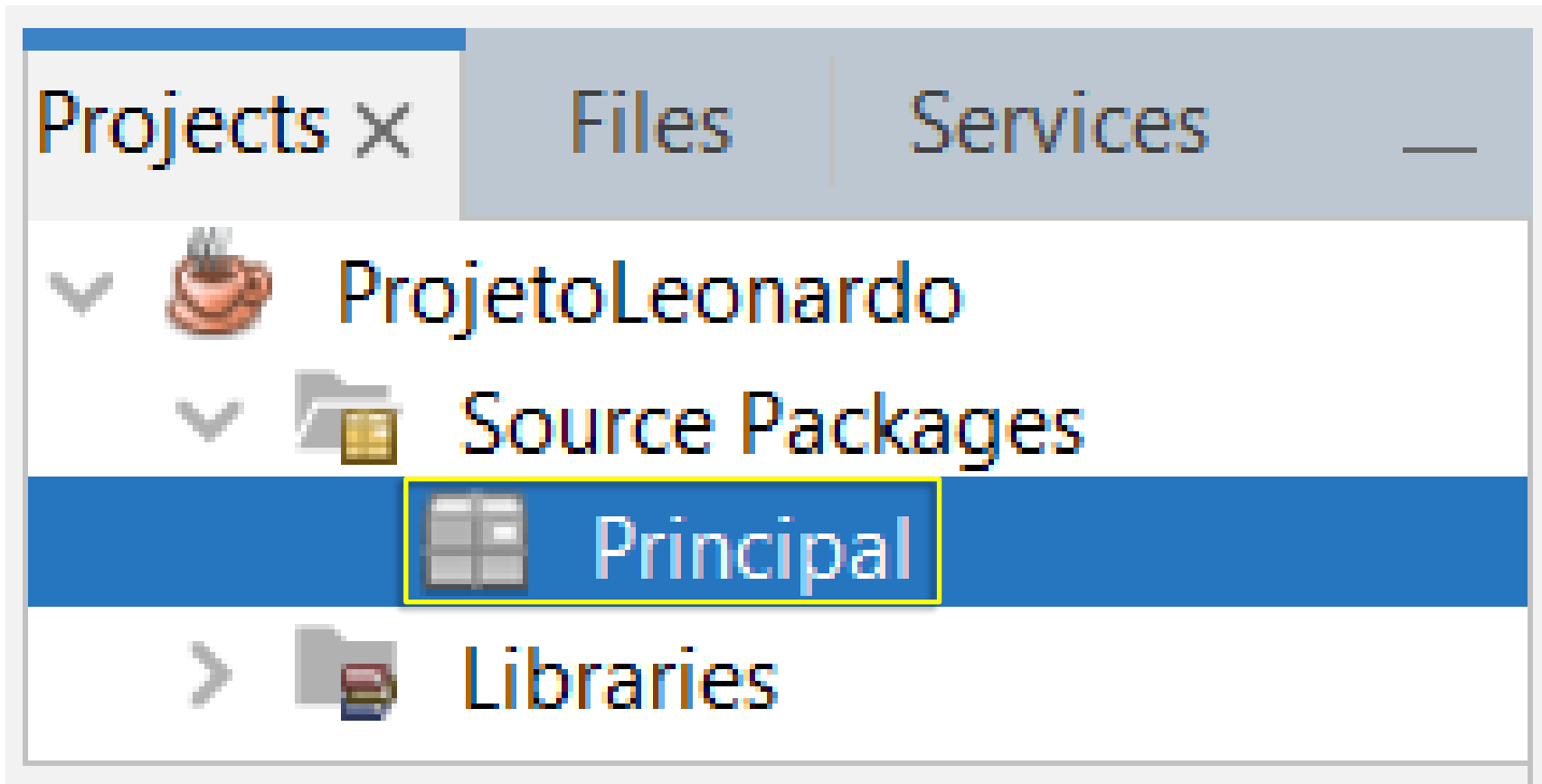
Source Packages

Created Folder:

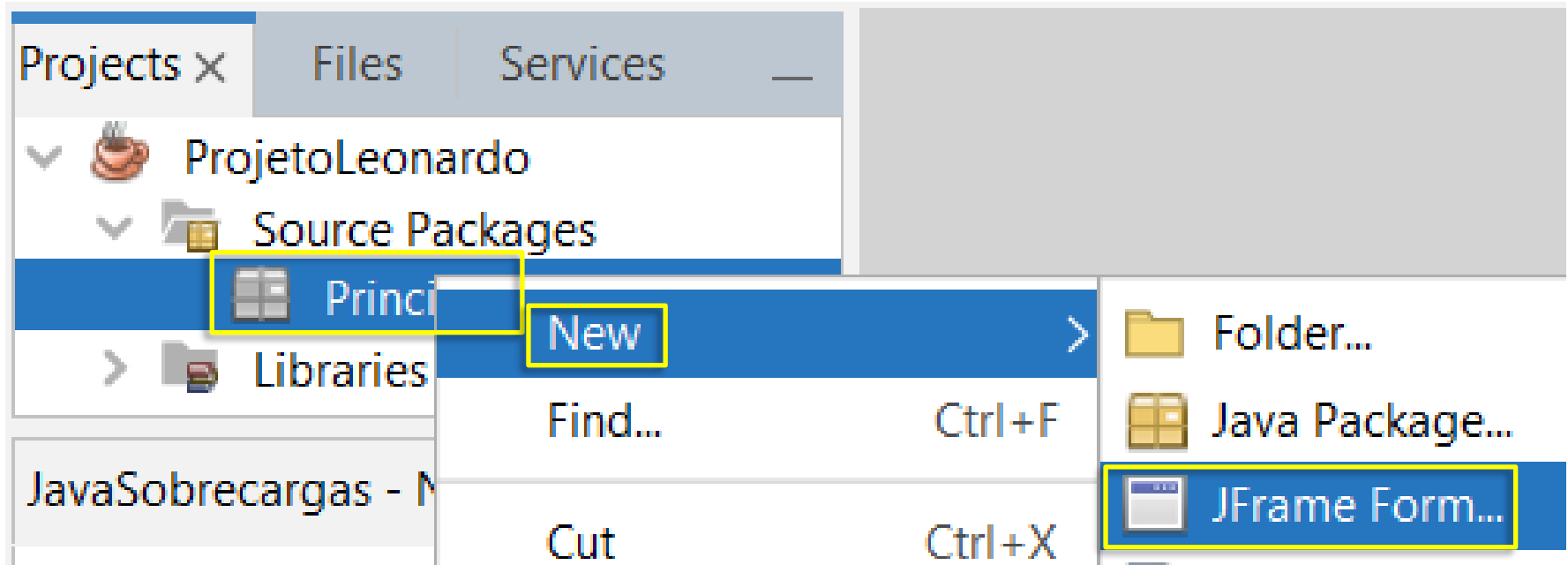
.:\\Users\\leomi\\Documents\\NetBeansProjects\\ProjetoLeonardo\\src\\Principal



Netbeans: Novo Pacote



Netbeans: Nova Janela (JFrame)



Netbeans: Nova Janela (Jframe)

Name and Location

Class Name:

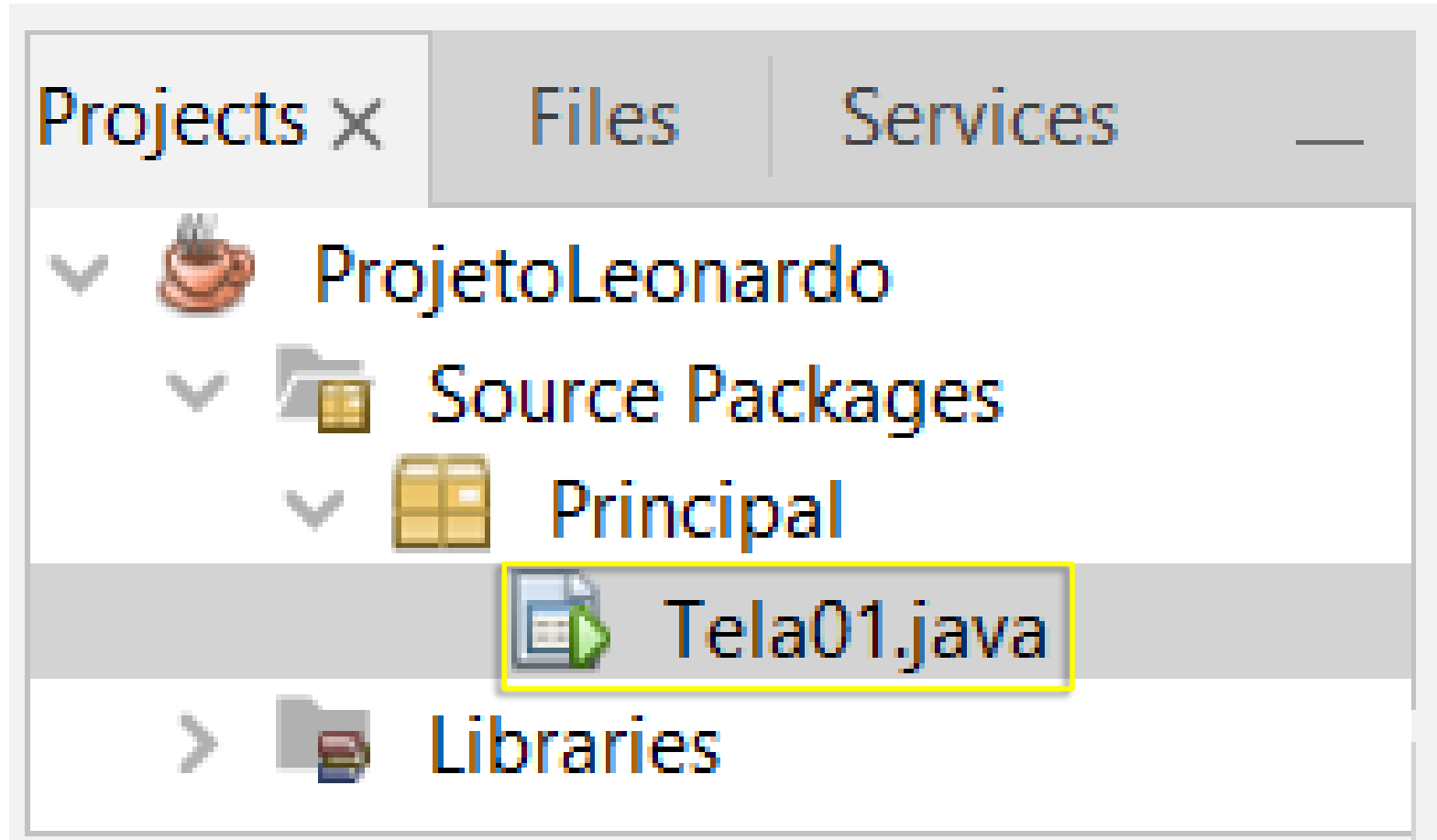
Project:

Location:

Package:



Netbeans: Nova Janela (JFrame)



Projects x Files Services


- ProjetoLeonardo
 - Source Packages
 - Principal
 - Tela01.java
 - Libraries

[JFrame] - Navigator x

- Form Tela01
 - Other Components
 - [JFrame]

Tela01.java x

Source Design History



Palette x

Swing Containers

- Panel
- Tabbed Pane
- Split Pane
- Scroll Pane
- Tool Bar
- Desktop Pane
- Internal Frame

[JFrame] - Properties x

Properties Events

Code

Properties

defaultCloseOperation	EXIT_ON...	...
title		...

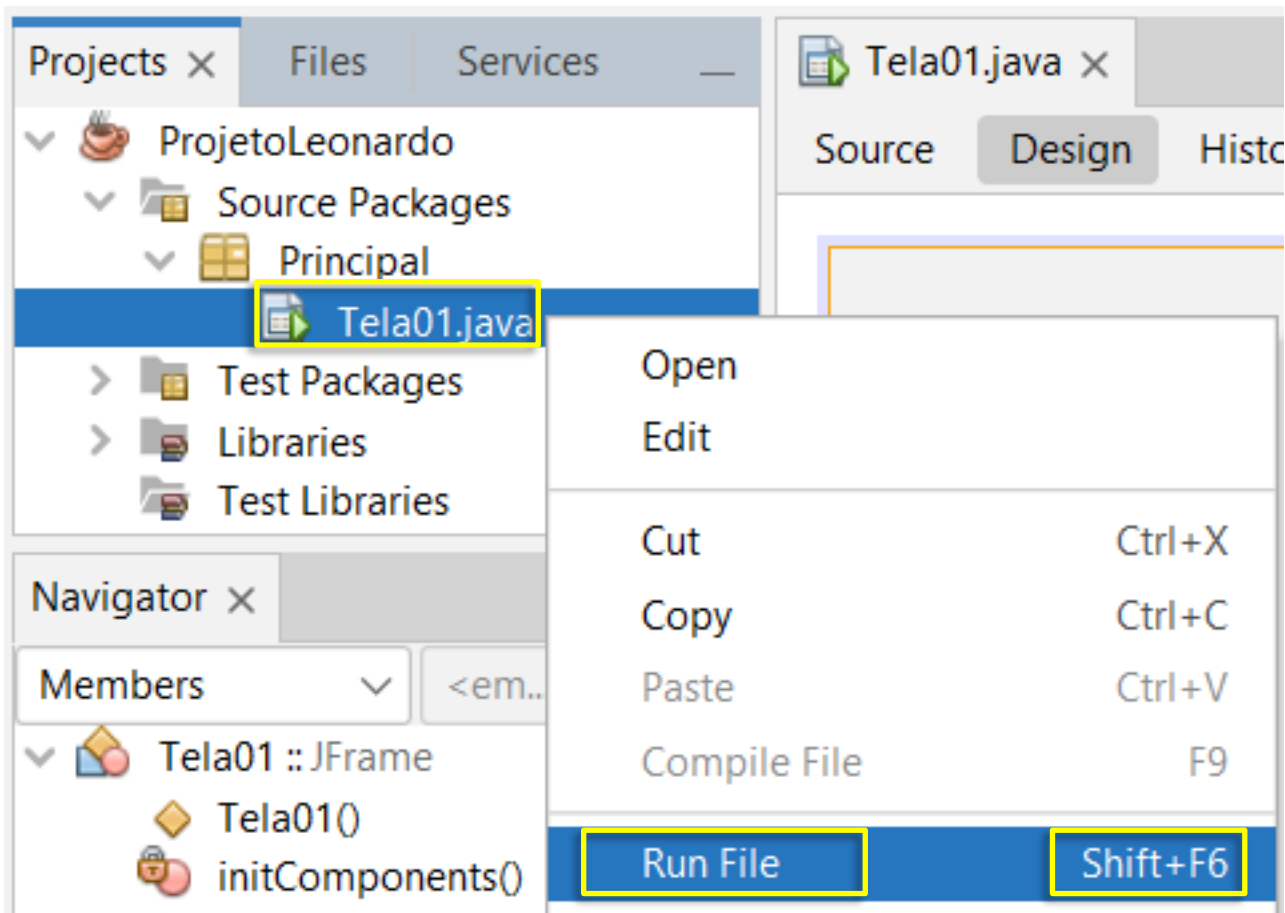
Other Properties

alwaysOnTop	<input type="checkbox"/>	...
alwaysOnTopSupport	<input checked="" type="checkbox"/>	...

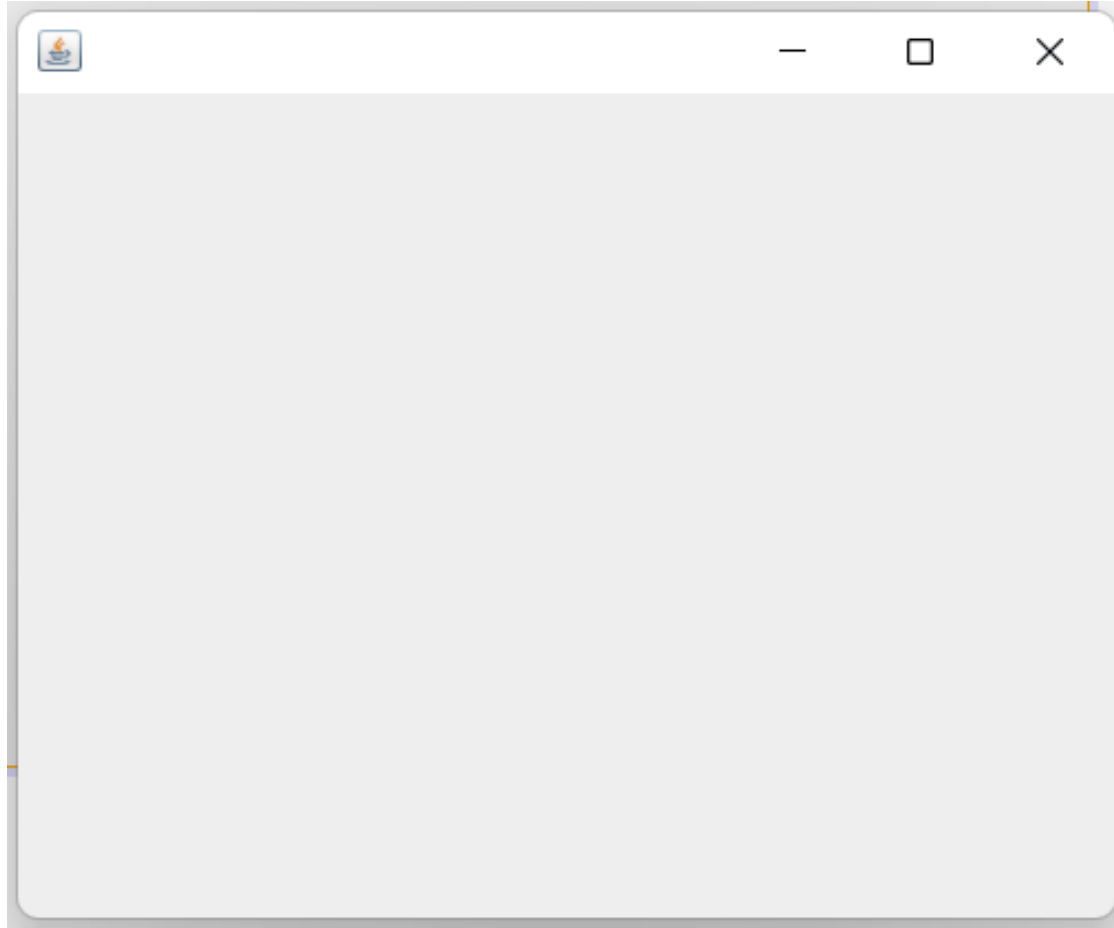
[JFrame] ?

