

# PEMROGRAMAN BERBASIS OBJEK 2

# KOMPONEN SWING

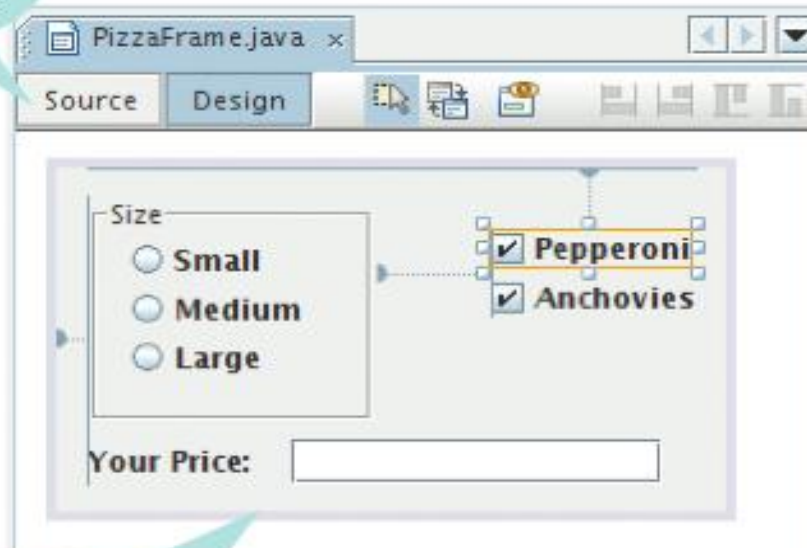
# Komponen Dasar Swing

1. **Top-Level Container:** kontainer dasar dimana komponen lainnya diletakkan (**JFrame**, **JDialog** dan **Applet**)
2. **Intermediate Container:** kontainer perantara dimana komponen lainnya diletakkan (**JPanel**, **JScrollPane**, **JTabbedPane**, **JToolBar**, **JSplitPane**)
3. **Atomic Component:** komponen yang memiliki fungsi spesifik dan menerima interaksi langsung dari user (**JButton**, **JLabel**, **TextArea**, dsb)
4. **Layout Manager:** mengatur tata letak dan posisi komponen dalam kontainer (**BorderLayout**, **BoxLayout**, **FlowLayout**, **GridBagLayout**, **GridLayout**)
5. **Event Handling:** menangani event yang dilakukan user (**klik mouse**, **ketik keyboard**, **perbesar frame**, dsb)

# Desain Aplikasi GUI dengan Netbeans

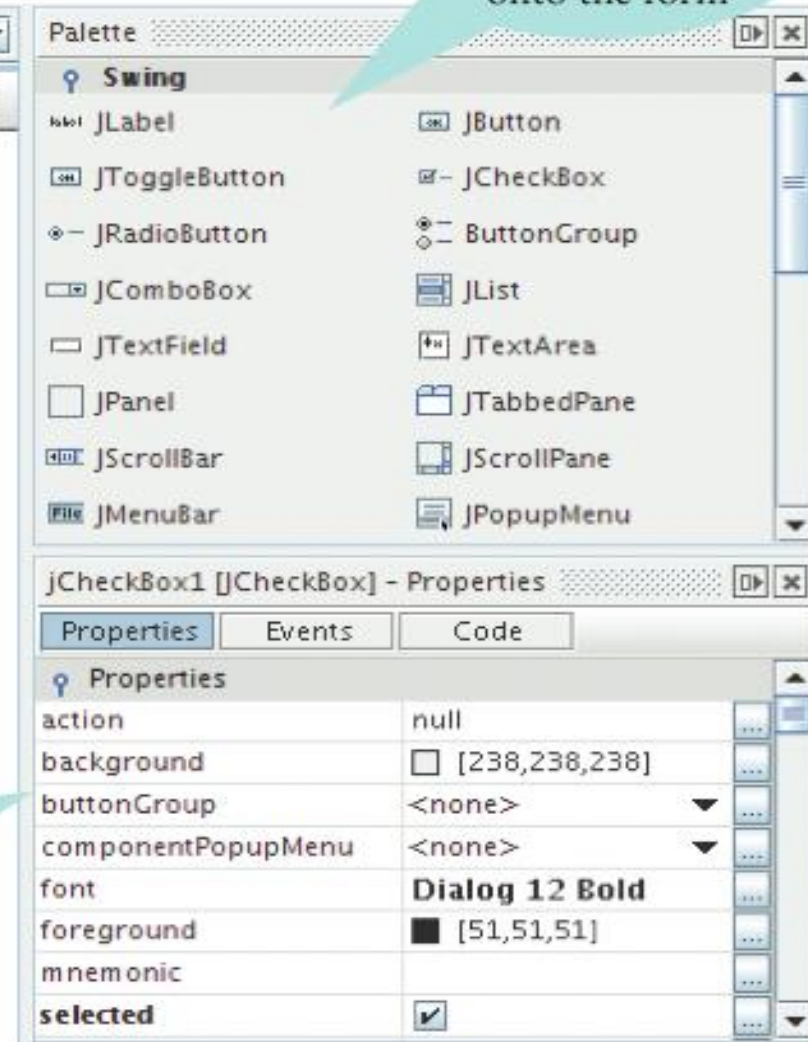
Click here to view generated source code

