

Graphical User Interface (GUI)

"Overview, Java Swings, JAVA FX GUI"
Advanced in Programming

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Agenda

- 1 Overview
- 2 Look and Feel
- 3 Simple GUI demo
- 4 Fundamental Swing GUI components
- 5 Questions and Discussion



Graphical User Interface (GUI)

- provides convenient way for interacting with an application
- a distinctive *look and feel*
- built from *GUI components* called *controls* or *widgets*
- GUI components are object with which user interacts with via mouse, keyboard, or another form of input such as touch and voice
- Swing GUI's components and latest API for GUI, graphics and multimedia the JavaFX



Java's look and feels

- GUI's consists of
 - **look** is its visual aspect, such as color, font, and size etc
 - **feel** components we use to interact with GUI, such as button and menu
- Swing has a cross-platform lookandfeel called *Nimbus*
- To set it as default for all applications, create a file named **swing.properties** both in *JDK* and *JRE lib* folder and put following line in it
`swing.defaultlaf=com.sun.java.swing.plaf.nimbus.NimbusLookAndFeel`



Simple GUI Example

- A simple GUI-Based Input/Output via JOptionPane



- Some fundamental Swing GUI components

Component	Description
JLabel	Displays <i>uneditable text</i> and/or icons.
TextField	Typically <i>receives input</i> from the user.
Button	Triggers an event when clicked with the mouse.
CheckBox	Specifies an option that can be <i>selected</i> or <i>not selected</i> .
ComboBox	A <i>drop-down list of items</i> from which the user can make a <i>selection</i> .
List	A <i>list of items</i> from which the user can make a <i>selection</i> by <i>clicking on any one</i> of them. <i>Multiple</i> elements <i>can</i> be selected.
Panel	An area in which <i>components</i> can be <i>placed</i> and <i>organized</i> .

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¹Some basic Swing GUI components [1] Page 479

Your Turn: Time to hear from you!



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²<https://fensafitters.files.wordpress.com/2013/07/3d095.jpg>

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