Notifications Output x

Netbeans: Executando Janela (JFrame)



Netbeans: Executando Janela (JFrame)





```
1 package Principal;
```

```
2  
3 public class Tela01 extends javax.swing.JFrame {
```

```
4  
5     public Tela01() {  
6         initComponents();  
7     }  
8
```

```
9 + Generated Code
```

```
27  
28     public static void main(String args[]) {  
29         new Tela01().setVisible(true);  
30     }  
31
```

```
32 // Variables declaration - do not modify  
33 // End of variables declaration  
34
```

```
}
```




```
1 package Principal;
```

Pacote

```
2  
3 public class Tela01 extends javax.swing.JFrame {
```

Construtor

Classe

Herança

```
4 public Tela01() {  
5     initComponents();  
6 }  
7
```

Chamada de método que
inicializa componentes

Generated Code

Inicialização e configuração de
componentes

Método estático "main"

```
27  
28 public static void main(String args[]) {  
29     new Tela01().setVisible(true);  
30 }  
31
```

Declaração
de variáveis

Cria objeto (componente) Tela01 e o torna visível

```
32 // Variables declaration - do not modify  
33 // End of variables declaration  
34 }
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
private void initComponents() {
```

```
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
```

```
    getContentPane().setLayout(layout);
```

```
    layout.setHorizontalGroup(
```

```
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addGap(0, 400, Short.MAX_VALUE)
```

```
    );
```

```
    layout.setVerticalGroup(
```

```
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addGap(0, 300, Short.MAX_VALUE)
```

```
    );
```

```
    pack();
```

```
}// </editor-fold>
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
private void initComponents() {
```

Método

Comportamento do ícone (botão) de fechar o JFrame

```
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
```

```
getContentPane().setLayout(layout);
```

```
layout.setHorizontalGroup(
```

```
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGap(0, 400, Short.MAX_VALUE)
```

```
);
```

```
layout.setVerticalGroup(
```

```
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGap(0, 300, Short.MAX_VALUE)
```

```
);
```

```
pack();
```

Layout Manager do JFrame ajusta o tamanho da tela (Frame) com base em seus componentes internos

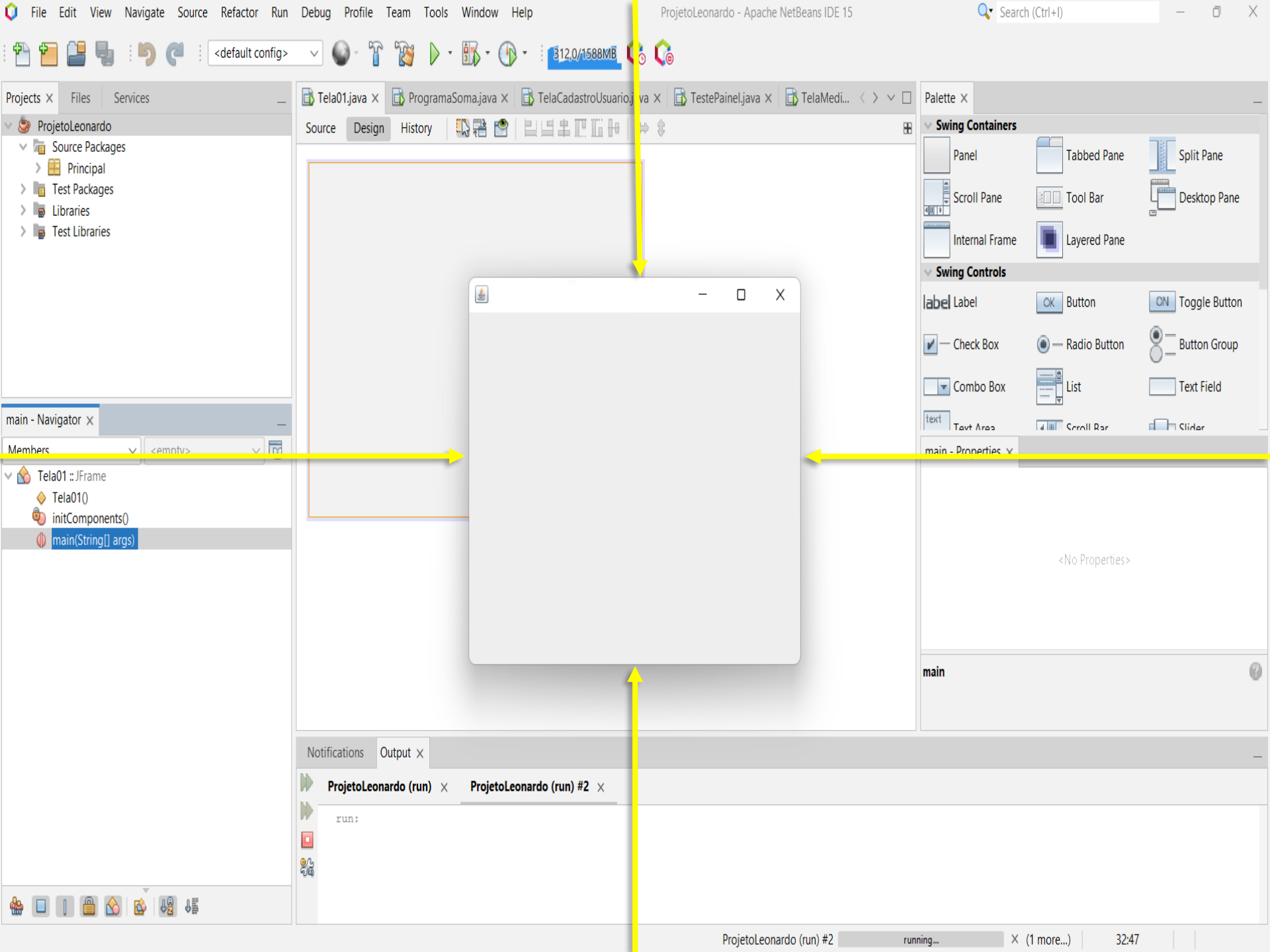
Configurações de Layout do JFrame

```
} // </editor-fold>
```

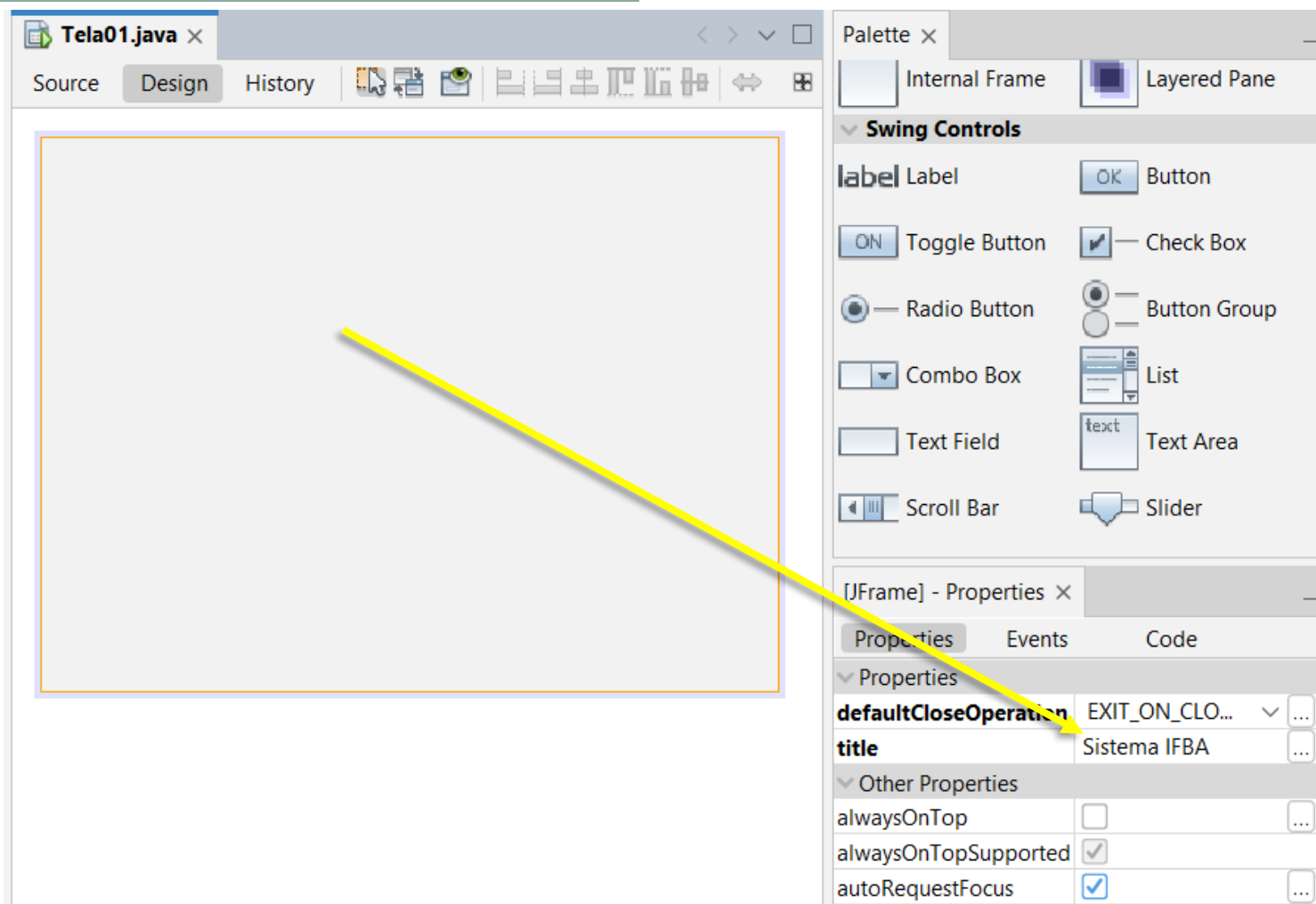
Netbeans: Centralizar JFrame

```
public Tela01 () {  
    initComponents () ;  
    this.setLocationRelativeTo (null) ;  
}
```

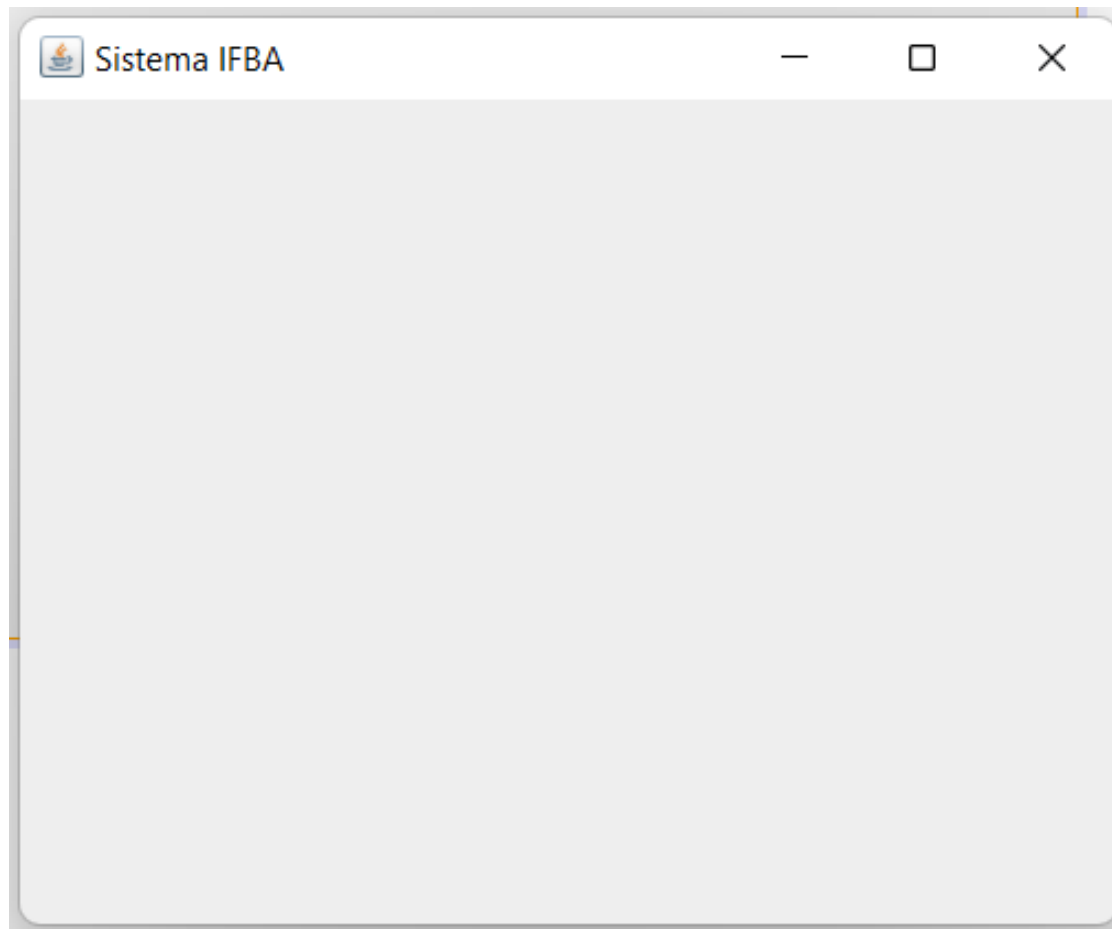




Netbeans: Título da Janela (JFrame)



Netbeans: Título da Janela (JFrame)



Netbeans: Desabilitar Redimensionar

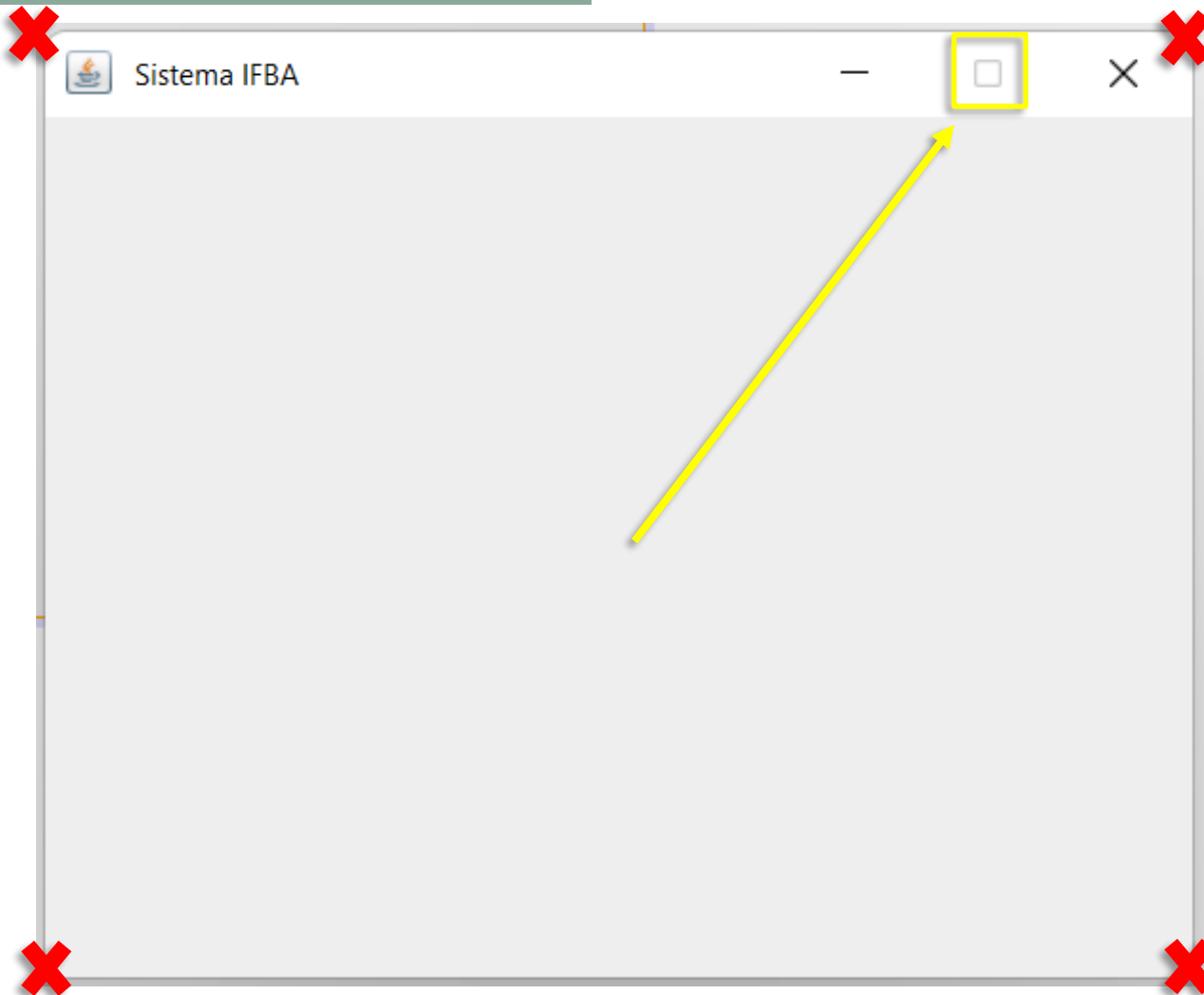
[JFrame] - Properties X

Properties	Events	Code
preferredSize		[395, 300]
resizable	<input type="checkbox"/>	
shape		<none>
size		<Not Set>
state		0
type		NORMAL