Drag components from this palette onto the form



The GroupLayout manages the components on this form

Use this dialog to edit component properties



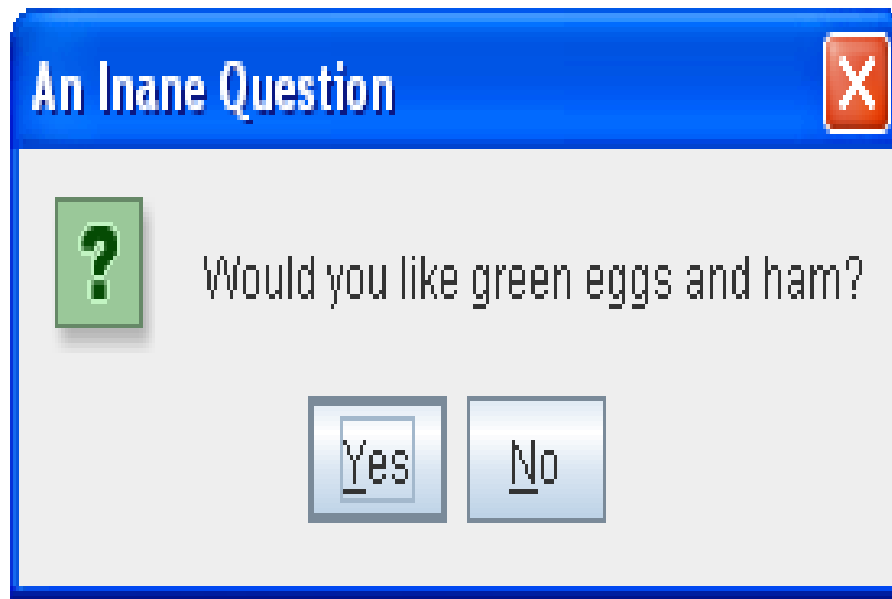
# Top-Level Container

JFrame, JDialog, Applet

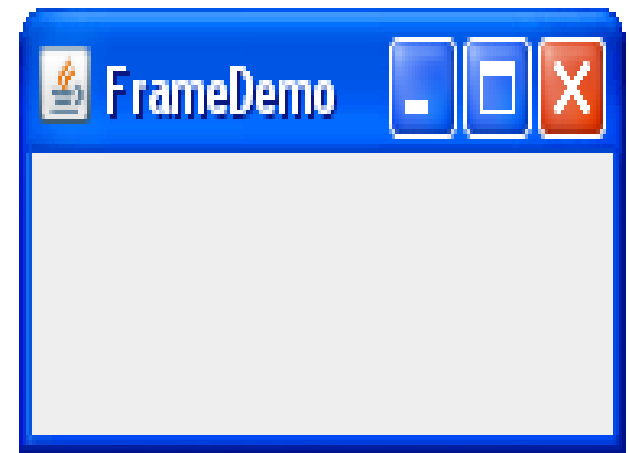
# Top Level Container



JApplet



JDialog



JFrame

# JFrame

//1. Create the frame

```
JFrame frame = new JFrame("Frame Beraksi");
```

//2. Optional: What happens when the frame closes?

```
frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

//3. Create components and put them in the frame

//...create emptyLabel...

