**Marking Guide**

**CPSC 441 – Assignment 1**

**Total Points = 100**

*We have to be able to* ***compile*** *and* ***run*** *your code using Java command line tools (i.e., javac and java) with default options (as installed on CPSC Linux machines). Otherwise, you will receive a mark of 0 regardless of the actual implementation and the amount of code submitted.*

**General features:**

1. Service code is sent to the server correctly.
2. Sending and receiving operations are concurrent.
3. Read and write operations are implemented using a buffer.
4. Streams and socket are closed properly.
5. Server name and port number are not hard coded.
6. Both text and binary files are processed correctly.

**General Requirements**

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| --- | --- | --- | --- |
|  | **Description** | **Penalty** |  |
| Program includes concepts or libraries that are not allowed | -50 |
| Method signatures do not conform to the specification | -50 |
| Submission instructions have not been followed | -20 |
| Program does not have proper code structure and comments | -10 |
|  | |  | |

**Design Requirements**

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| --- | --- | --- | --- |
|  | **Description** | **Penalty** |  |
| Serial Read and Write operations (as opposed to concurrent IO) | -50 |
| Byte-by-Byte Read and Write operations (as opposed to block IO) | -20 |
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**Comments:**

You are not shutting down the output when you all the bytes are transferred. If you don’t do this the server has no idea if you are done with transferring the files therefor, none of the service codes are working.

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**Functionality**

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| --- | --- | --- | --- | --- |
| **Marks** | | **Description** | **Grade** | |
| **Typical Case:**    *Run the server remotely on a CPSC server. Run the client locally. Use a medium size binary file of a few 100 KBytes. Use the ECHO service.* | | | | |
| 60 | | 1. Expected outcome:   1. The client runs and transfer is completed quickly. 2. The server does not report any errors. 3. The output file is correct. 4. There is no stalling or exceptions. 5. Program terminates normally. | 40 | |
| 10 | | 2. Correct console output format   1. Correct format for R and W (5) 2. No extra output on console (5) | 10 | |
| **Special Cases:**    *Change the value of the parameters mentioned below. For others, use the default values.* | | | | |
| 10 | | 3. Effect of file size and type   1. A small text file of a few Bytes (5) 2. A large binary file of several MBytes (5) | 0 | |
| 10 | | 4. Error handling   1. Wrong server name (5) 2. Non-existent input file (5) | 10 | |
| 10 | | 5. Service codes   1. ZIP service works (5) 2. UNZIP service works (5) | 0 | |
|  |  | | |  |

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