False



Netbeans: Desabilitar Redimensionar

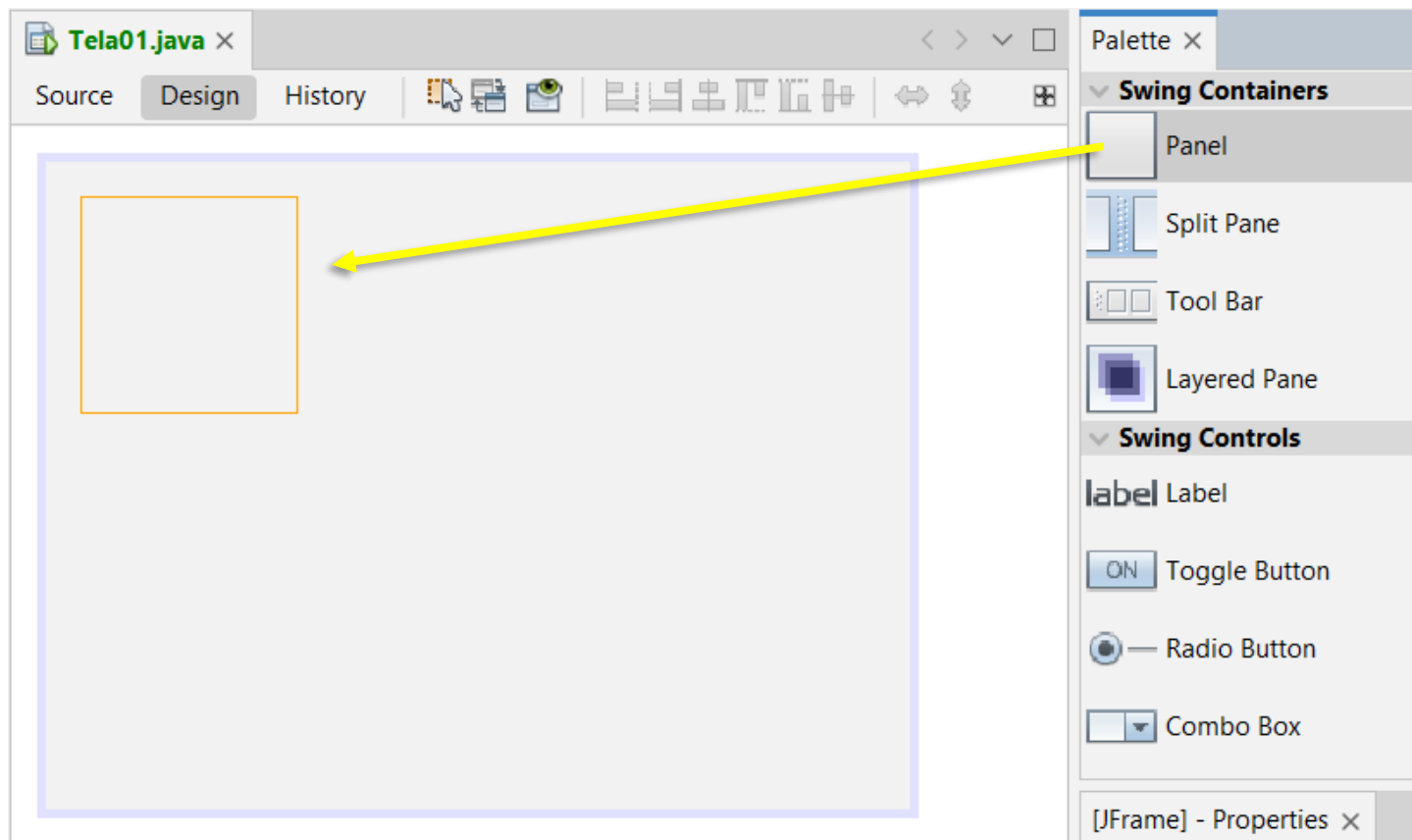


Java Swing – JPanel

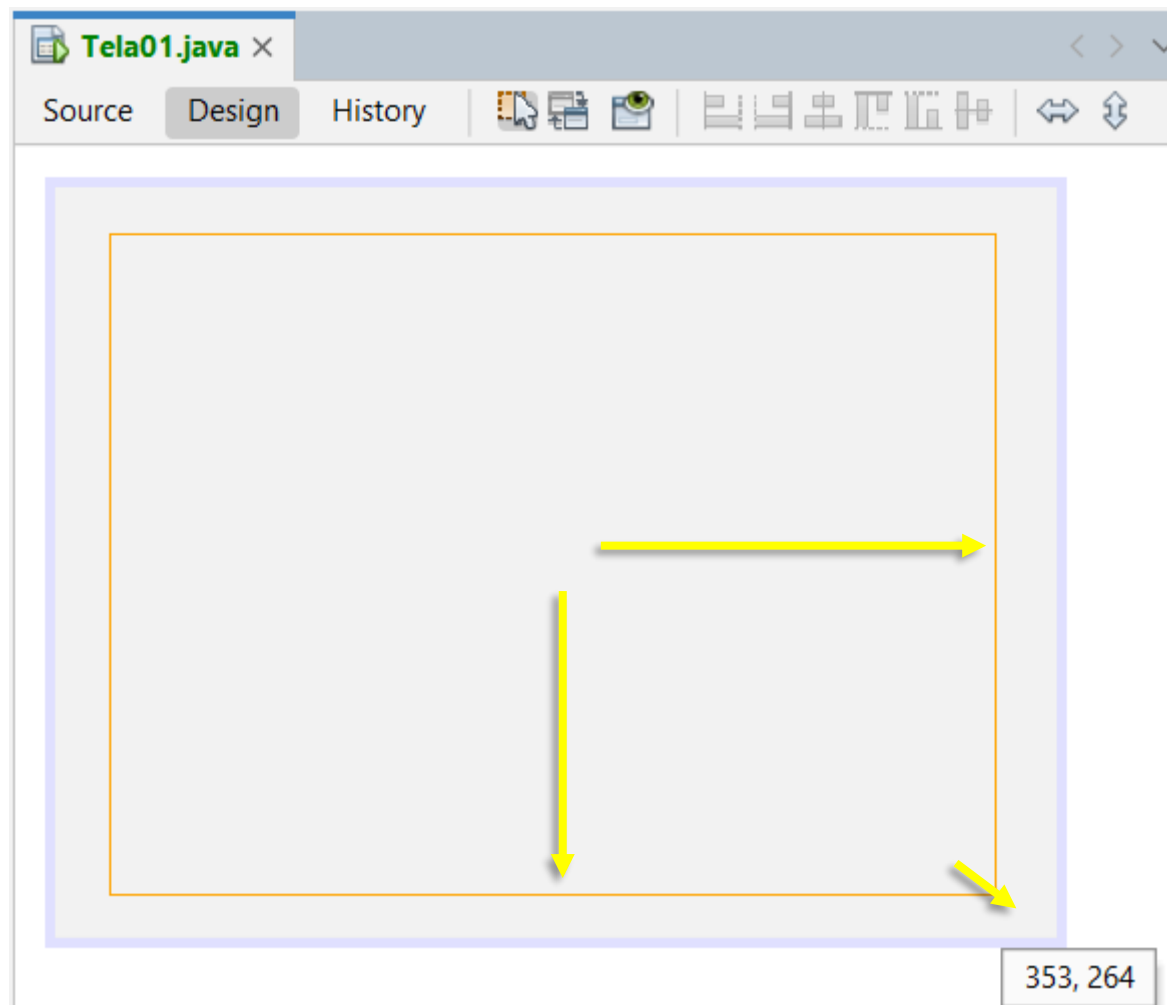
- O **JPanel** é um **contêiner flexível** no Java Swing, utilizado para **agrupar e organizar componentes** em interfaces gráficas.
- Ele **oferece opções de personalização**, como **layout e cor de fundo**, permitindo criar **interfaces atraentes e adaptáveis**.



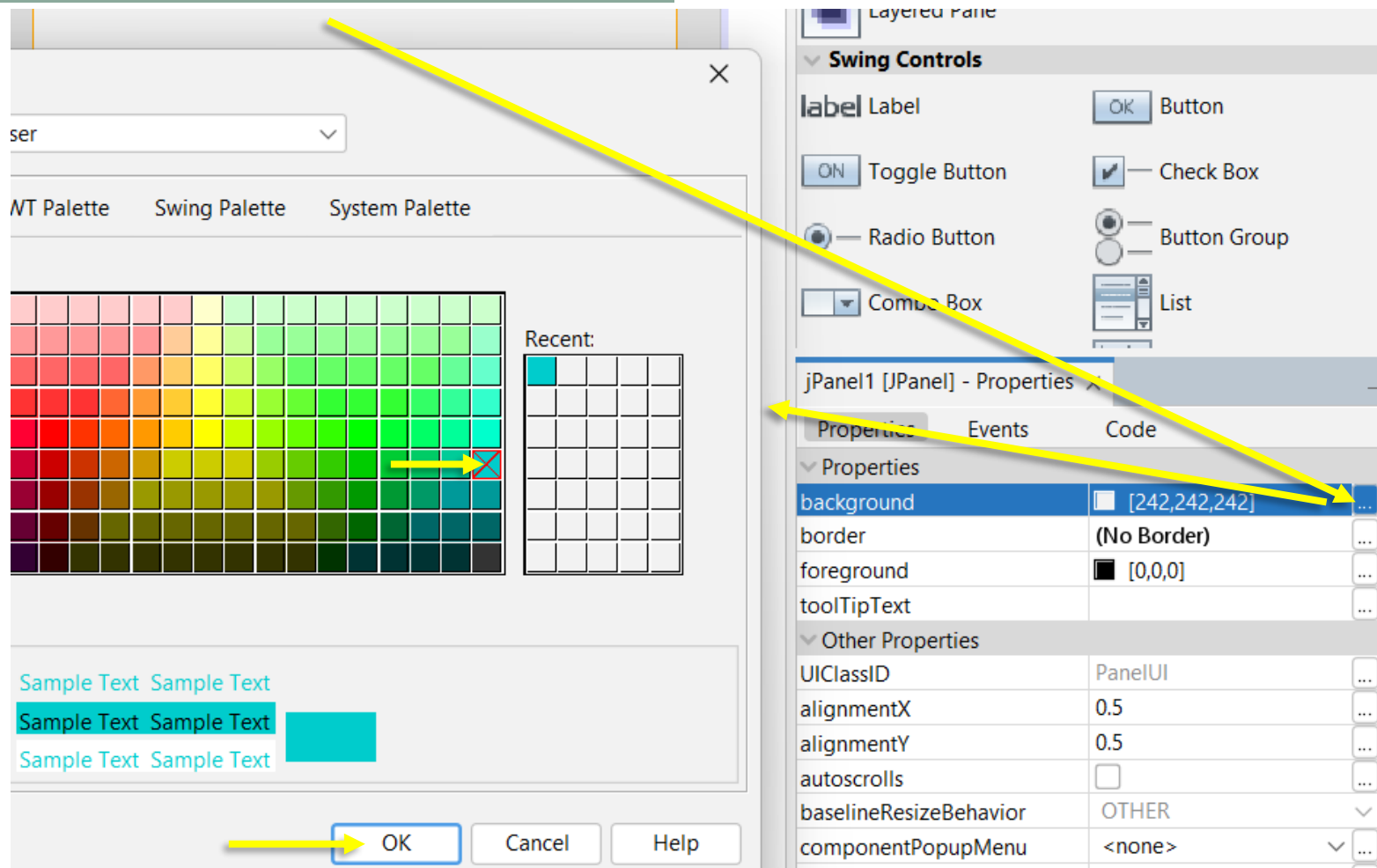
Java Swing – JPanel - Adicionar



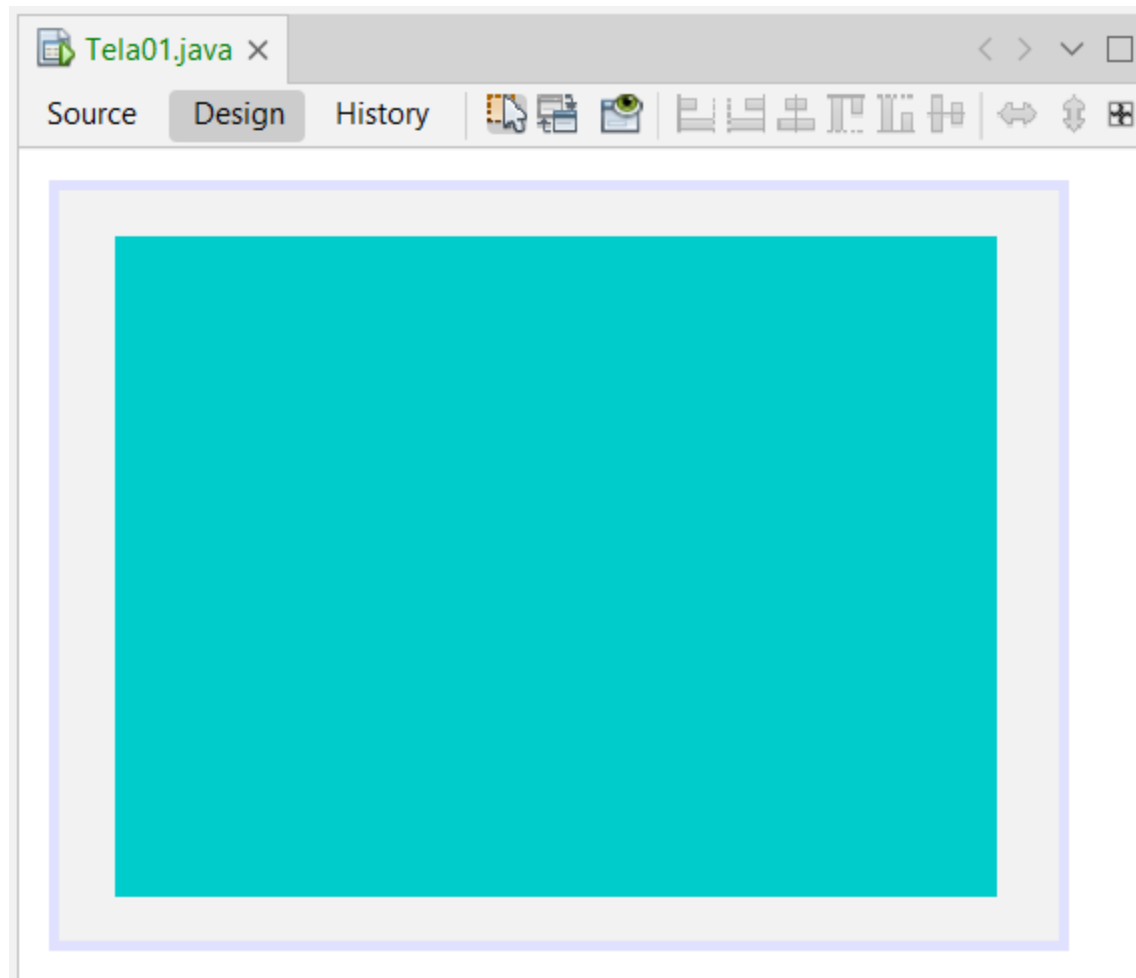
Java Swing – JPanel - Redimensionar



Java Swing – JPanel – Mudar Cor Fundo



Java Swing – JPanel – Mudar Cor Fundo

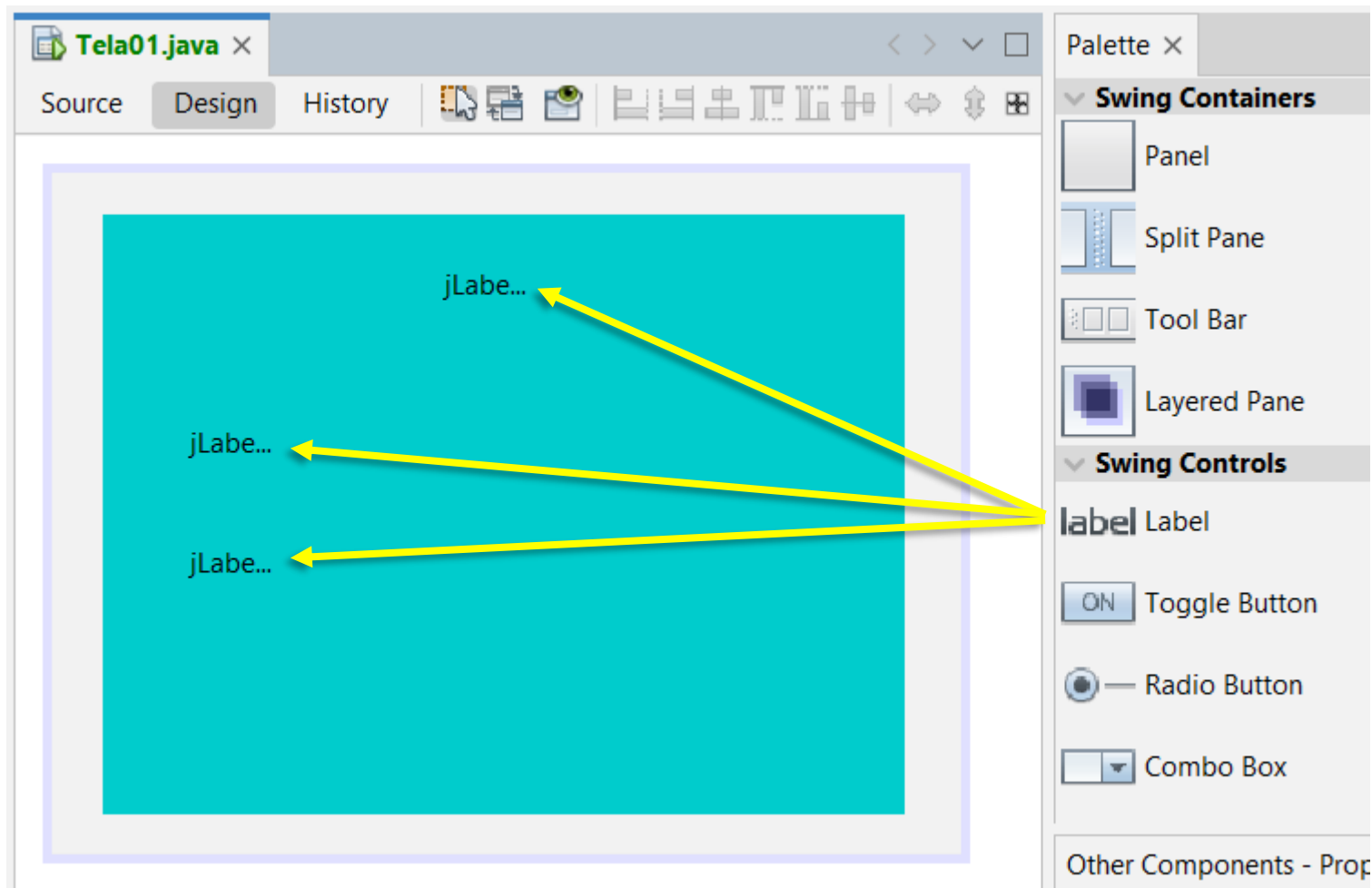


Java Swing – JLabel

- A classe **JLabel** permite **definir um texto** que **pode ser adicionado** a um **outro componente** (frame, painel etc.).
- Podem ser definidas várias **propriedades** para esse texto, tais como **alinhamento**, **tipo de letra**, **tamanho**, **cor** etc.



Java Swing – JLabel – Adicionar



Java Swing – JLabel – Editor Texto

The screenshot displays the Java Swing IDE interface. The main window shows a design view of a Java Swing component named 'Tela01.java'. The component is a light blue rectangle with a darker blue border. A yellow arrow points from the 'Tela 01' text in the 'Properties' tab of the 'jLabel1 [JLabel] - Properties' dialog to the 'Tela 01' text in the design view. The 'Properties' tab is selected, showing the following properties:

Properties	Events	Code
icon		<none>
labelFor		<none>
text		Tela 01
toolTipText		

The 'Palette' window on the right shows the 'Swing Containers' and 'Swing Controls' sections. The 'Swing Controls' section is expanded, showing the 'Label' component. The 'Label' component is selected, and the 'Properties' tab of the 'jLabel1 [JLabel] - Properties' dialog is open.



Java Swing – JLabel – Editor Texto

The screenshot shows the Java Swing IDE with the following components:

- Design View:** A cyan rectangular area representing the GUI. Inside, there is a grey rectangular component labeled "Tela 0...". Below it, a smaller grey component is labeled "Mens" and "jLabe...". A yellow arrow points from the "text" property in the Properties window to the text "Mensagem 1:" in the design view.
- Palette:** A window on the right side of the IDE showing various Swing components. It is divided into two sections: "Swing Containers" and "Swing Controls".
 - Swing Containers:** Panel, Split Pane, Tool Bar, Layered Pane, Tabbed Pane, Scroll Pane, Internal Frame.
 - Swing Controls:** label Label, OK Button.
- Properties Window:** A window titled "jLabel2 [JLabel] - Properties" showing the properties of the selected JLabel component. It has three tabs: "Properties", "Events", and "Code". The "Properties" tab is active, showing the following properties:

Properties	Events	Code
icon		<none>
labelFor		<none>
text		Mensagem 1:
toolTipText		



Java Swing – JLabel – Editor Texto

The screenshot shows an IDE window titled 'Tela01.java' with tabs for Source, Design, and History. The Design tab is active, showing a visual representation of a Java Swing window. The window has a cyan background and a grey panel labeled 'Tela 0..'. Inside this panel is a vertical grey bar with two labels 'Mens...' and a wavy line. A yellow arrow points from the 'Mens...' label to the 'jLabel3 [JLabel] - Properties' window. The 'Palette' window on the right shows 'Swing Containers' and 'Swing Controls'. The 'Properties' window shows the 'text' property set to 'Mensagem 2:'.