```
frame.getContentPane().add(emptyLabel, BorderLayout.CENTER);
```

//4. Size the frame

```
frame.pack();
```

//5. Show it

```
frame.setVisible(true);
```

# FrameBeraksi.java

```
public class FrameBeraksi {  
    public static void main(String[] args){  
        JFrame frame = new JFrame("Frame Beraksi");  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
  
        JLabel emptyLabel = new JLabel("Frame Beraksi");  
        frame.getContentPane().add(emptyLabel);  
  
        frame.setSize(400,200);  
        frame.setVisible(true);  
    }  
}
```

# FrameBeraksi2.java

```
import javax.swing.*;

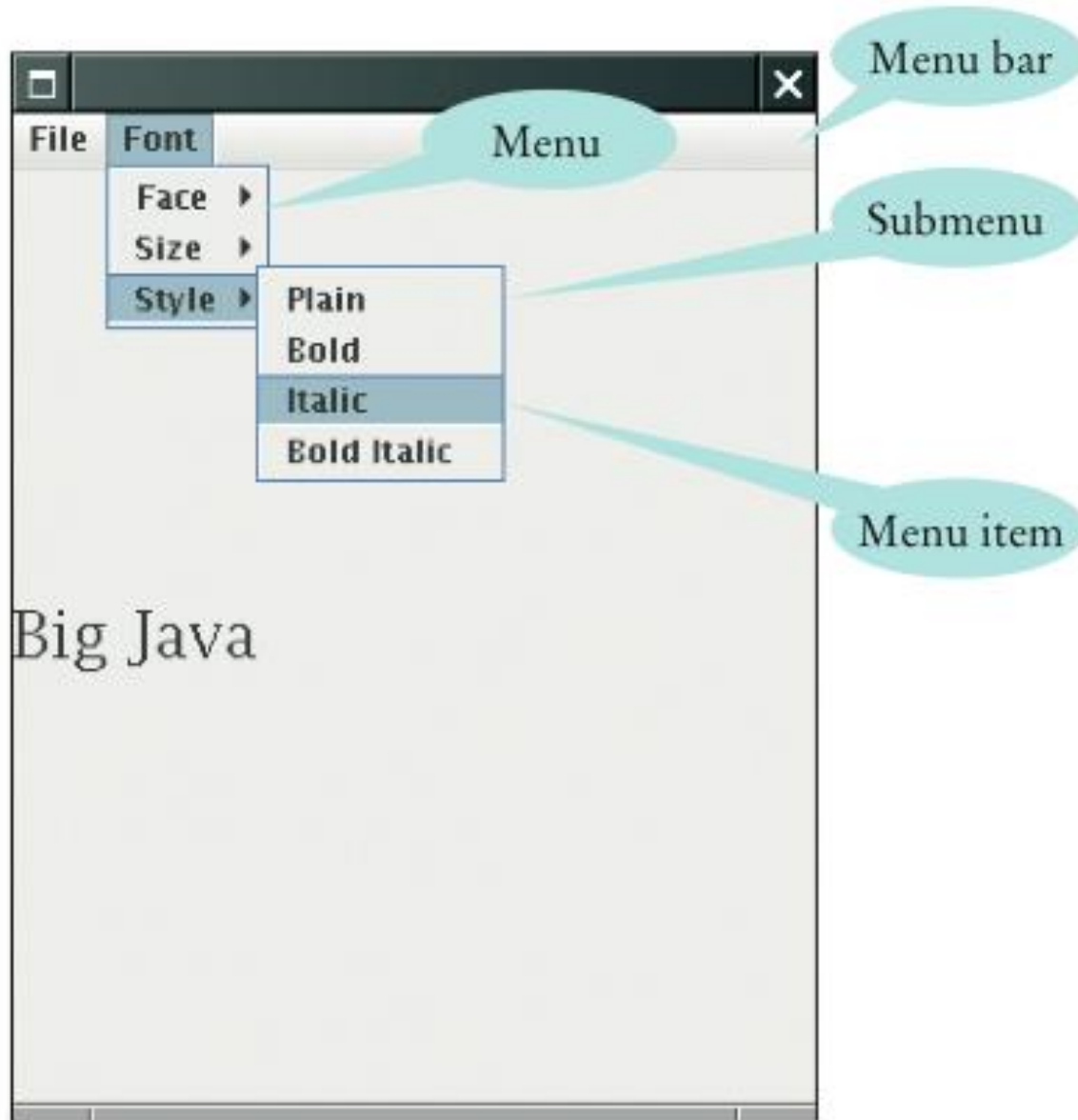
public class FrameBeraksi2 extends JFrame {
    public FrameBeraksi2() {
        super("Frame Beraksi 2");
        setSize(300, 100);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setVisible(true);
    }

