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CSC 402 - Advanced Programming Languages

Homework#4 – Hospital App utilizing I/O, Error Exception Handling, STL template and more

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**Report**

Console Run Test

When the app started, it will start in debug mode so everything will be displayed to the console. The result of the console test run is attached as “Test Run – Console Report.pdf”. The file is zipped together with this repot file and the source code in a zipped folder named “wieliesie-hw2”.

The summary of the testing in DEBUG mode are :

• As a nurse, I want to add a patient to the system.

Tested - Nurse can add multiple patients to the system.

• As a doctor, I want to treat a patient in triaged order.

Tested - Doctor can treat patient based on their priority – smaller priority number = higher priority.

Tested - The highest priority will be on the top of the priority queue called “triaged List”.

A patient will be treated for a random 1 to 3 seconds before being moved into treated list.

• As a doctor, I want to print out a patient’s information as a report.

Tested and it is displaying all patient’s information (from the triaged list and the treated list).

• As a doctor, I want to print out a report of all treated patients.

Tested and it is displaying all treated patient’s information.

• As a doctor, I want to know the next patient to be treated.

Tested and it is displaying the first patient’s information that has the highest priority from a triaged list.

• As a hospital admin, I want to print out a report of all the patients in triage.

Tested, all patients from triaged list are being displayed.

• As a hospital admin, I want a single command to treat all patients.

Tested, all patients will be treated (takes somewhere between 1 to 3 seconds randomly)

• As a hospital admin, I want a print out of all patients by doctor.

Tested, user will have to enter doctor name and all patients under that doctor will be displayed.

• As any user, I want to be able to print out a guide on each command the system offers. (eg "help" functionality).

Tested, any user will be able to enter “help” or “quit” anytime when it is being prompted to enter a string input.

• As a sys admin, I want to bulk add patients into the system from a file (see patients.txt)

Tested, all patients are entered into a triaged list based on their priorities.

* As a sys admin, I want some way to turn on debug mode.

Tested, system admin will be able to switch into debug mode by selecting “debug” menu option.

• As a sys admin, I want all operations of the system by each user to be logged to the console in debug mode.

Tested, outputs will be displayed into the console when debug mode is active.

The summary of the testing in NORMAL mode are :

• As a sys admin, I want all operations of the system by each user to be logged to a file in normal mode.

Tested, system admin can switch the program into normal mode by selected “normal” menu option.

Tested, on normal mode, the system activities will be logged into log.txt file (part of the source code).

Menu options – when user selected “help” can still be displayed on console on purpose.