Swing Containers

- Panel
- Split Pane
- Tool Bar
- Layered Pane
- Tabbed Pane
- Scroll Pane
- Internal Frame

Swing Controls

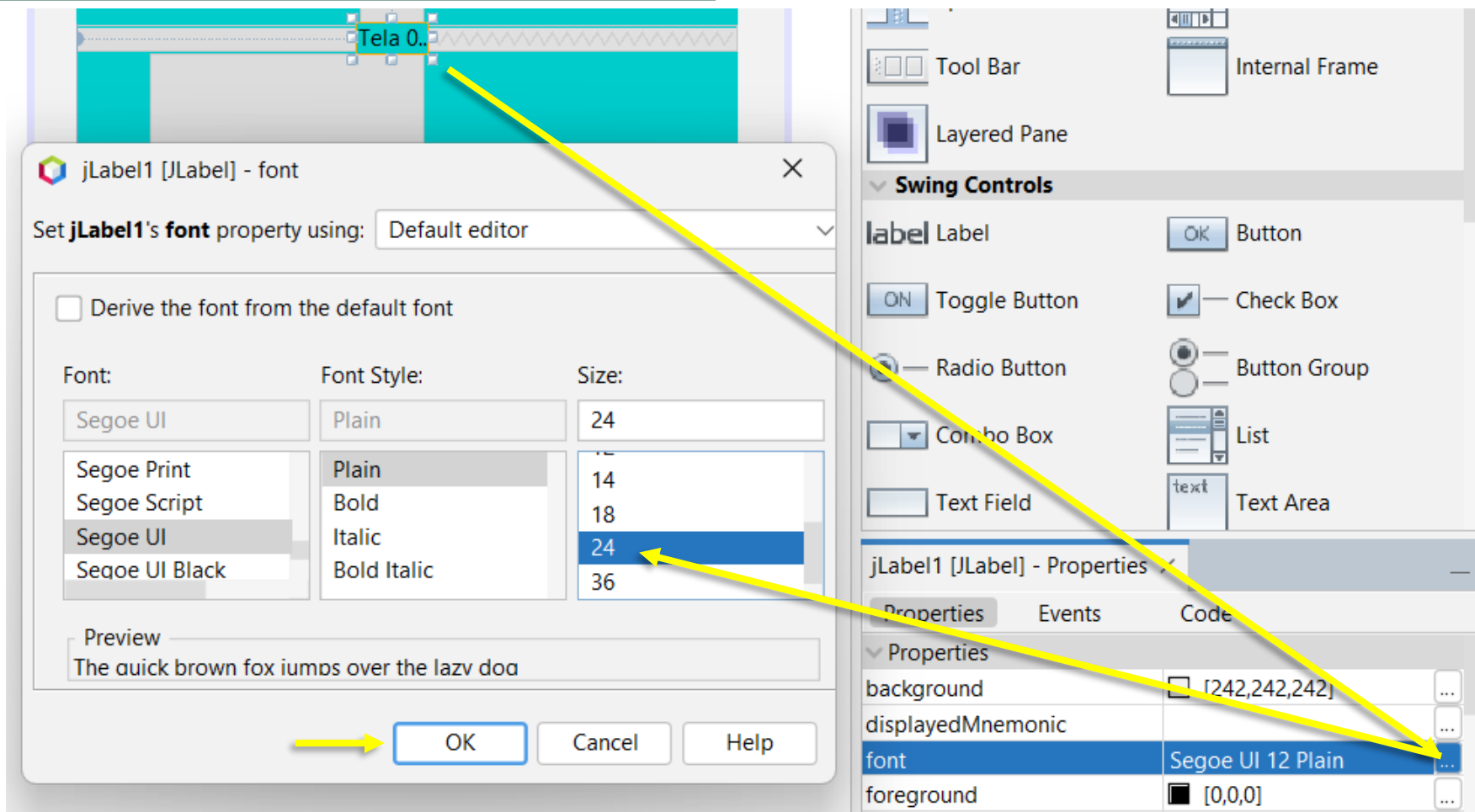
- label Label
- OK Button

jLabel3 [JLabel] - Properties

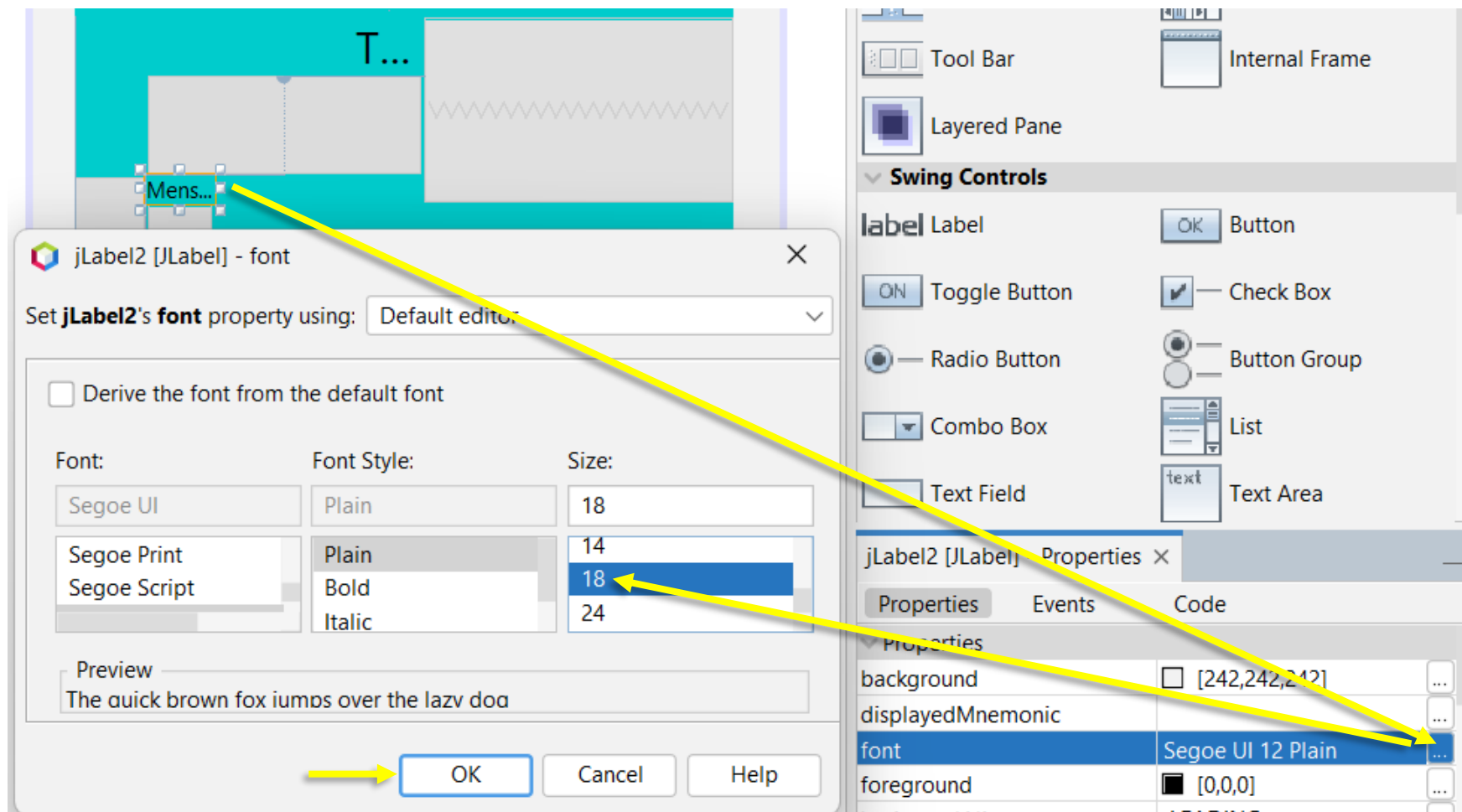
Properties	Events	Code
icon		<none>
labelFor		<none>
text		Mensagem 2:
toolTipText		



Java Swing – JLabel – Aumentar Fonte



Java Swing – JLabel – Aumentar Fonte



Java Swing – JLabel – Aumentar Fonte

The image shows a Java Swing IDE interface with two main windows. The top window is a preview of a JLabel component with the text "Mens...". Below it is a dialog box titled "jLabel3 [JLabel] - font". The dialog box has a dropdown menu set to "Default editor". It contains three sections: "Font:" with a list box showing "Segoe UI" and "Segoe Print"; "Font Style:" with a list box showing "Plain" and "Bold"; and "Size:" with a list box showing "18" and "24". A yellow arrow points from the "18" in the "Size:" list box to the "font" property in the "jLabel3 [JLabel] - Properties" window. The "jLabel3 [JLabel] - Properties" window has a tabbed interface with "Properties", "Events", and "Code" tabs. The "Properties" tab is active, showing a table of properties. The "font" property is highlighted, and its value is "Segoe UI 12 Plain". A yellow arrow points from the "font" property in the "jLabel3 [JLabel] - Properties" window to the "font" property in the "jLabel3 [JLabel] - font" dialog box. The "font" property in the "jLabel3 [JLabel] - Properties" window is set to "Segoe UI 12 Plain". The "font" property in the "jLabel3 [JLabel] - font" dialog box is set to "Segoe UI 18 Plain".

Font: Segoe UI Plain 18

Font Style: Plain Bold

Size: 18 24

Preview: The quick brown fox jumps over the lazy dog

OK Cancel Help

Swing Controls

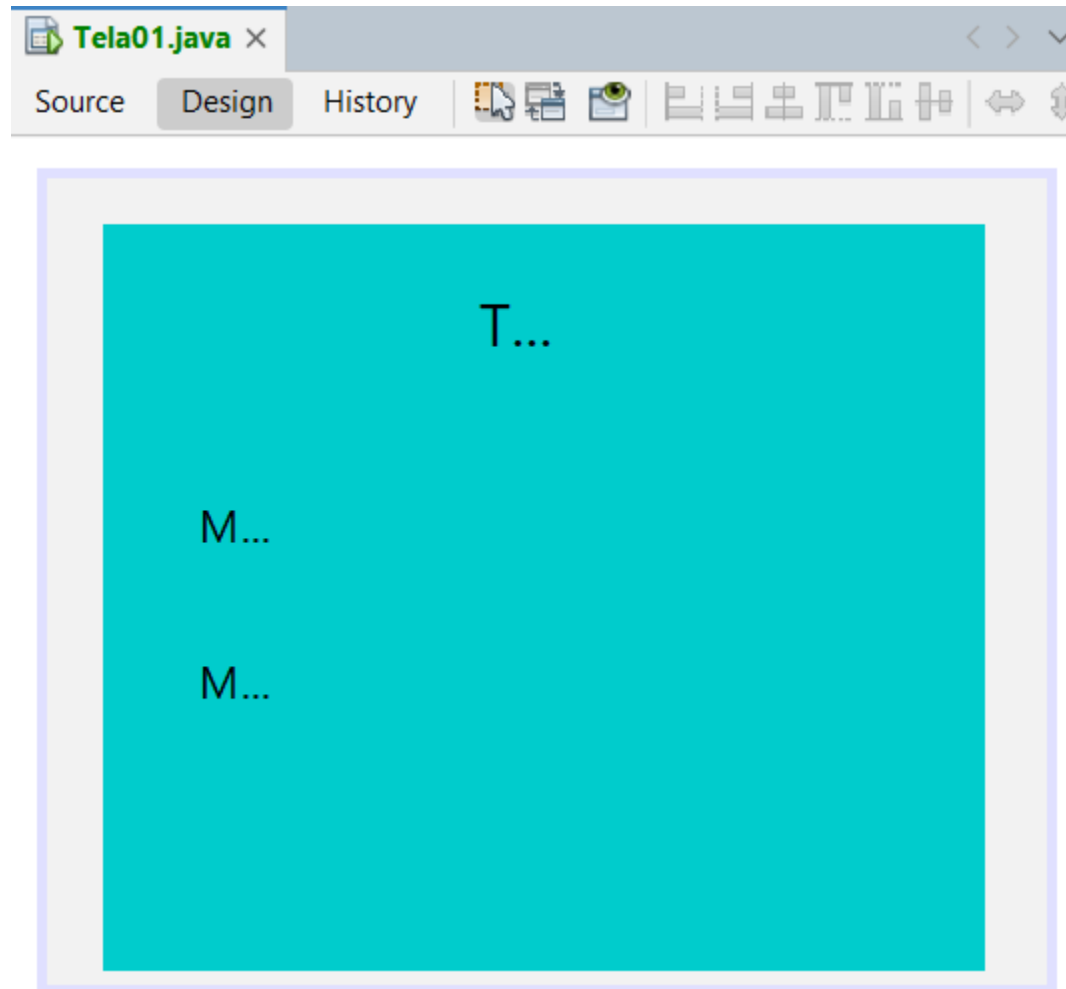
- Label
- Toggle Button
- Radio Button
- Combo Box
- Text Field
- Button
- Check Box
- Button Group
- List
- Text Area

jLabel3 [JLabel] - Properties

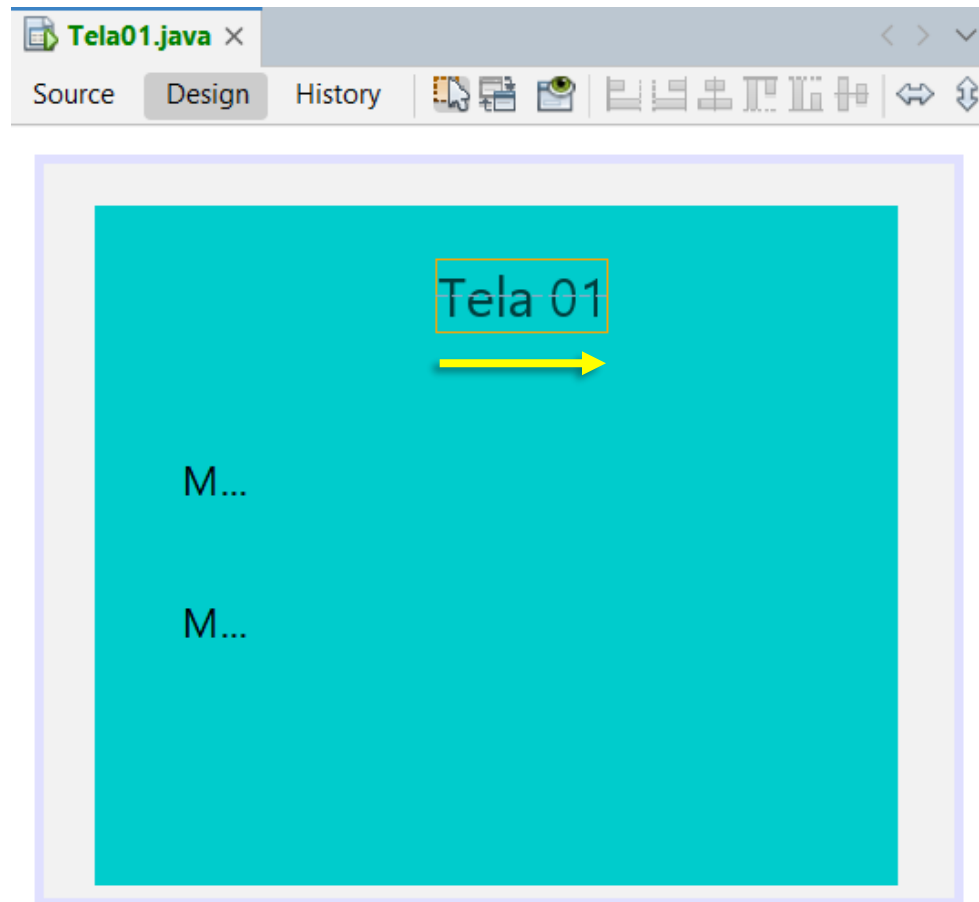
Properties	Events	Code
background		[242,242,242]
DisplayedMnemonic		
font		Segoe UI 12 Plain
foreground		[0,0,0]
horizontalAlignment		LEADING
icon		<none>



