

HW # 16

The goal of this assignment is to gain experience with creating and using buttons as well as formatting text in an array of text boxes using Swing components.

Definition of required function:

Using Swing functions, create a program that has two display frames, one with 4 buttons in it and one with 4 text boxes. The button frame is to have a 2 x 2 grid of buttons with text Button1, Button2, etc. (or abbreviated Btn1 etc if you wish). The text frame is to have a 2 x 2 grid of text boxes. The initial text to be displayed in the center of each text box is OFF.

Implement logic to do the following.

When a button is “pressed” (i.e. clicked):

- 1) change the text displayed in a matching text box from OFF to ON
- 2) disable the button that was pressed (further clicks on that box have no affect)

For this homework YOU MUST USE ONLY Swing functions defined in the textbook example programs listed below.

I suggest that you start by creating only two buttons and two cells in the text frame. Once that works adding more should be straight forward.

Notes

On the class web page are two code examples, *buttons-with-icons* and *text-array*, that help with this assignment. Study them. The first shows the creation of buttons that can have icons and that change appearance when clicked. The second example shows creation of an array of text boxes using the grid manager. The technique of creating a grid of text box objects can also be used to create an array of buttons.

While the example button code has statements that load graphical icons, no icons are required for this assignment. If no icons are found then default button graphics will be used (that is ok for this assignment). No error or warning will be displayed when no icon files are found.

Here is the general layout of the two frames:

