

Lab 7

- Implement the PriorityQueue class as explained in the lecture sessions
- Use your implementation of the PriorityQueue to create a clinic registration system that works according to the following requirements
 - The value of the reservation entry is the name of the patient
 - Regular reservations are prioritized based on the time they were made so the key for a regular reservation is set to a number that represents the time (e.g. using the getTime() function of the [java.util.Date](#))
 - Emergency reservations are priorities based on the level of distress which is represented by a number between 1 and 10 with 1 being the most distressed and 10 being the least distressed.
 - Test your system by allowing the user to make reservations based on the following input
 - Patient 1- name: Alice – reservation: regular
 - Patient 2- name: Bob – reservation: emergency – level: 3
 - Patient 3- name: Cat – reservation: regular
 - Patient 4- name: Dan – reservation: regular
 - Patient 5- name: Eric – reservation: emergency – level: 1
 - Simulate calling the patients for their appointments by printing their names and removing them from the list, the names should appear in the following order:
 - Eric
 - Bob
 - Alice
 - Cat
 - Dan
- Keep an eye on the description of the assignment as we might updated with answers to FAQ.

Submission Instructions

- Compress the entire NetBeans project and submit it to the assignment on OWL.
 - or submit your Java files if you're using another IDE
- Late submissions will be accepted for up to 3 days late with 10% late penalty for each day.
- You are expected to work on this assignment as an individual. Any violation to academic integrity will result in a zero mark.
 - I understand that some students find a sort of unhealthy fulfillment in cheating the system, but you'd find much better fulfillment if instead you put your energy into building real competence that will help you get a good job with high payment.

How is the lab conducted?

- The lab assignment will be posted on Friday and will be due on the next Friday (24hrs after the last lab)

- If you have any question
 - Imagine you'd win 1000\$ if you figured it out on your own and try it first (you'd actually win much more since it's a skill that you'd need throughout your career)
 - If you couldn't figure it out and you're ready to lose the 1000\$
 - Join the Zoom meeting of your lab (only the one you registered for)
 - Raise your hand and wait for the TA to take your question
- It's better for you to work on it and submit it during your allocated lab time (or 24hrs after), because you have other things to do, and last-minute questions are not likely to be addressed