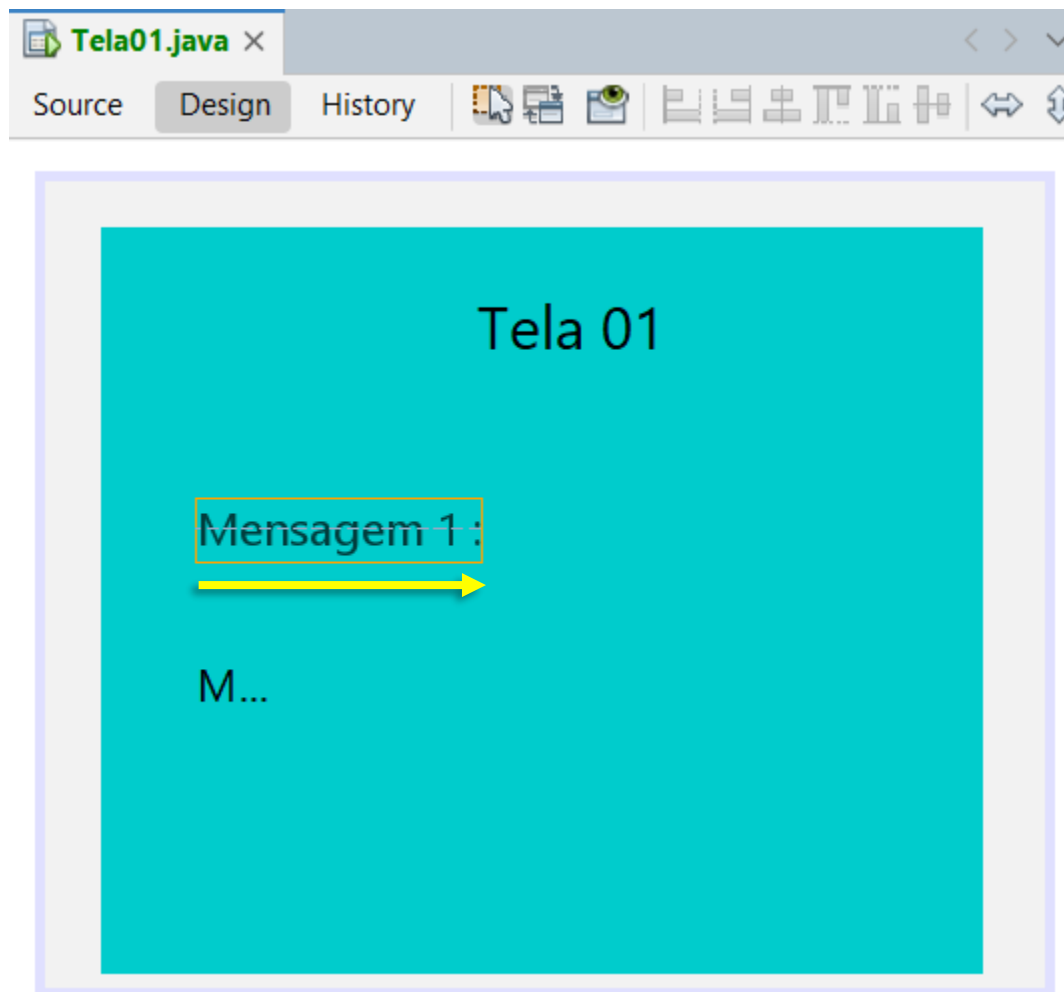
Java Swing – JLabel – Aumentar Fonte



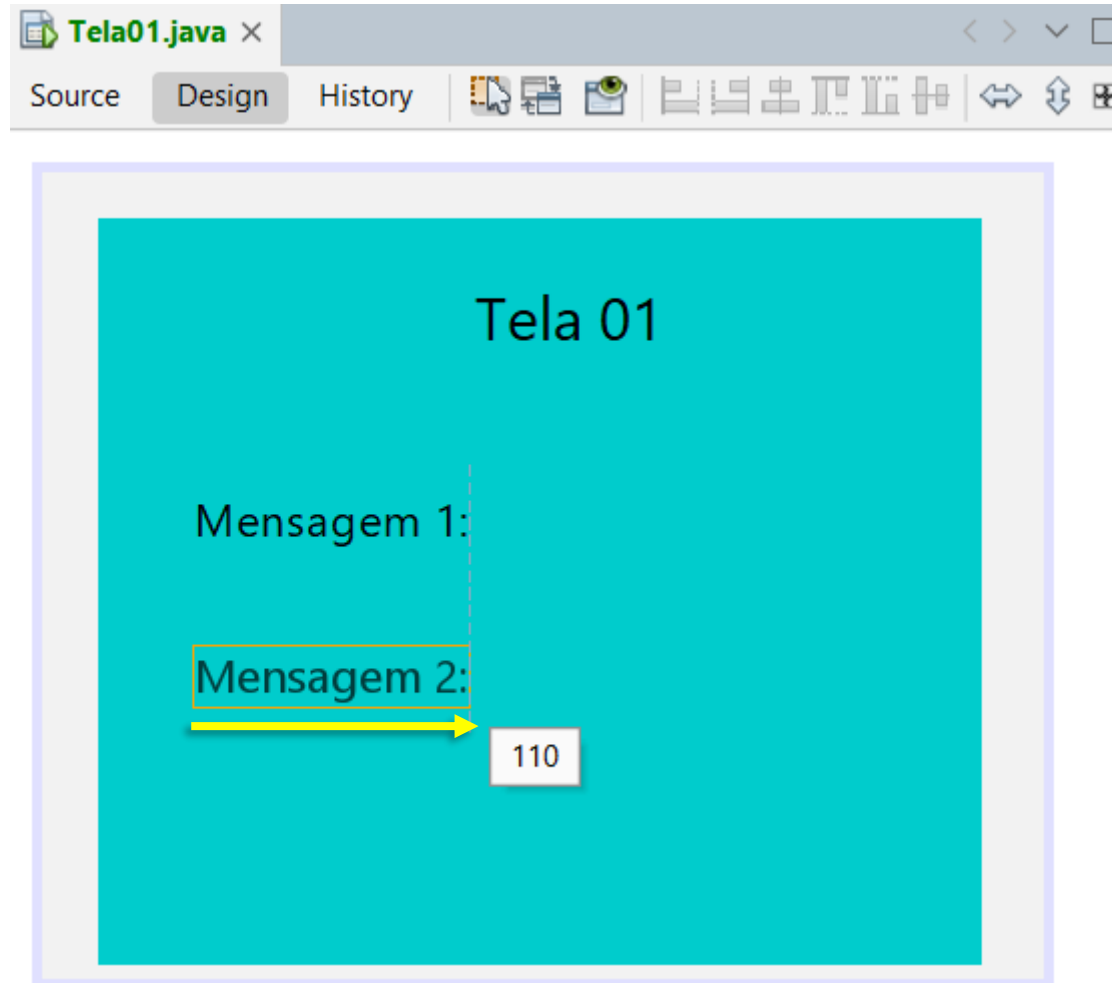
Java Swing – JLabel – Redimensionar



Java Swing – JLabel – Redimensionar



Java Swing – JLabel – Redimensionar

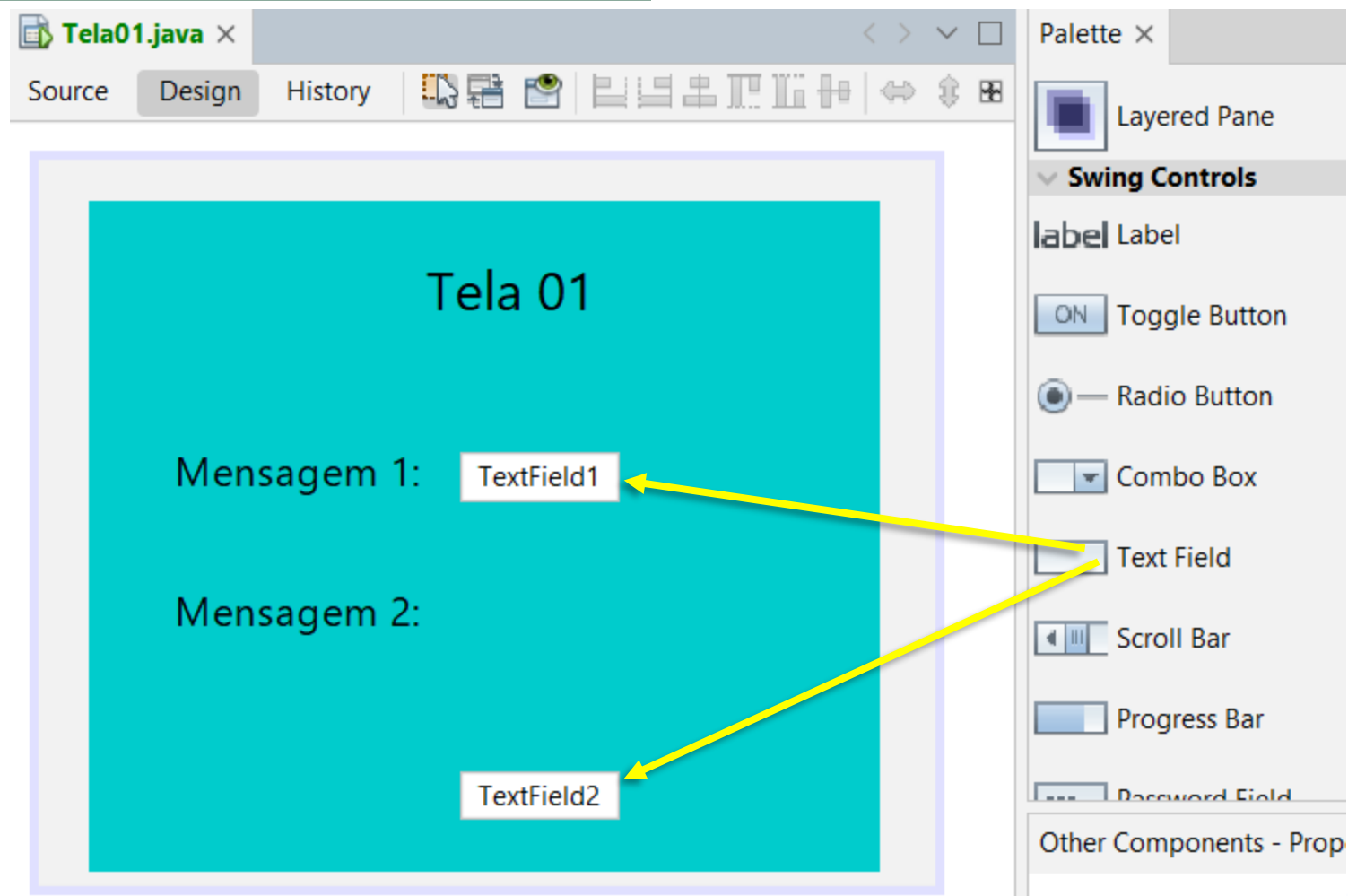


Java Swing – JTextField

- A classe **JTextField** permite criar uma **caixa de texto gráfica** na qual o usuário pode **digitar dados**.
- Existem **diversas propriedades** cujos **conteúdos podem ser modificados**.



Java Swing – JTextField – Adicionar



Java Swing – JTextField – Editor Texto

The image shows a Java Swing GUI design in an IDE. The main window is titled "Tela 01" and has a cyan background. It contains two labels, "Mensagem 1:" and "Mensagem 2:", and a text field labeled "TextField2". A yellow arrow points from the text field to the "jTextField1 [JTextField] - Properties" panel on the right. The properties panel shows the following settings:

Properties	Events	Code
foreground		[0,0,0]
horizontalAlignment		LEADING
text		
toolTipText		
Other Properties		
UI		<default>



Java Swing – JTextField – Editor Texto

The screenshot shows an IDE window titled 'Tela01.java' with tabs for Source, Design, and History. The Design view displays a window titled 'Tela 01' with a cyan background. It contains two labels, 'Mensagem 1:' and 'Mensagem 2:', and a text field. A yellow arrow points from the text field to the 'text' property in the Properties window.

Palette

- Layered Pane
- Swing Controls**
 - Label
 - Toggle Button
 - Radio Button
 - Combo Box
 - Button
 - Check Box
 - Button Group
 - List

jTextField2 [JTextField] - Properties

Properties	Events	Code
foreground		[0,0,0]
horizontalAlignment		LEADING
text		
toolTipText		
Other Properties		
UI		<default>



Java Swing – JTextField – Renomear Var.

Properties Events Code

Code Generation	
Bean Class	class javax.swing.JTextField
Variable Name	txtMensagem1
Variable Modifiers	private
Type Parameters	
Use Local Variable	<input type="checkbox"/>



Java Swing – JTextField – Renomear Var.

The image shows a screenshot of an IDE interface. On the left, a window titled 'Tela01.java' is in 'Design' mode. It displays a window titled 'Tela 01' with a cyan background. Inside, there are two labels: 'Mensagem 1:' and 'Mensagem 2:'. Below 'Mensagem 1:', there is a text field. A yellow arrow points from this text field to the 'Code' tab of the 'jTextField2 [JTextField] - Properties' panel on the right. The 'Code' tab shows the 'Variable Name' set to 'txtMensagemFinal'.

Palette ×

Layered Pane

Swing Controls

- Label
- Toggle Button
- Radio Button
- Combo Box
- Button
- Check Box
- Button Group
- List

jTextField2 [JTextField] - Properties ×

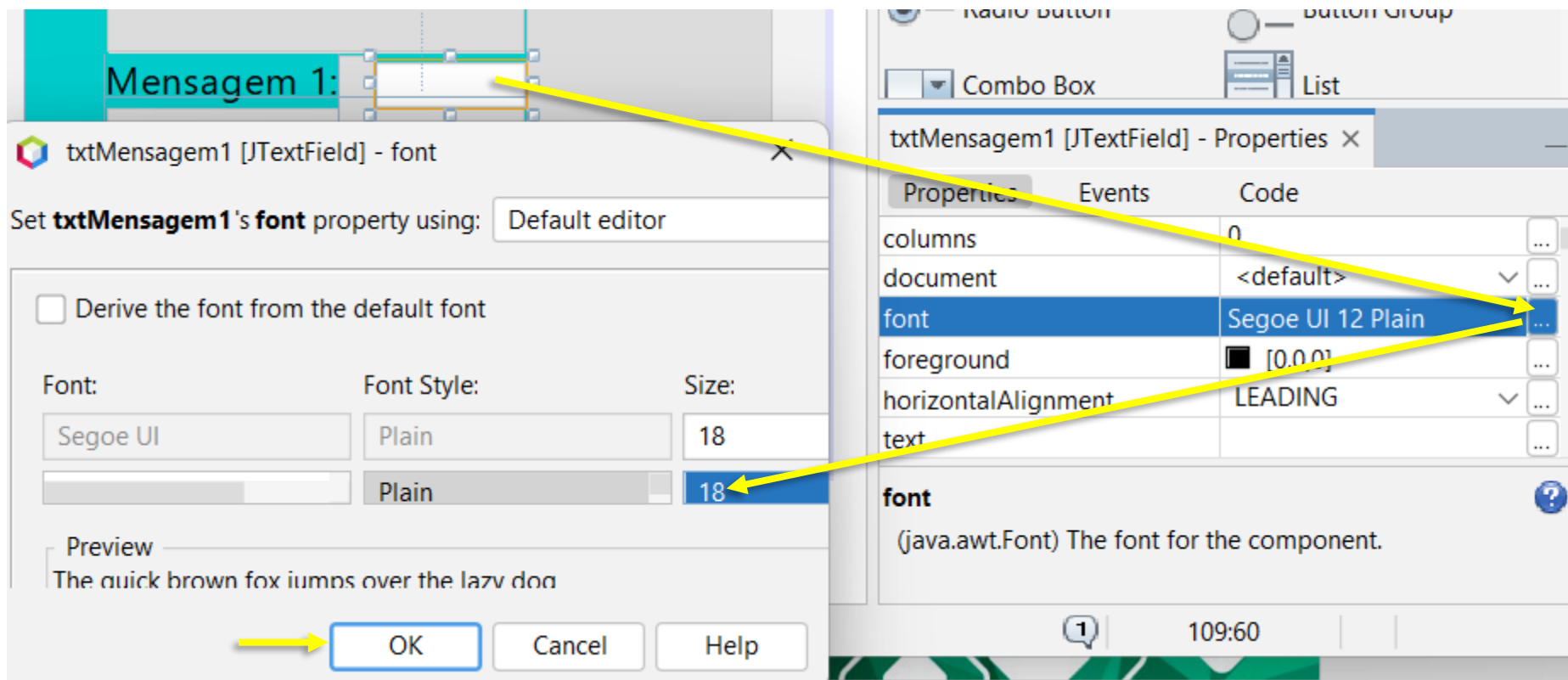
Properties Events Code

Code Generation

Bean Class	class javax.swing.JTextField
Variable Name	txtMensagemFinal
Variable Modifiers	private
Type Parameters	
Use Local Variable	<input type="checkbox"/>



Java Swing – JTextField – Aument. Fonte



Java Swing – JTextField – Aument. Fonte

The image shows two windows from a Java Swing IDE. The left window, titled 'txtMensagemFinal [JTextField] - font', is used to set the font for a specific text field. It has a 'Set txtMensagemFinal's font property using:' dropdown set to 'Default editor'. Below this, there's a checkbox 'Derive the font from the default font' which is unchecked. The 'Font:' field is set to 'Segoe UI', 'Font Style:' is 'Plain', and 'Size:' is '18'. A preview box shows the text 'The quick brown fox jumps over the lazy dog'. At the bottom are 'OK', 'Cancel', and 'Help' buttons. A yellow arrow points from the 'OK' button to the 'font' property in the right window. The right window, titled 'txtMensagemFinal [JTextField] - Properties', shows a list of properties for the text field. The 'font' property is highlighted in blue, and its value is 'Segoe UI 12 Plain'. A yellow arrow points from the '18' in the left window's 'Size' field to the '12' in the right window's 'font' value.

txtMensagemFinal [JTextField] - font

Set **txtMensagemFinal's font** property using: Default editor

☐ Derive the font from the default font

Font: Segoe UI Font Style: Plain Size: 18

Preview
The quick brown fox jumps over the lazy dog

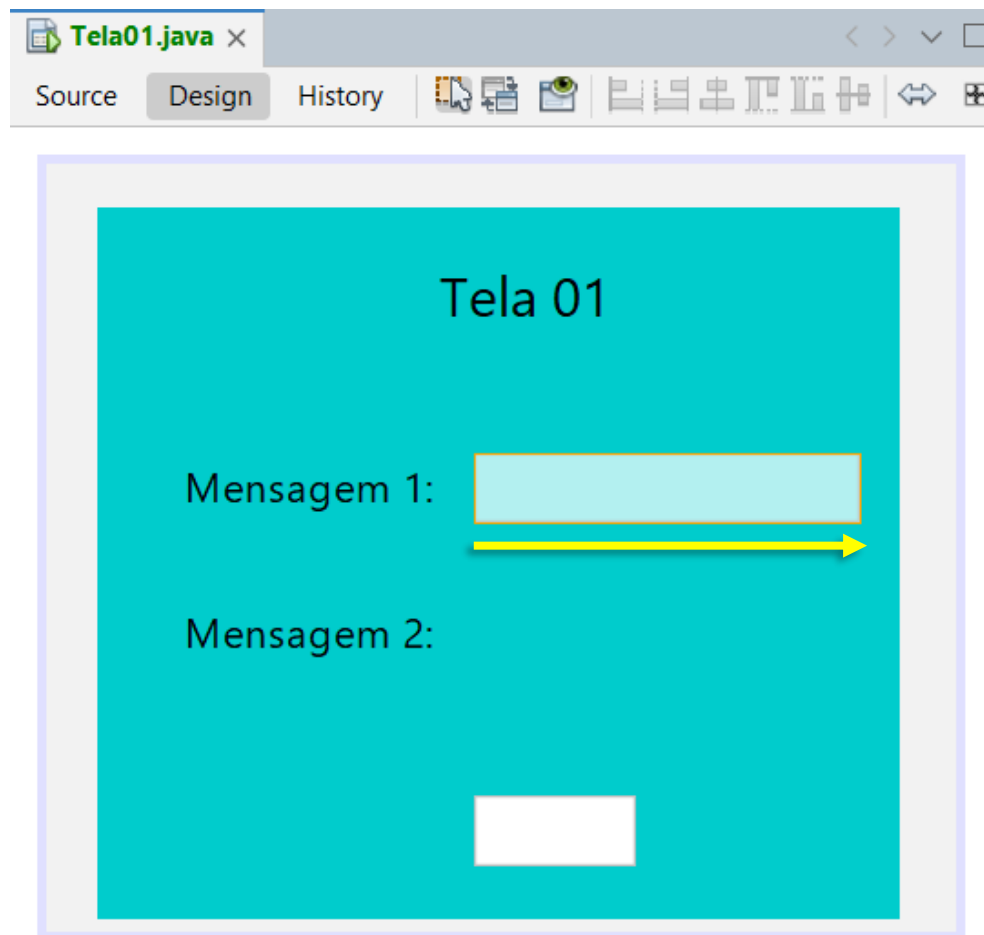
OK Cancel Help

txtMensagemFinal [JTextField] - Properties

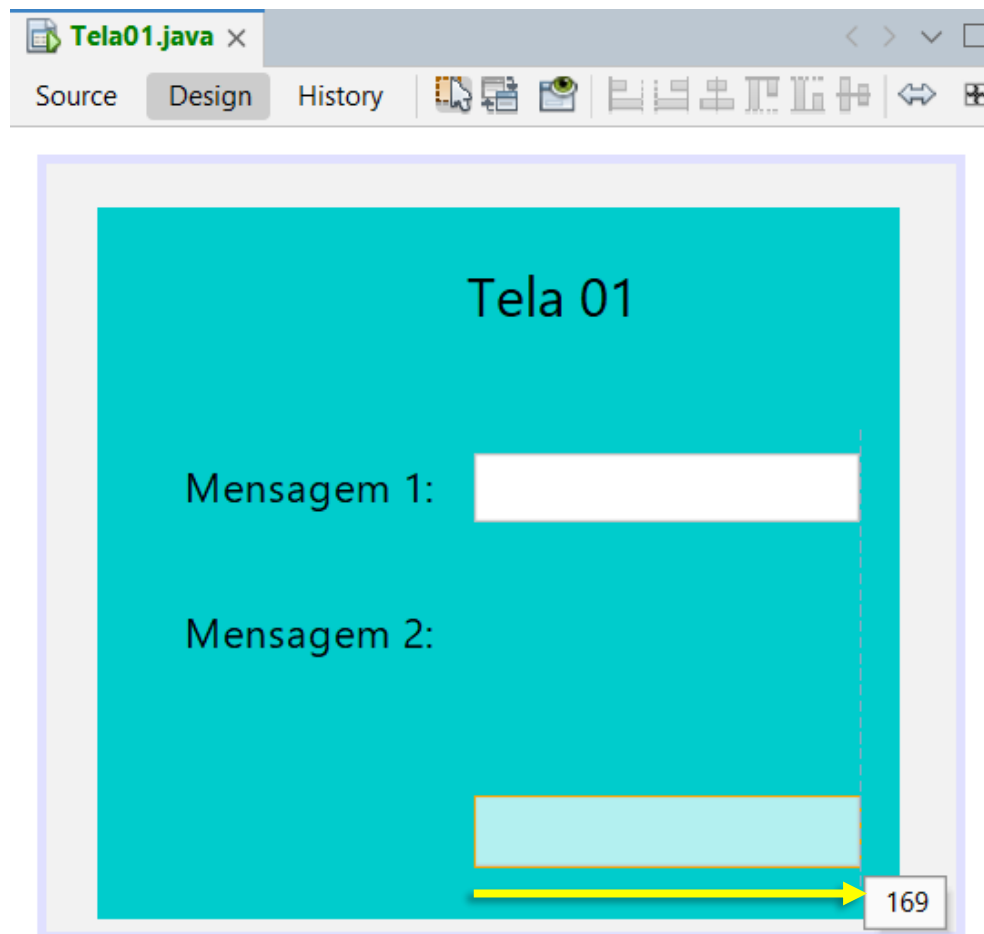
Properties	Events	Code
columns		0
document		<default>
font		Segoe UI 12 Plain
foreground		[0,0,0]
horizontalAlignment		LEADING
text		



Java Swing – JTextField – Redimens.



Java Swing – JTextField – Redimens.



Java Swing – JTextField – Não Editável

The screenshot shows an IDE window titled 'Tela01.java' with tabs for Source, Design, and History. The Design view displays a window titled 'Tela 01' with a cyan background. It contains two labels, 'Mensagem 1:' and 'Mensagem 2:', each followed by a text field. The text field for 'Mensagem 2:' is highlighted with a yellow box. A yellow arrow points from this text field to the 'editable' property in the Properties panel, which is set to false.

Palette ×

- Radio Button
- Button Group
- Combo Box
- List
- Text Field
- Text Area
- Scroll Bar
- Slider
- Progress Bar
- Formatted Field
- Password Field
- Spinner
- Separator
- Text Pane

txtMensagemFinal [JTextField] - Properties ×

Properties	Events	Code
editable		<input type="checkbox"/>
background		<input type="checkbox"/> [242,242,242]
columns		0

editable

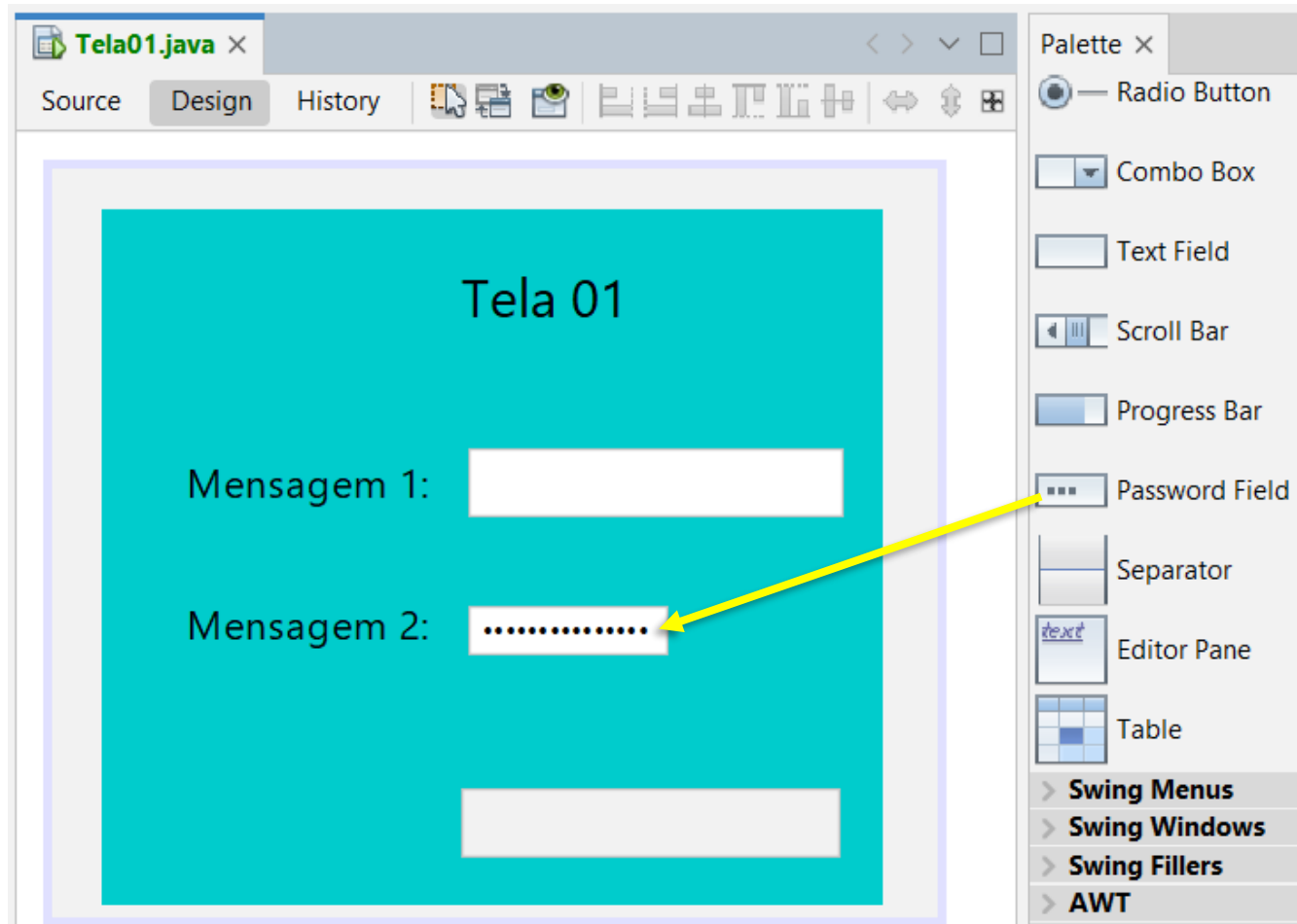


Java Swing – JPasswordField

- A classe **JPasswordField** permite criar uma **caixa de texto gráfica** na qual o usuário pode **digitar dados**, porém eles são substituídos (visualmente) por outro caractere (*).



