F27SB Software Development 2

File I/O Coursework

Create a file writing class

Create a new class that writes to the included txt file. Use a BufferedWriter to write the following text to the file:

What took you so long?
Well, you know, Master, I couldn't find a speeder that I really liked...
There he is.
...with an open cockpit and the right speed capabilities.
If you spent as much time practicing your saber techniques as you did your wit, you'd rival Master Yoda as a swordsman.
I thought I already did.
Only in your mind, my very young apprentice.

Make sure that all the line breaks are correct.
Hint: You can access the file via its relative path by just stating its name: `conversation.txt`. No need to have the complete path to the file.

(Successfully writing the file: 1P)

Create a file reading class

Create a new class that reads the `conversation.txt` line by line and prints it to the console. In this class you should implement two different methods to read the file:

1. Implement a method using a Scanner that reads the file.
   (Successfully printing file content to Console: 1P)
2. Implement a method that uses a BufferedReader to read the file.
   (Successfully printing file content to Console: 1P)

Finally, alter the second method that reads the file line by line using a BufferedReader. After printing the first two lines, make your programme wait for the user to press enter before printing the next two lines. Continue this until all the lines are printed. Once the end of the file is reached, the programme should terminate so that when the user presses enter again, nothing bad happens.
Hint: You can use a Scanner which reads from the system input stream like this `Scanner s = new Scanner(System.in);` to wait for user input.
(Successfully printing file content to Console: 1P)

Marking

In each coursework, you can achieve a total of 4 points. Each question awards different amounts of points for different parts of the question. Partial completion of a task will award the partial points listed underneath. Most descriptors of points are self-explanatory in context of the task. Where further clarification is needed, you can find that below.

Your work will be checked by a lab helper during your assigned lab slot. Once all tasks are checked, the points will be used to calculate your marks. Please, understand that the lab helpers are not marking your work but are checking the completion of subtasks. As part of this check, you will need to explain how you solved the given task. **Only successfully completed sub-tasks will award points.**

The marks will be released on Canvas after the marking deadline has passed. This is not an automatic process so please, be patient. Once the marks are released, you will be notified via Canvas. Please, **make sure to check your marks as soon as possible**. If there are any issues, please contact your teaching team immediately.

Collusion and Plagiarism

As mentioned above, you will need to explain your work during the demo session in the lab. If you are not able to explain how you arrived at the solution to the task, we need to assume that you did not do the work yourself. We do, however, know that you might be anxious or nervous during the session. Please, rest assured that this is not an interrogation and you can take all the time you need to explain your solution.

If there is reasonable doubt that you solved the given problems yourself, you will not get any points for this task. If there are concrete indications that you copied your answer or colluded with other students, we might also start an official investigation.

Please, make sure to fill and sign the Declaration of Student Authorship form for each coursework and upload it to Canvas. If you do not upload the form, we will not be able to give you any marks for this coursework.

If you feel unjustly accused of plagiarism or collusion, please contact your teaching team.

Coursework submission

Unless stated otherwise, all code parts of your work need to be committed and pushed to your GitLab fork. You need to upload the Declaration of Student Authorship to Canvas, and you need to present your solution to a lab helper. If you fail to do any one of these steps, you will not be awarded any marks.

The deadline for submission can be seen on Canvas. You will need to **present your work to a lab helper any time before the deadline during your allocated lab slot**. If you do not manage to present your work before the deadline, you can do so at the first lab after the deadline but will incur a 30% late penalty. If this late submission was caused by issues out with your control, you can apply for mitigating circumstances to have this late penalty removed.

If you also fail to present your work at the lab following the deadline, we will not be able to give you any marks for your work. Similarly, if this was caused by circumstances out with your control, you should apply for Mitigating Circumstances.
Please, note that we are not allowed to give individual extensions. If you cannot submit your work on time, you will need to apply for Mitigating Circumstances.