Create a core-JAVA component for logging.

Logger should be able to queue the logs which are being logged by the user, so that input/output operations on log should not consume waiting-time for ongoing code-execution.

- Input/output operations must be handled by a different dedicated thread.

- Logging order should be maintained for the queued logs.

- Log should be inserted into a flat file, with date as filename and txt extension. When the date changes, logging should continue with the newly created file with name as updated date.

- Buffer for log queue can increase as much as it may require.

- Parameters for a log are,

       1. Log time (time of user logging, not insertion if both are different)

       2. Severity level

       3. Log message

Validation of solution will be done based on

- optimality of the data structures being used and its usage.

- optimality of thread handling.

- code structuring and packaging.

- coding standards.

Solution must be a core-java project.

Solution must be shared as a zip file of the project.

Usage of 3rd party components outside JDK is prohibited.

The name of the class with "public static void main" must be shared alongside the solution.

The log component as well as test-class must be part of the solution too. Logger component can be part of the same project with which we are testing the logger (NO need to integrate component via jar or anything).

An error-free and ready-to-run solution is expected as a solution.

A basic write-up/documentation is also expected regarding the technicality of the solution.

You can reach Karthik via phone at 9037191009. Please do call for only 'genuine' clarification regarding the problem.