Java Swing – JPasswordField – Adic.



Java Swing – JPasswordField – Editor T.

The screenshot displays the NetBeans IDE interface for a Java Swing application. The main window, titled 'Tela 01', is in the 'Design' view. It features a cyan background with two labels, 'Mensagem 1:' and 'Mensagem 2:', each followed by a text field. The second text field is a JPasswordField, highlighted with a yellow box and a yellow arrow pointing to its properties. The 'Properties' tab of the 'jPasswordField1 [JPasswordField] - Properties' window is open, showing the 'text' property set to an empty string. The 'Palette' window on the right lists various Swing components, including 'Password Field'.

Palette components:

- Radio Button
- Button Group
- Combo Box
- List
- Text Field
- Text Area
- Scroll Bar
- Slider
- Progress Bar
- Formatted Field
- Password Field
- Spinner
- Separator
- Text Pane

jPasswordField1 [JPasswordField] - Properties

Properties	Events	Code
foreground		[0,0,0]
horizontalAlignment		LEADING
text		
toolTipText		

jPasswordField1 [JPasswordField]



Java Swing – JPasswordField – Ren. Var.

The screenshot shows an IDE window titled 'Tela01.java' with tabs for Source, Design, and History. The Design view displays a window titled 'Tela 01' with a cyan background. Inside the window, there are two labels: 'Mensagem 1:' and 'Mensagem 2:'. Below 'Mensagem 2:', there is a JPasswordField component. A yellow arrow points from the JPasswordField to the 'txpMensagem2 [JPasswordField] - Properties' window. The Properties window shows the 'Code' tab with the following information:

Code Generation	
Bean Class	class javax.swing.JPassword...
Variable Name	txpMensagem2
Variable Modifiers	private

Below the table, the text 'txpMensagem2 [JPasswordField]' is displayed.



Java Swing – JPasswordField – Aum. F.

The image shows a Java Swing IDE with a window titled 'Tela01.java'. A dialog box titled 'txpMensagem2 [JPasswordField] - font' is open, allowing the user to set the font for the 'txpMensagem2' JPasswordField. The dialog has a 'Default editor' button and a checkbox 'Derive the font from the default font' which is unchecked. The 'Font' field is set to 'Segoe UI', 'Font Style' is 'Plain', and 'Size' is '18'. Below these fields are 'OK', 'Cancel', and 'Help' buttons. A yellow arrow points from the 'OK' button to the 'txpMensagem2 [JPasswordField] - Properties' window. The 'Properties' window shows the 'font' property set to 'Segoe UI 12 Plain'. Another yellow arrow points from the 'font' property to the 'txpMensagem2 [JPasswordField] - font' dialog. The background shows a Java Swing window titled 'Mensagem 2:' with a text area.

Set **txpMensagem2**'s font property using: Default editor

☐ Derive the font from the default font

Font: Segoe UI Font Style: Plain Size: 18

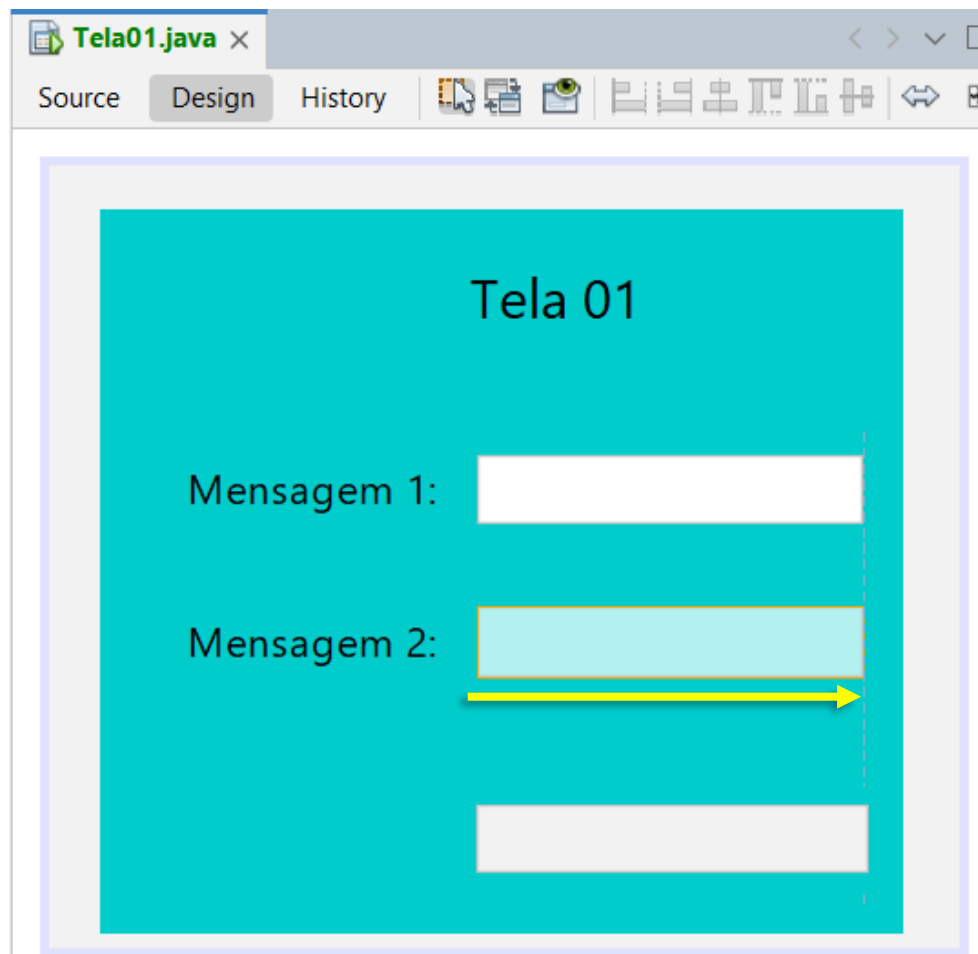
OK Cancel Help

txpMensagem2 [JPasswordField] - Properties

Properties	Events	Code
columns		0
document		<default>
font		Segoe UI 12 Plain
foreground		[0,0,0]



Java Swing – JPasswordField – Redimen.

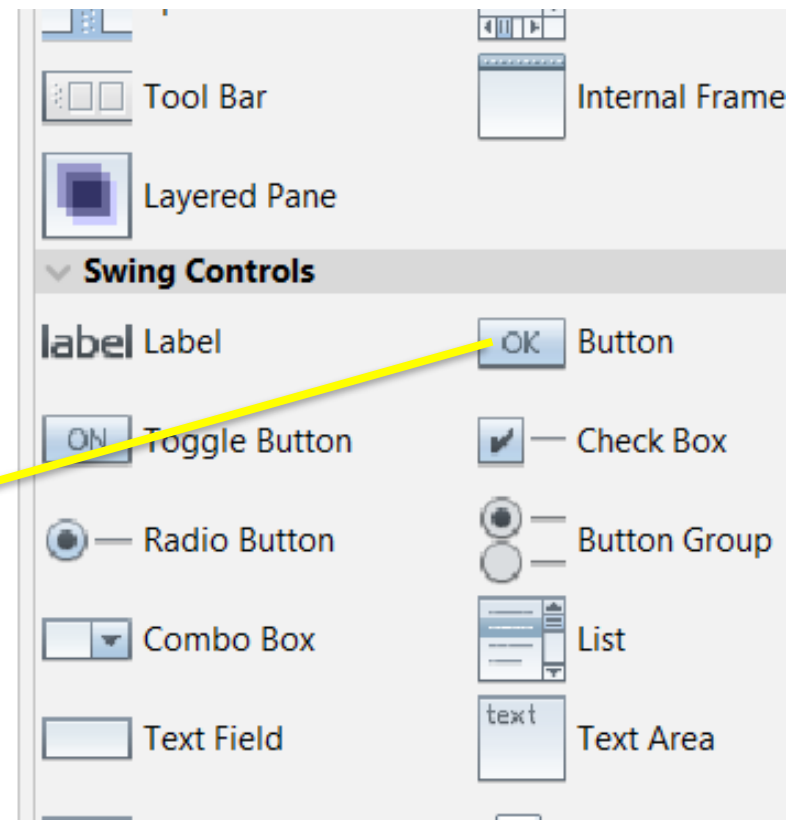
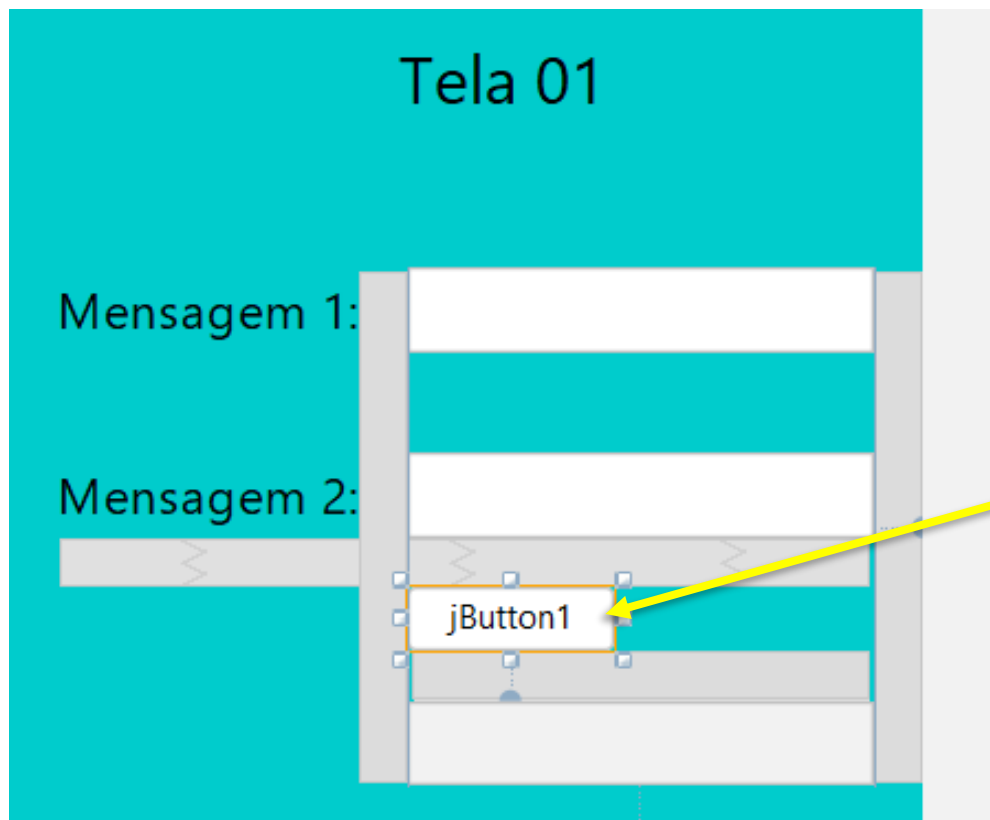


Java Swing – JButton

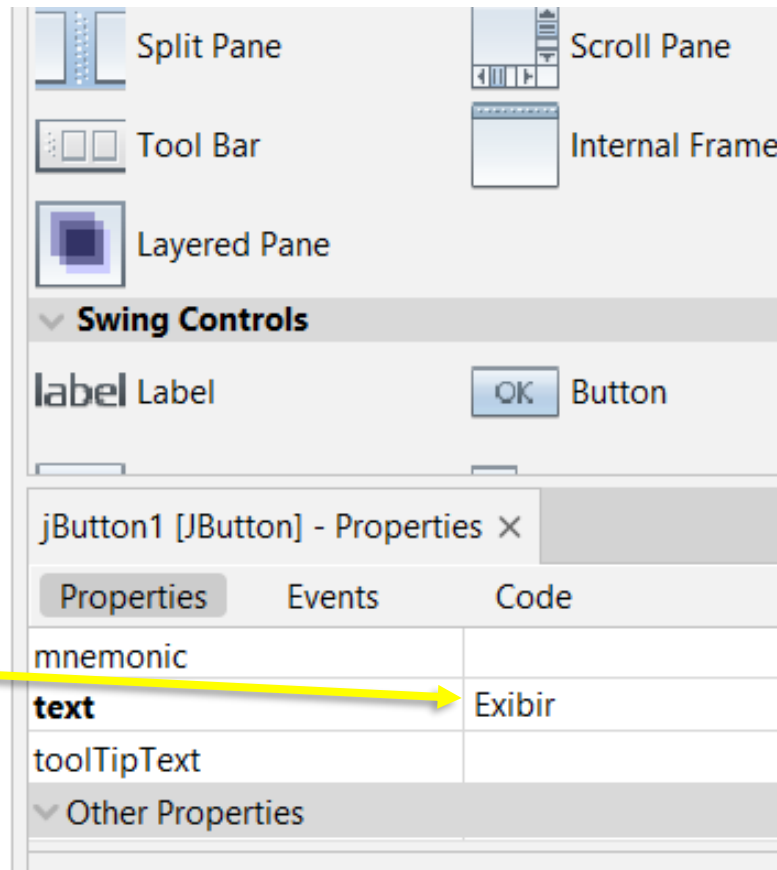
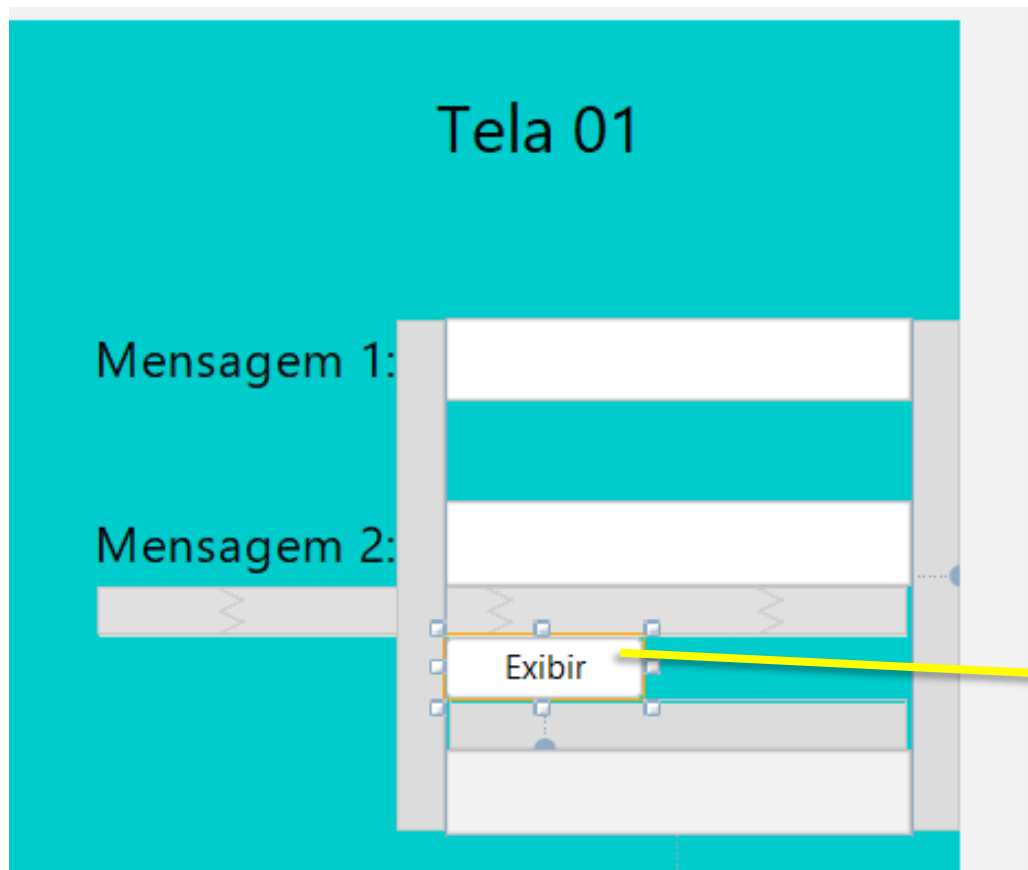
- A classe **JButton** permite **definir botões gráficos** que **pode ser adicionados** a um **outro componente** (frame, painel etc.).
- Um **botão** pode **ser criado** com apenas um **texto e/ou com ícones** para tornar o ambiente mais intuitivo.



Java Swing – JButton – Adicionar



Java Swing – JButton – Editor Texto



Java Swing – JButton – Aumentar Fonte

The image shows a Java Swing IDE interface with two main windows. The left window is titled "jButton1 [JButton] - font" and contains a "Default editor" tab. It has a checkbox "Derive the font from the default font" which is unchecked. Below this are three fields: "Font:" with "Segoe UI", "Font Style:" with "Plain", and "Size:" with "18". A "Preview" section shows the text "The quick brown fox jumps over the lazy dog" in the selected font. At the bottom are "OK", "Cancel", and "Help" buttons. A yellow arrow points from the "OK" button to the "font" property in the right window. The right window is titled "jButton1 [JButton] - Properties" and has three tabs: "Properties", "Events", and "Code". The "Properties" tab is active, showing a list of properties. The "font" property is highlighted, and its value is "Segoe UI 12 Plain". A yellow arrow points from the "Size" field in the left window to the "font" property in the right window. Another yellow arrow points from the "font" property in the right window to the "font" property in the left window.