    public static void main(String[] arguments) {
        FrameBeraksi2 frame= new FrameBeraksi2();
    }
}
```



# Intermediate Container

# Menu



# Atomic Component



[JButton](#)



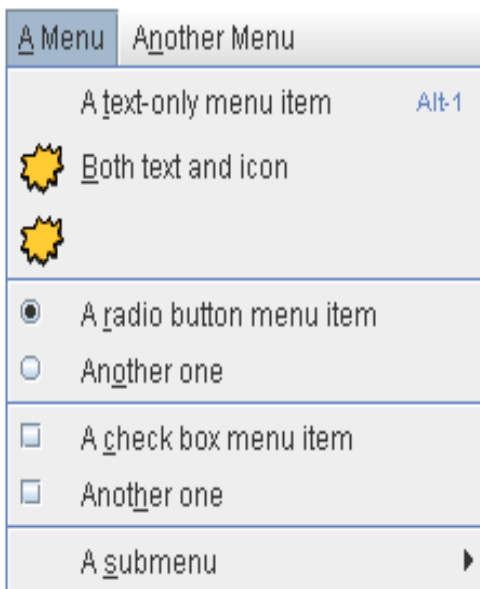
[JCheckBox](#)



[JComboBox](#)



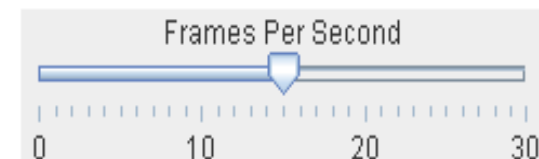
[JList](#)



[JMenu](#)



[JRadioButton](#)



[JSlider](#)



[JSpinner](#)



[JTextField](#)



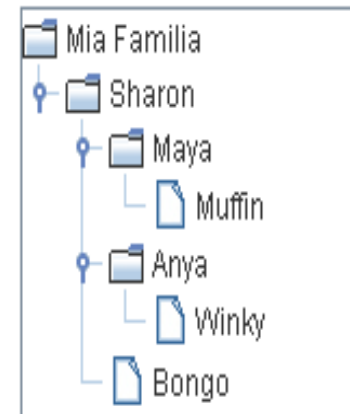
[JPasswordField](#)

Host	User	Password	Last Modified
Biocca Games	Freddy	!#asf6Awwzb	Mar 16, 2006
zabble	ichabod	Tazb!34\$fZ	Mar 6, 2006
Sun Developer	fraz@hotmail.co...	AasW541!fbZ	Feb 22, 2006
Heirloom Seeds	shams@gmail....	bKz[ADF78!	Jul 29, 2005
Pacific Zoo Shop	seal@hotmail.c...	ybAf1 24%z	Feb 22, 2006

JTable

*This is an editable JTextArea. A text area is a "plain" text component, which means that although it can display text in any font, all of the text is in the same font.*

