# DSAMINOR PROJECT

JAVA SWING



#### JAVA SWING

Java Swing is a part of Java Foundation Classes (JFC) that is used to create window-based applications. It is built on the top of AWT (Abstract Windowing Toolkit) API and entirely written in java. Unlike AWT, Java Swing provides platform-independent and lightweight components.

The javax.swing package provides classes for java swing API such as JButton, JTextField, JTextArea, JRadioButton, JCheckbox, JMenu, JColorChooser etc.

#### GUI

A graphical user interface (GUI) is an interface through which a user interacts with electronic devices such as computers and smartphones through the use of icons, menus and other visual indicators or representations (graphics). GUIs graphically display information and related user controls, unlike textbased interfaces, where data and commands are strictly in text. GUI representations are manipulated by a pointing device such as a mouse, trackball, stylus, or by a finger on a touch screen.

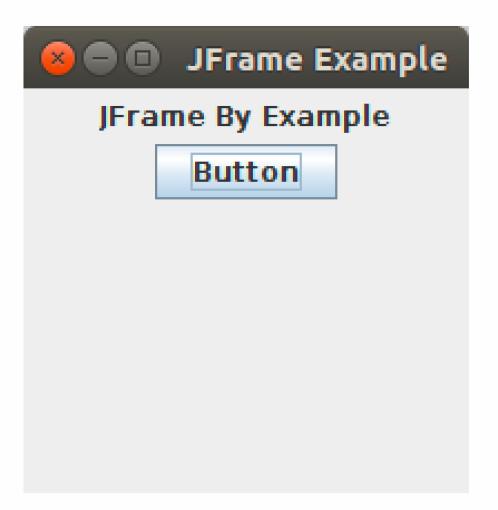
# Components in JFC

- Button class
- JTextArea class
- JColorChooser class
- Jlayout
- JFrame
- JFileChooser
- many more...

### JFrame

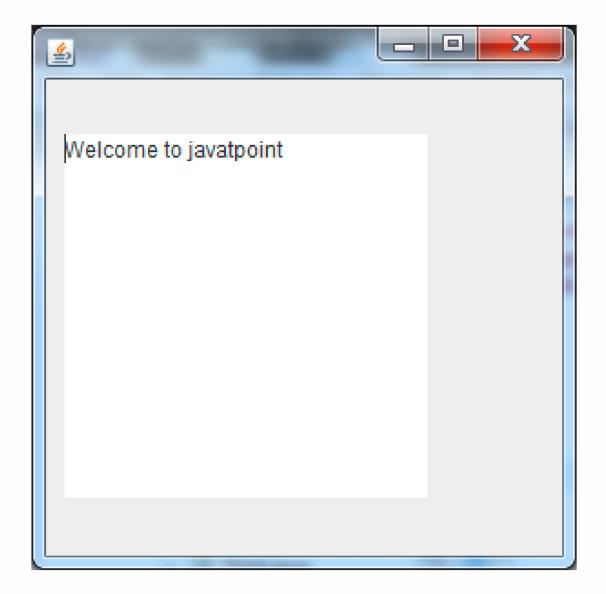
JFrame works like the main window where components like labels, buttons, textfields are added to create a GUI.

Unlike Frame, JFrame has the option to hide or close the window with the help of setDefaultCloseOperation(int) method.



#### JTextArea

The object of a JTextArea class is a multi line region that displays text. It allows the editing of multiple line text. It inherits JTextComponent class

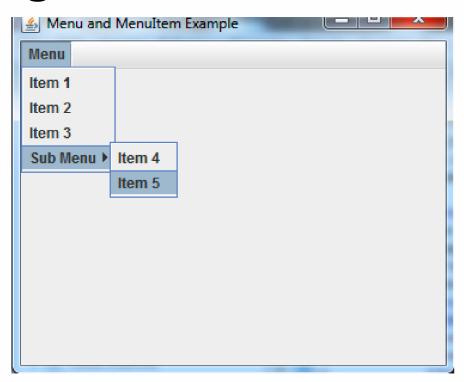


## JMenu/JMenuBar/JMenuItem

The **JMenuBar** class is used to display menubar on the window or frame. It may have several menus.

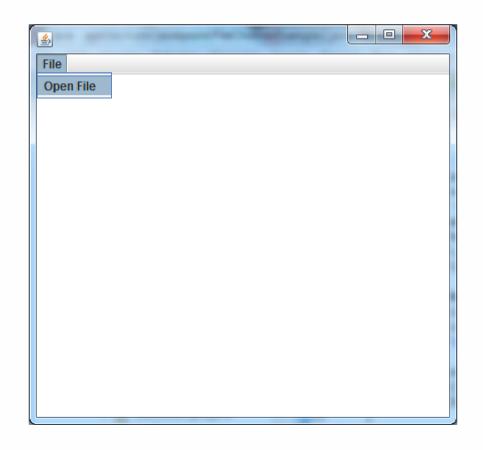
The object of **JMenu** class is a pull down menu component which is displayed from the menu bar. It inherits the JMenuItem class.

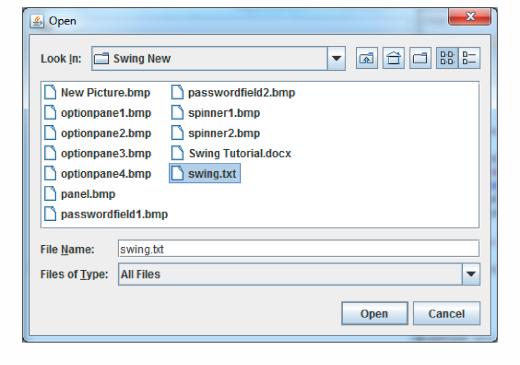
The object of **JMenuItem** class adds a simple labeled menu item. The items used in a menu must belong to the JMenuItem or any of its subclass.



#### JFileChooser

The object of **JFileChooser** class represents a dialog window from which the user can select file. It inherits JComponent class.





```
_ 0 X
import javax.swing.*;
public class CheckBoxExample
                CheckBoxExample(){
                JFrame f= new JFrame("CheckBox Example");
                 JCheckBox checkBox1 = new JCheckBox("C++");
                 checkBox1.setBounds(100,100, 50,50);
                 JCheckBox checkBox2 = new JCheckBox("Java", true);
                 checkBox2.setBounds(100,150, 50,50);
                 f.add(checkBox1);
                 f.add(checkBox2);
                 f.setSize(400,400);
                 f.setLayout(null);
                 f.setVisible(true);
public static void main(String args[])
  new CheckBoxExample();
```

#### ActionListener

The Java ActionListener is notified whenever you click on the button or menu item. It is notified against ActionEvent. The ActionListener interface is found in java.awt.event package. It has only one method: actionPerformed().