Set **jButton1**'s **font** property using: Default editor

☐ Derive the font from the default font

Font: Segoe UI Font Style: Plain Size: 18

Preview
The quick brown fox jumps over the lazy dog

OK Cancel Help

Swing Containers

- Panel
- Split Pane
- Tool Bar
- Layered Pane
- Tabbed Pane
- Scroll Pane
- Internal Frame

Swing Controls

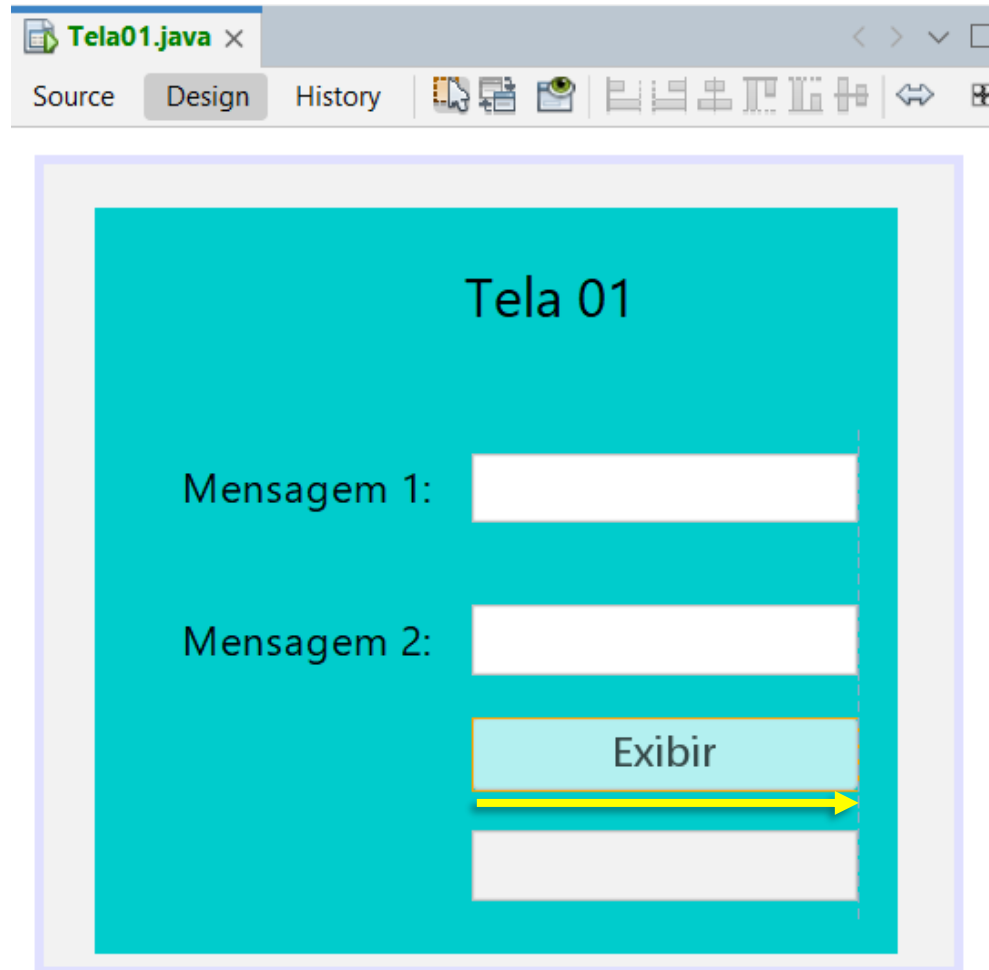
- Label
- Button

jButton1 [JButton] - Properties

Properties	Events	Code
font		Segoe UI 12 Plain
foreground		[0,0,0]
icon		<none>



Java Swing – JButton – Redimensionar



Java Swing – JButton – Renomear Var.

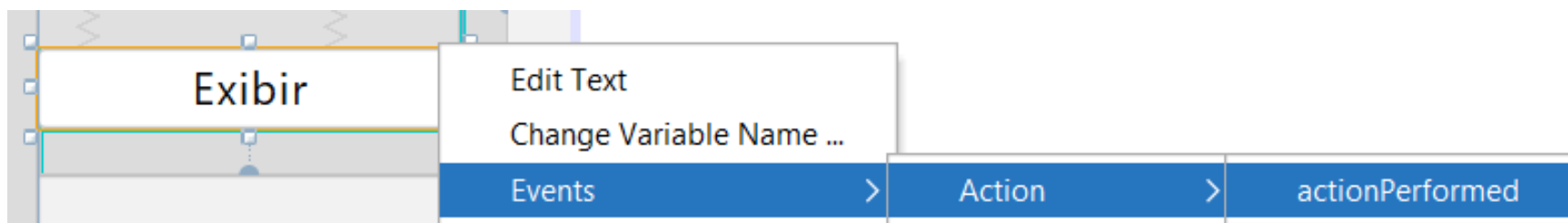
The image shows a Java Swing IDE interface. The main window, titled 'Tela 01', is in Design mode. It contains a cyan background with the text 'Tela 01'. Below this, there are two labels: 'Mensagem 1:' and 'Mensagem 2:'. To the right of these labels is a vertical stack of components. The bottom component is a JButton labeled 'Exibir'. A yellow arrow points from the 'Exibir' button to the 'Properties' window.

The 'Properties' window for 'btnExibir [JButton]' is open. It shows the 'Code' tab. The 'Code Generation' section displays the following information:

Property	Value
Bean Class	class javax.swing.JButton
Variable Name	btnExibir
Variable Modifiers	private



Java Swing – JButton – Adicionar Ação



Java Swing – JButton – Adicionar Ação

```
private void btnExibirActionPerformed(java.awt.event.ActionEvent evt) {
```

}



Java Swing – JButton – Adicionar Ação

```
import javax.swing.JOptionPane;
```



Java Swing – JButton – Adicionar Ação

```
private void btnExibirActionPerformed(java.awt.event.ActionEvent evt) {  
  
    String mensagem1 = txtMensagem1.getText();  
    String mensagem2 = String.valueOf(txpMensagem2.getPassword());  
  
    String mensagemFinal = mensagem1 + " " + mensagem2;  
  
    txtMensagemFinal.setText(mensagemFinal);  
  
    JOptionPane.showMessageDialog(this, mensagemFinal);  
  
}
```



Java Swing – JButton – Execução



Sistema IFBA

Tela 01

Mensagem 1:

Mensagem 2:



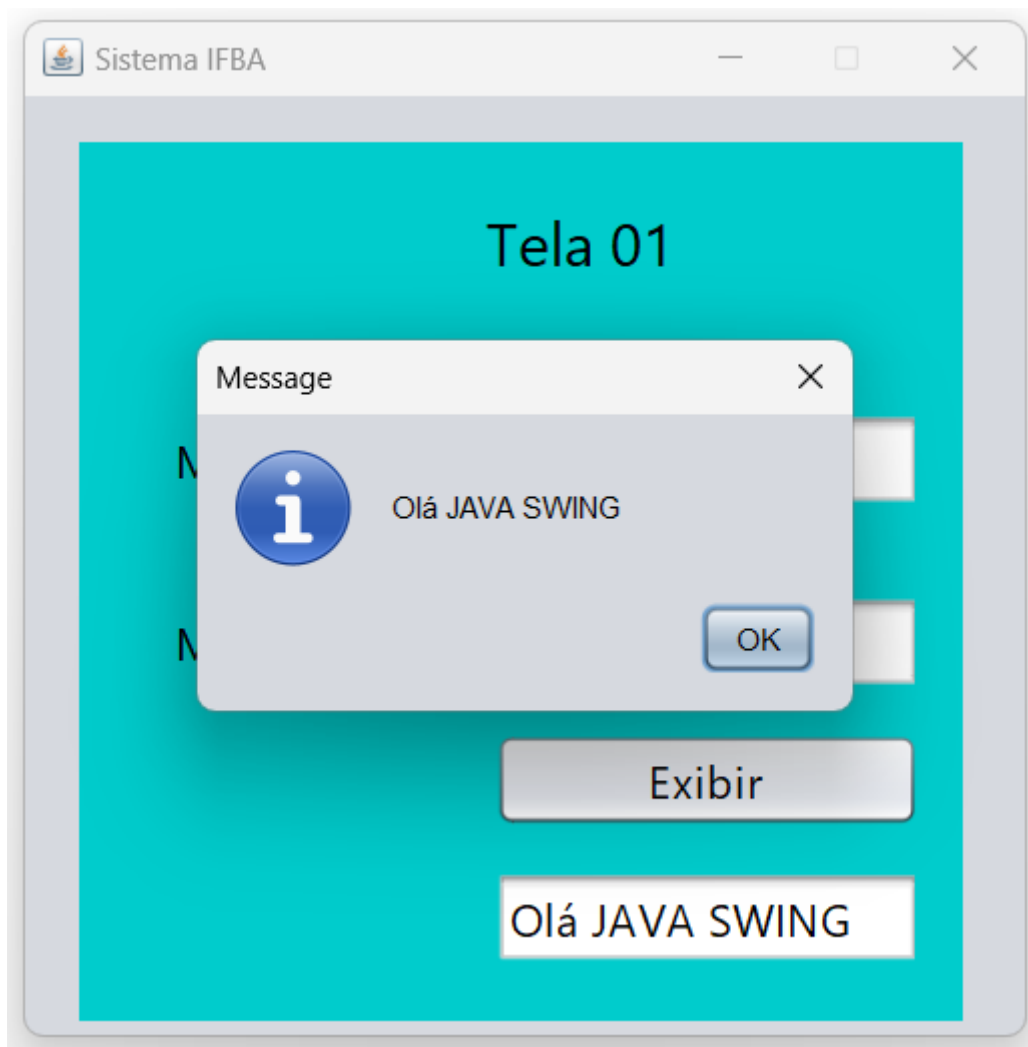
Java Swing – JButton – Execução



The screenshot shows a Java Swing window titled "Sistema IFBA". The window has a light gray title bar with standard minimize, maximize, and close buttons. The main content area has a cyan background. At the top center, the text "Tela 01" is displayed. Below this, there are two text input fields. The first field is labeled "Mensagem 1:" and contains the text "Olá". The second field is labeled "Mensagem 2:" and contains a series of asterisks "*****". Below the second field is a button labeled "Exibir". At the bottom of the form, there is an empty text input field.



Java Swing – JButton – Execução



Java Swing – JButton – Execução



Java Swing – Exercício – Prog. Soma

The image shows a Java Swing window titled "Sistema IFBA". Inside the window is a form titled "Programa Soma". The form contains the following components:

- lblTitulo**: The title "Programa Soma" at the top of the form.
- lblValor1**: The label "Valor 1:" next to the first input field.
- txtValor1**: The first text input field.
- lblValor2**: The label "Valor 2:" next to the second input field.
- txtValor2**: The second text input field.
- btnSomar**: A button labeled "Somar" located below the input fields.
- lblResultado**: The label "Resultado:" next to the result text field.
- txtResultado**: The text input field for the result.



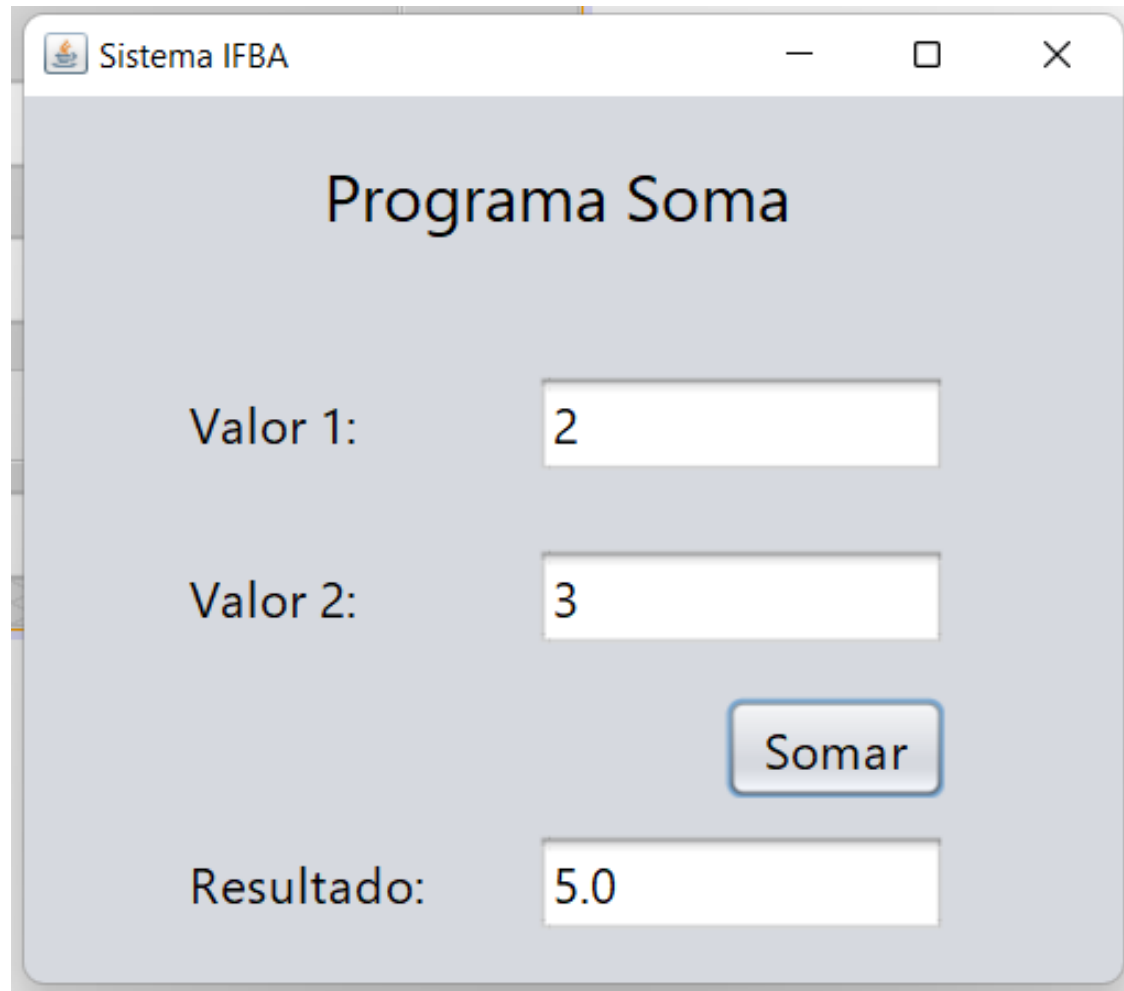
Java Swing – Exercício – Prog. Soma

```
private void btnSomarActionPerformed(java.awt.event.ActionEvent evt) {  
  
    double valor1 = Double.parseDouble(txtValor1.getText());  
  
    double valor2 = Double.parseDouble(txtValor2.getText());  
  
    double resultado = valor1 + valor2;  
  
    String strResultado = String.valueOf(resultado);  
  
    txtResultado.setText(strResultado);  
  
}
```



Java Swing – Exercício – Prog. Soma

Execução



Sistema IFBA

Programa Soma

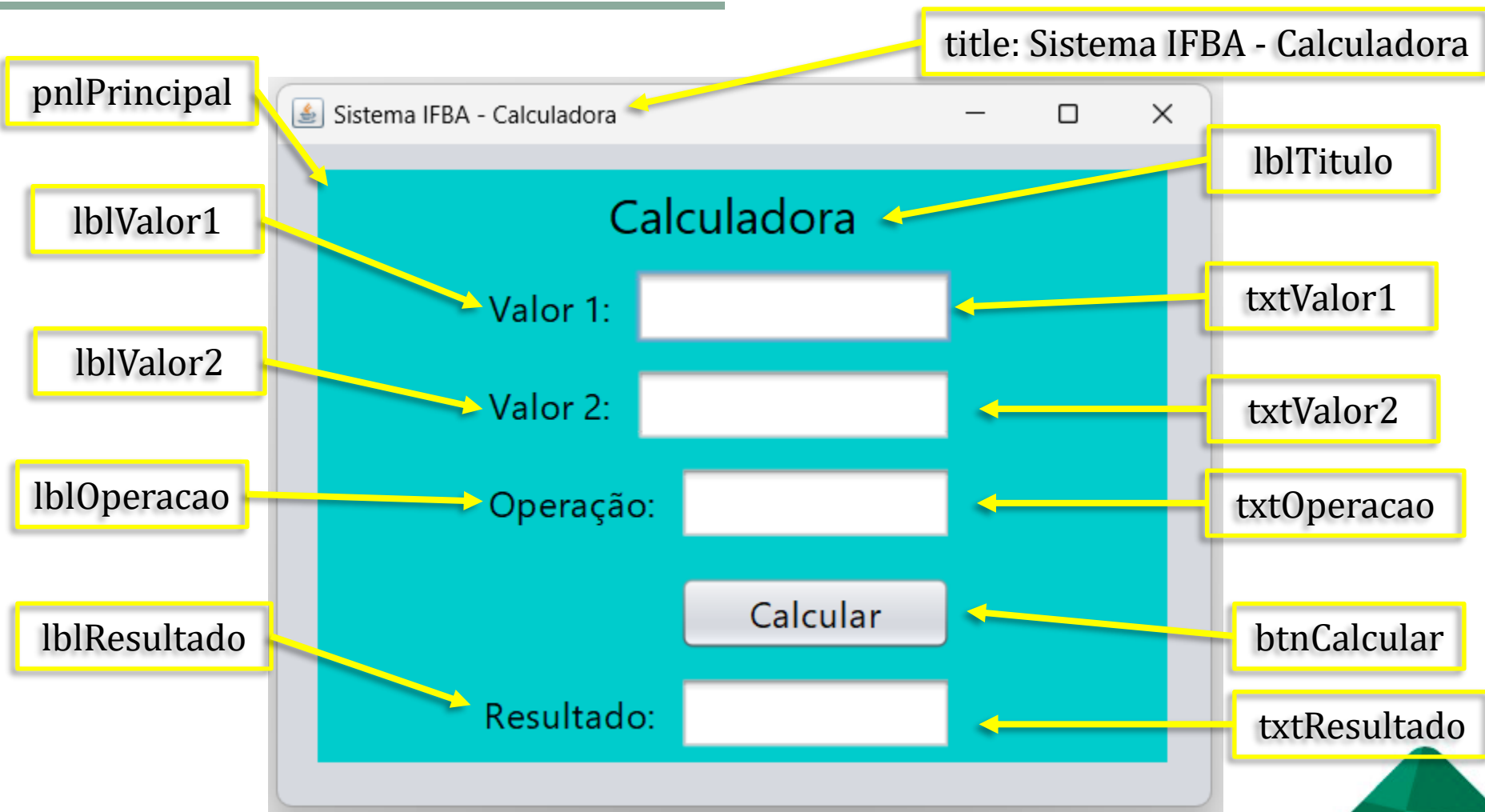
Valor 1:

Valor 2:

Resultado:



Java Swing – Exercício – Prog. Calc.



Java Swing – Exercício – Prog. Calc

Qual é o código executado ao acionar o botão “Calcular”?



Java Swing – Exercício – Prog. Calc.

