CAB403 Assignment Marking Criteria

Student Name(s): _____

Student Number(s): _____

Total Marks: _____ /**100**

NOTE: Programs that do not compile on the Linux command line will receive a mark of zero (0). Submission must be implemented in the C programming language using BSD sockets on the Ubuntu Linux virtual machine which has been used in the weekly practicals and is available from Blackboard.

Programs which crash (or "segmentation fault") during testing of a criteria will receive zero (0) for the criteria, and any which depend on it. For example, a program which crashes on SUB <channelid> will not be able to receive marks for NEXT and LIVEFEED.

If you attempt Task 2 and/or 3, only one (1) server program is required to be submitted, incorporating all the functionality from the previous tasks.

FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

Task 1: (____/40)

Criteria	Marks
Server command line parameter – configurable port & default port	/2
Server exits gracefully upon receiving SIGNAL (ctrl + c)	/4
Client command line parameters	/2
Implementation of SUB <channelid>	/2
Implementation of CHANNELS	/4
Implementation of UNSUB <channelid>	/2
Implementation of SEND <channelid> <message>	/4
Implementation of BYE	/2
Implementation of NEXT <channelid> and NEXT	/6
Implementation of LIVEFEED <channelid> and LIVEFEED	/8
Description of data structures in the report	/4

Task 2: (_____/20)

Criteria	Marks
Multiprocess implementation	/10
Process synchronization	/6
Description of how the critical-section problem is handled in your report	/4

Task 3: (_____/20)

Criteria	Marks
Thread usage	/10
Thread synchronisation	/6
Description of how threads are created and managed in your report	/4

PROGRAM QUALITY

Marks: (_____/16)

Criteria	Marks
Program structure & readability	/4
Program performance	/4
Resource management	/4
Program reliability (e.g. run time errors, deadlocks)	/4

REPORT QUALITY

Marks: (_____/4)

Criteria	Marks
Statement of completeness	/2
Instructions on how to compile and run your program	/2

Comments:

NOTE: Allocation of marks depends on which tasks are attempted.

Task	Functional and Non-functional Requirements	Code Quality	Report Quality	Maximum Marks
Task 1 only	40	16	4	**60**
Task 1 and Task 2	60	16	4	**80**
Task 1 and Task 3	60	16	4	**80**
Task 1, Task2 and Task 3	80	16	4	**100**