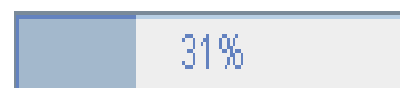
JTextArea



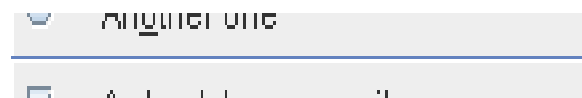
JTree



JLabel



JProgressBar

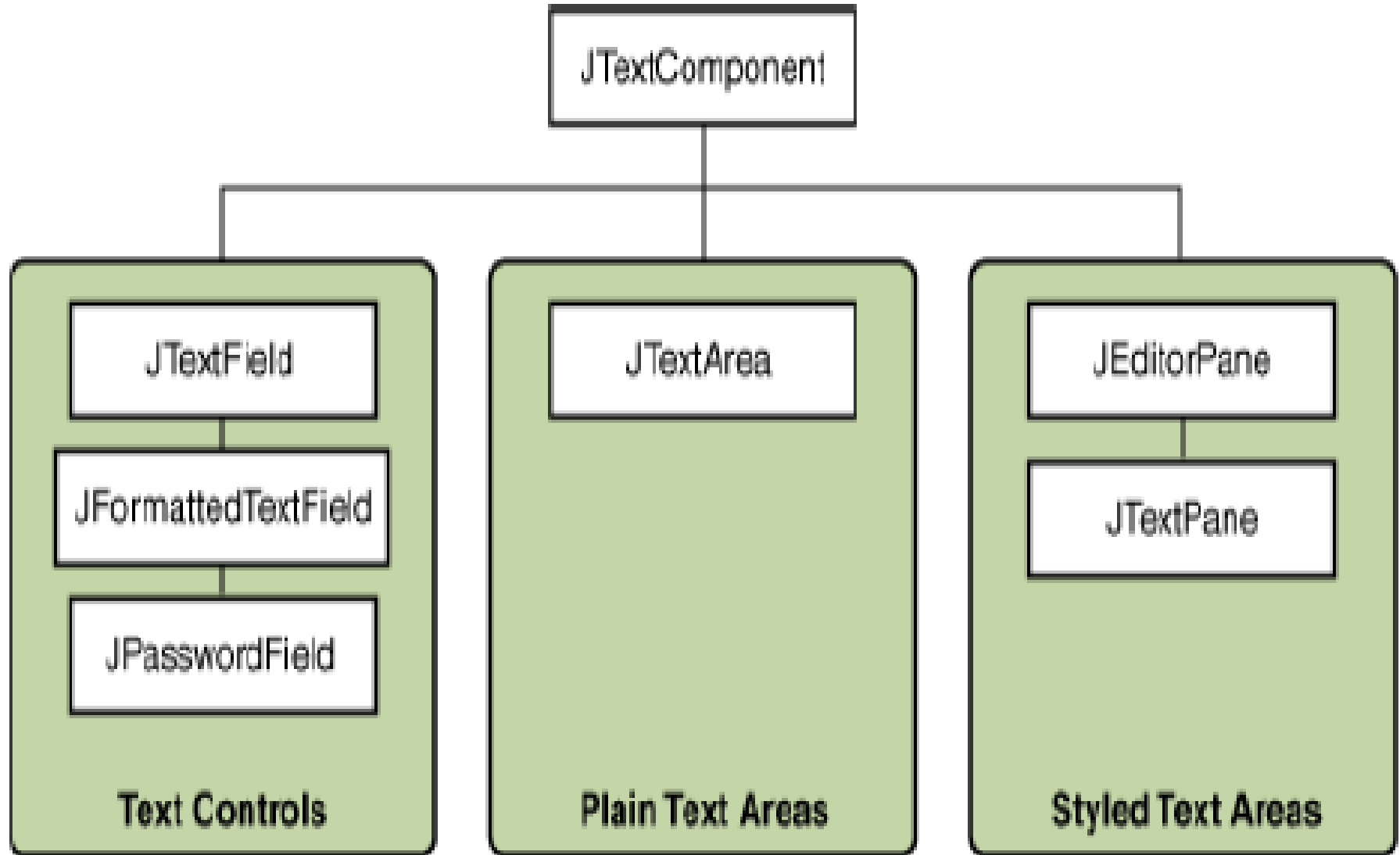


JSeparator



JToolTip

# JTextComponent





# TextSamplerDemo



## Text Fields

JTextField: Hello

JPasswordField: •••••

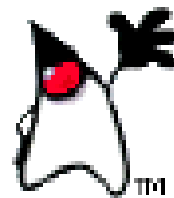
JFormattedTextField: Feb 20, 2007

You typed "hola"

## Plain Text

*This is an editable JTextArea. A text area is a "plain" text component, which means that although it can display text in any font, all of the text is in the same font.*

## Styled Text



This is an uneditable JEditorPane, which was *initialized* with **HTML** text from a **URL**.

An editor pane uses specialized editor