Execução

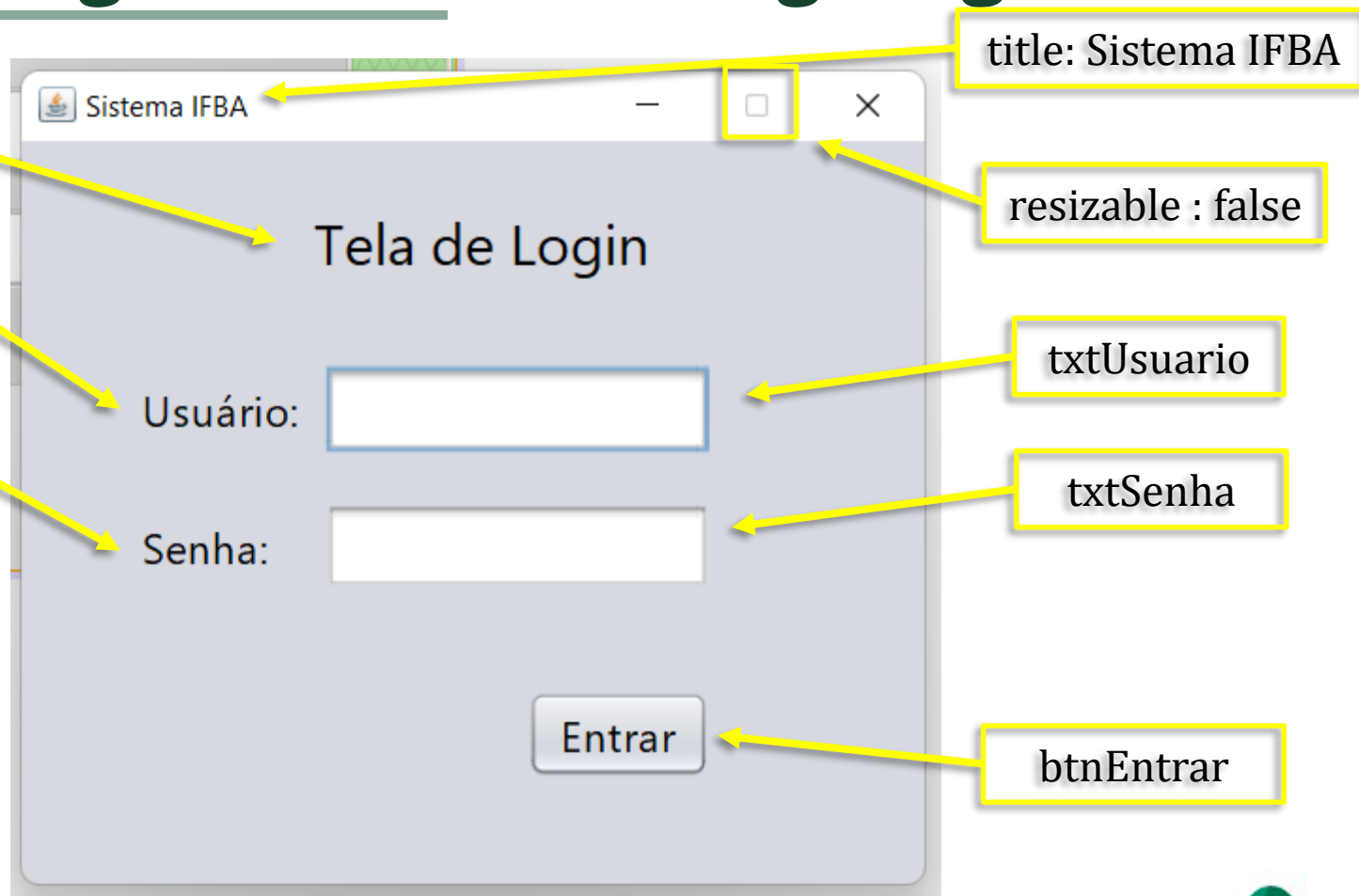
The screenshot shows a Java Swing window titled "Sistema IFBA - Calculadora". The window has a light blue background and contains the following elements:

- Calculatora**: The title of the application.
- Valor 1:** A text label followed by a text field containing the value "10".
- Valor 2:** A text label followed by a text field containing the value "5".
- Operação:** A text label followed by a text field containing the value "*".
- Calcular**: A button with the text "Calcular".
- Resultado:** A text label followed by a text field containing the value "50.0".

A yellow arrow points from a separate box containing the operators "+", "-", "*", and "/" to the "*" operator in the "Operação" field.



Java Swing – Exercício – Prog. Login

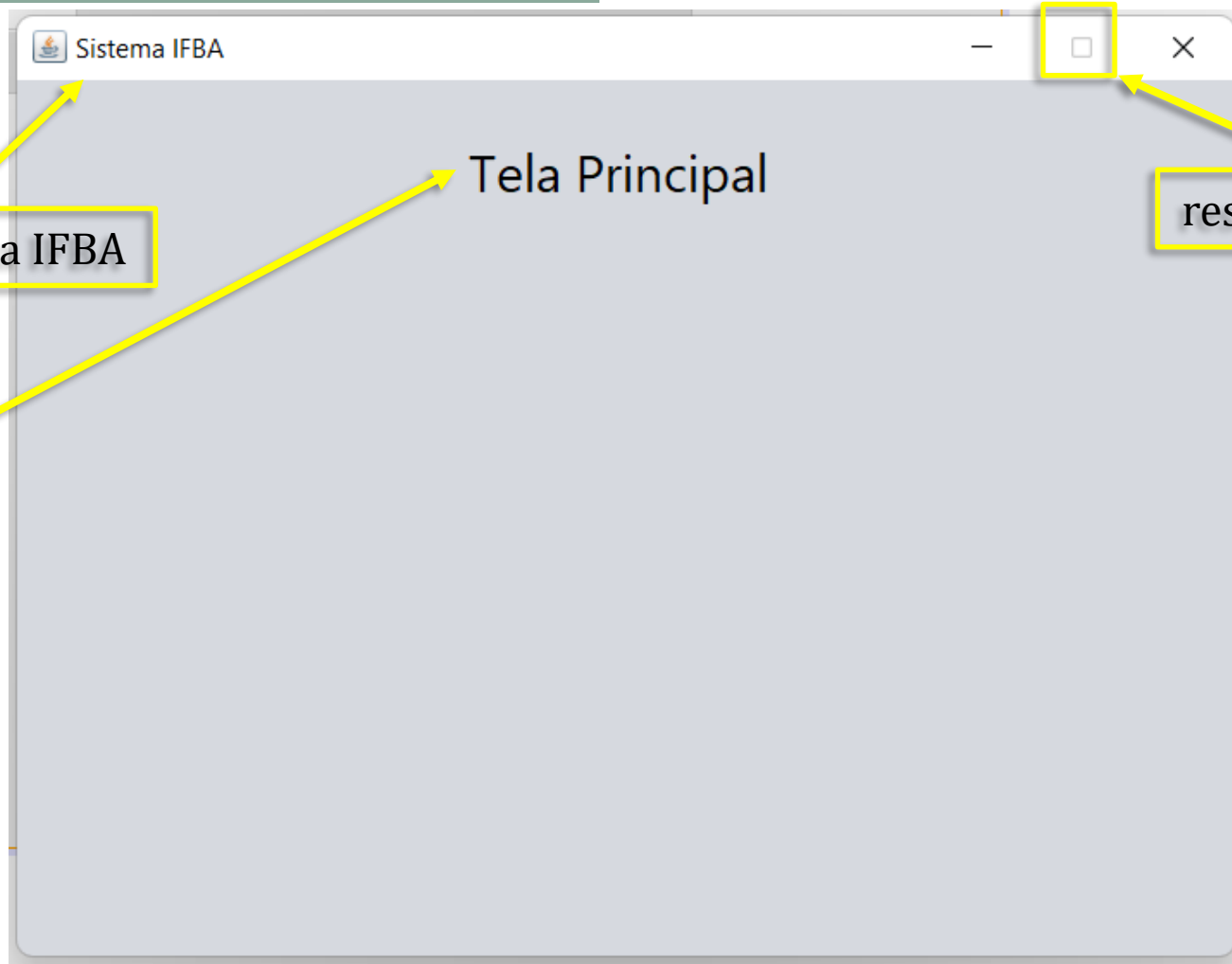


Java Swing – Exercício – Prog. Login

```
private void btnEntrarActionPerformed(java.awt.event.ActionEvent evt) {  
  
    String usuario = txtUsuario.getText();  
  
    String senha = String.valueOf(txpSenha.getPassword());  
  
    if(usuario.equals("ifba") && senha.equals("1234"))  
    {  
        new TelaPrincipal().setVisible(true);  
  
        this.dispose();  
    }  
    else  
    {  
        JOptionPane.showMessageDialog(this, "Acesso negado!");  
    }  
}
```

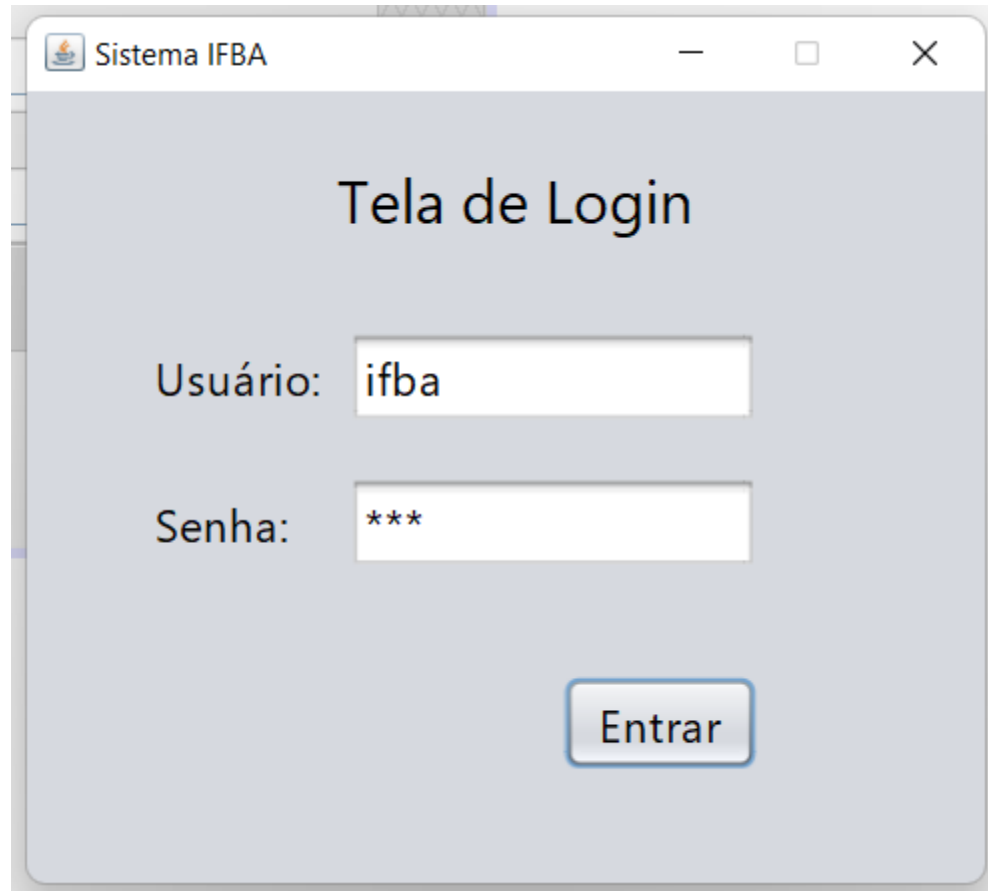


Java Swing – Exercício – Prog. Principal



Java Swing – Exercício – Prog. Login

Execução

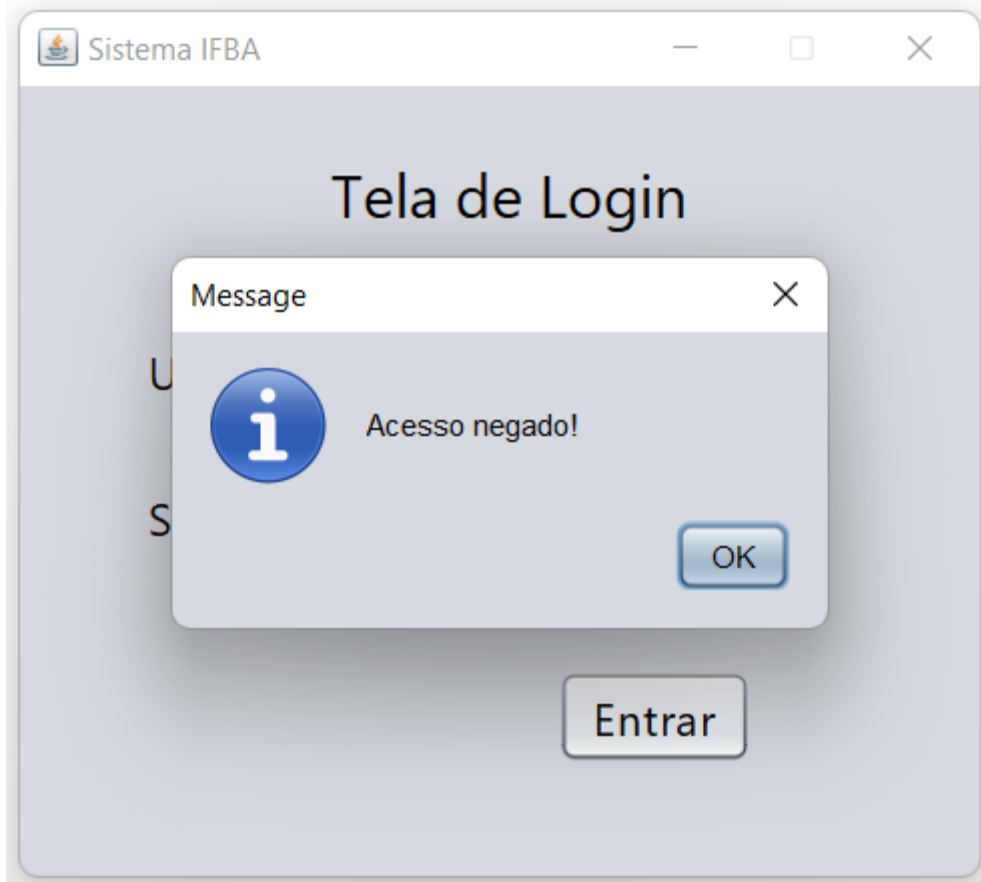


The image shows a Java Swing window titled "Sistema IFBA". Inside the window, the text "Tela de Login" is centered. Below this, there are two input fields. The first is labeled "Usuário:" and contains the text "ifba". The second is labeled "Senha:" and contains three asterisks "***". At the bottom right of the window, there is a button labeled "Entrar".



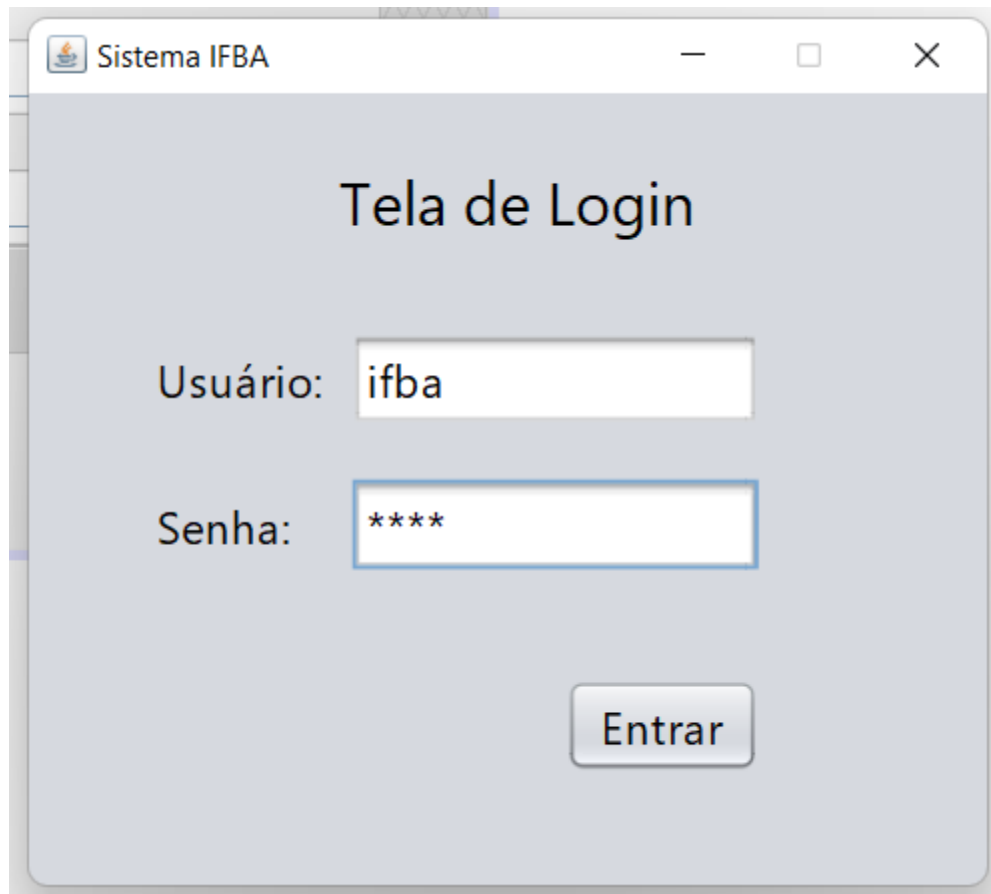
Java Swing – Exercício – Prog. Login

Execução



Java Swing – Exercício – Prog. Login

Execução

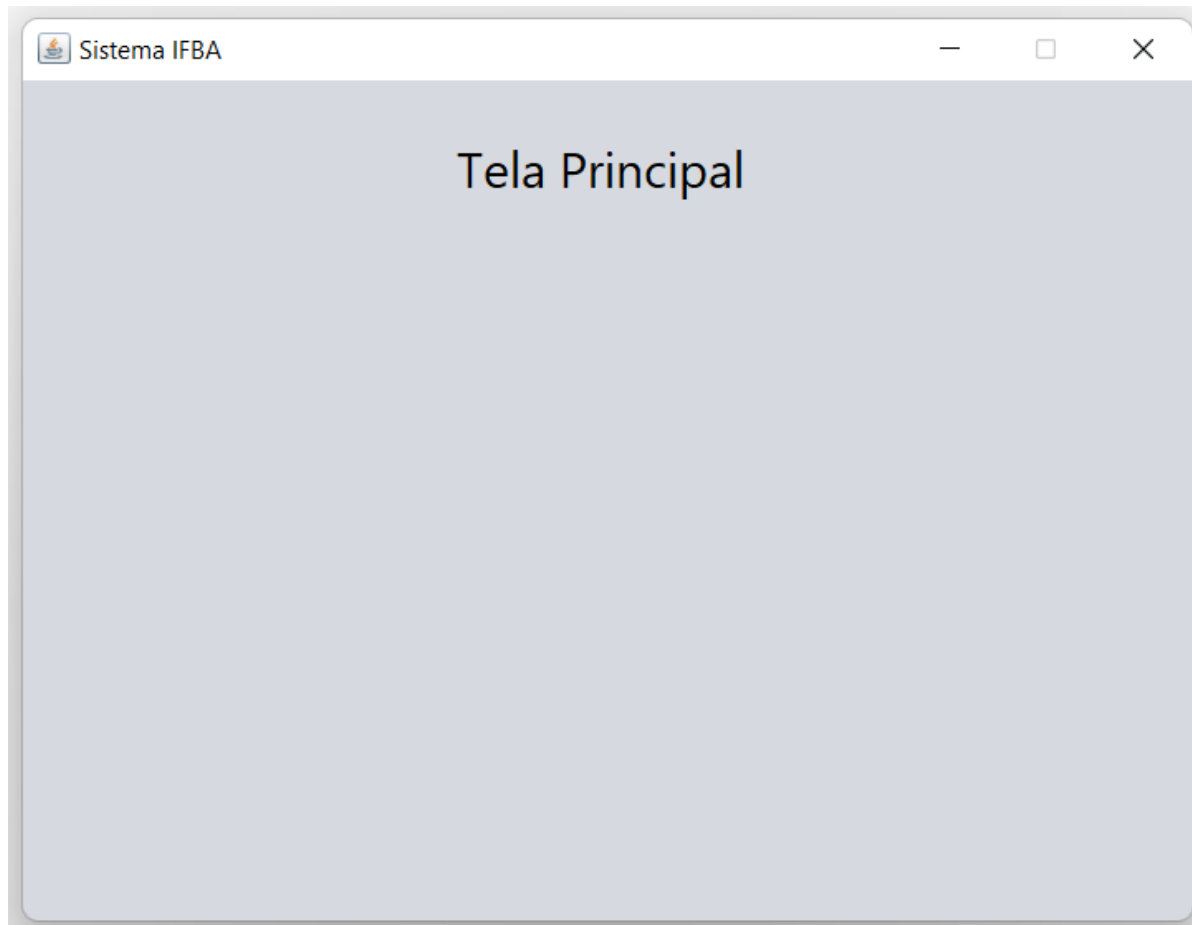


The screenshot shows a Java Swing window titled "Sistema IFBA" with standard window controls (minimize, maximize, close). The window contains a login form titled "Tela de Login". It features two text input fields: one for the username labeled "Usuário:" with the text "ifba" entered, and another for the password labeled "Senha:" with four asterisks "****" entered. Below the password field is a button labeled "Entrar".



Java Swing – Exercício – Prog. Login

Execução



Referências

- Junior, Peter Jandl. Java Guia do Programador - 4ª Edição. Novatec Editora.
- SÉRGIO FURGERI. Java Ensino Didático: Desenvolvimento e Implementação de Aplicações. Editora Érica.
- <https://www.youtube.com/playlist?list=PLwQkYMetu0OYFOU71txhtvSYTVUCHjJYD>
- https://www.youtube.com/playlist?list=PLWd_VnthxxLfeEUK08gB7G3316OS5xIT3



Obrigado!

- Canais de Comunicação;
- Horário de Atendimento.

