

<b>CS 212 – Spring 2020 – Project 4</b>
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Assigned: 23 April 2020  
Due: 8 May 2020  
Cutoff: 13 May 2020 (midnight; no exceptions)

### **Use a TreeMap to Sort the Clocks**

The project should work the same as project 3, opening a chosen file and displaying the unsorted clocks on the left and the sorted clocks on the right. For this project do not use a sorted linked list to sort the clocks, but rather use a TreeMap (adapt the code from the PowerPoint on Maps).

### **Create an Edit Menu in your GUI**

Add a second menu to the GUI called *Edit* which will have one menu item called *Search*. Clicking on search should prompt the user using a JOptionPane input dialog to enter hours for a clock. Your program should check that the hours are between 0 and 23, and that the value entered is an integer.

The GUI should then display only clocks with hours at or below the given value. You will need to write a second menu handler called *EditMenuHandler*.

Create a jar file called **Project4.jar** containing the **source** code for all the necessary classes and submit that to Blackboard by the due date for full credit.