

Exercise 8:

Summary: Implement a graphical user interface that allows you to vary the RGB components of a text either by pressing + or - buttons or by typing in the RGB value into the text field and pressing return.

Task 1: (5 points): Figure 1 (left) shows the GUI when you launch the program. Implement a GUI that looks like that. Use JPanels for all components of the GUI that don't require input.

Task 2: (5 points): Pressing the buttons in the columns labeled Red, Green and Blue should change the RGB value in steps of 15. Pressing - should decrease it by 5 and + should increase it by 15. Figure 1 (right) shows it after you pressed the red - once. You should also be able to write the RGB value directly into the text field. All text should have plain sans serif font with the size 20. If one of the RGB values goes above 255 when you press a button, then you should subtract 255 from it. If the value goes below 0 you should add 255 to it. If you type in a value outside 0-255 into the text field or if you typed in a non-integer value then your input should be ignored.

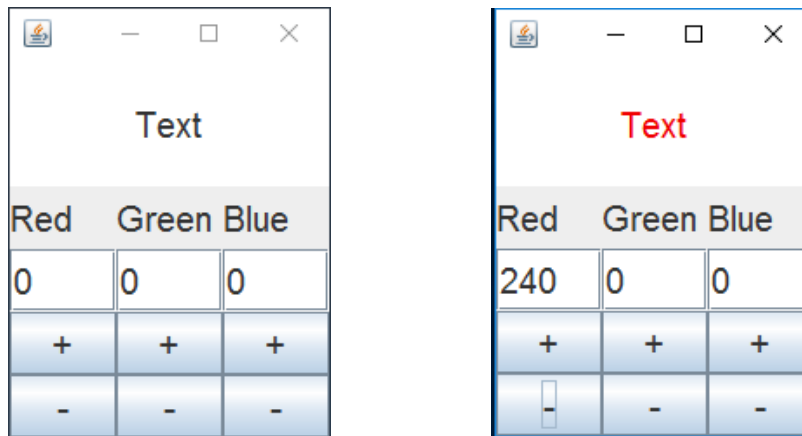


Figure 1: The GUI when you launch the code (left) and after you have changed the color by pressing the red + or - buttons (right).