Lesson 6: Graphical User Interfaces

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Purpose of this lesson: To implement a graphical user interface and to familiarize you with how to use its components.

Task 1: develop a user interface that looks like the one below when we launch it.



A grid layout subdivides the GUI into three rows.

The text field on top allows us to type in text. The text field at the bottom is initially not enabled and not editable.

The central slot is subdivided into two sectors (grid layout and JPanels).

The left sector has two buttons. The left button displays the text "Copy text". The right button displays "On" when the GUI starts up. All text is written in "Serif", italic and font size 25. The right sector has two radio buttons. Only the "Copy full text" radio button should be selected when you start the GUI.

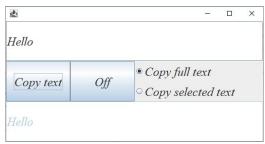
Task 2: implement the actionPerformed method.



If you press the button initially labelled "On", the bottom text field should become enabled but not editable. The button should change its text to "Off". If you press the button again, the text field should become disabled again and the text should be replaced by "On". The text thus says if a click switches the text field on or off.



Only one radio button should be clicked at any time. If you press the radio button denoted as "Copy selected text", the other radio button should be unselected and vice versa.



The upper text field accepts text. If "Copy full text" is selected and the second button displays "Off", the full text should be copied from the upper to the lower text field.

If "Copy selected text" is chosen, only the text selected by the mouse cursor should be copied.



If you click the button "Off" the bottom text field should be disabled and the button text should change to "On".