This is an editable JTextPane, another **styled** text component, which supports embedded components...



...and embedded icons...



# JButton

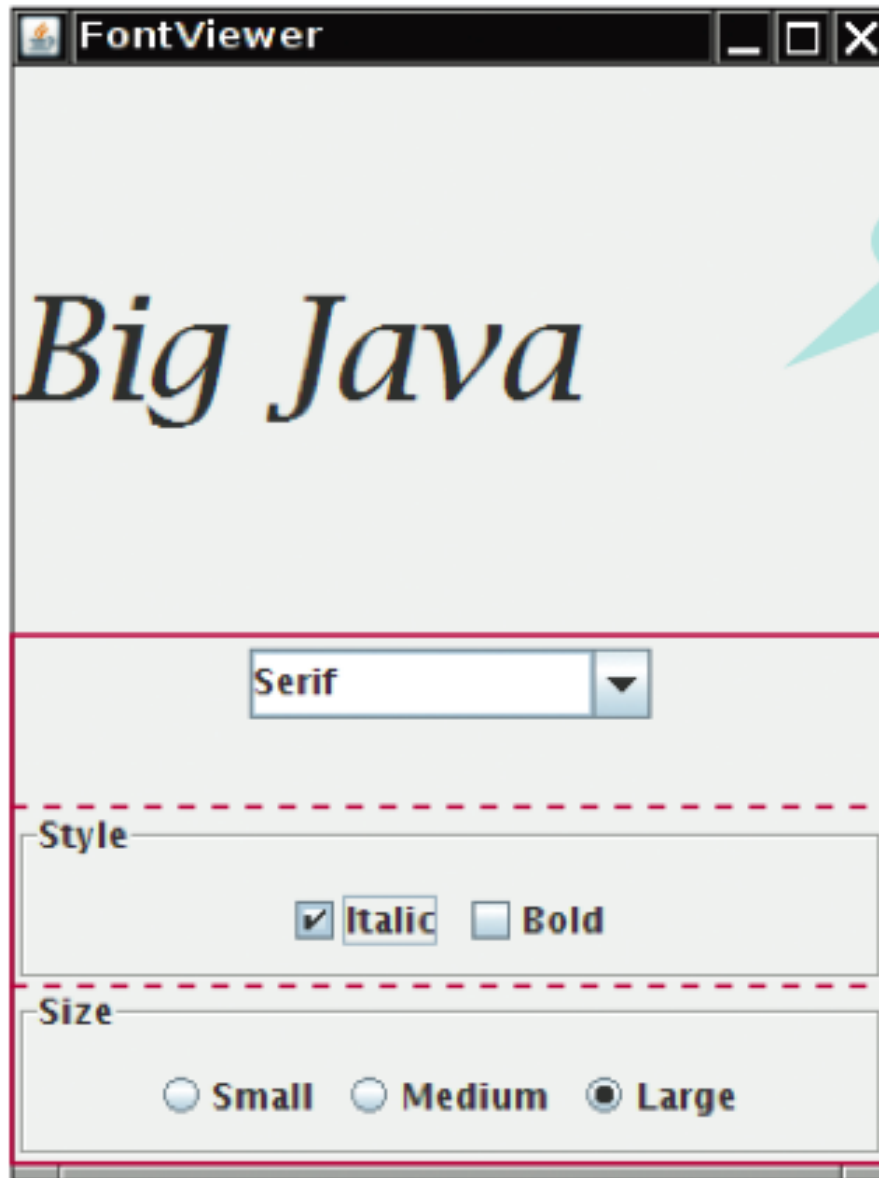
```
public class ButtonBeraksi extends JFrame {  
    JButton load = new JButton("Load");  
    JButton save = new JButton("Save");  
    public ButtonBeraksi() {  
        super("Button Beraksi");  
        setSize(140, 170);  
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        JPanel pane = new JPanel();  
        pane.add(load);  
        pane.add(save);  
        add(pane);  
        setVisible(true);  
    }  
    public static void main(String[] arguments) {  
        ButtonBeraksi button = new ButtonBera  
    }
```



# Choice with ComboBox, CheckBox, RadioButton



# Choice with ComboBox, CheckBox, RadioButton



JLabel  
in CENTER position

JPanel  
with GridLayout  
in SOUTH position