

Data Communications and Networking

Internet Chat

Assignment 1

I. Assignment Description and Requirements

Students are required to write an **Internet Chat Program** by using Windows Socket Programming C++. The program should ensure that the users can chat concurrently on the Internet (i.e., User A can send encrypted messages to User B; and vice versa). The sample programs (namely, “server.cpp” and “client.cpp”) can be downloaded from the Web site. The illustration of the actual operations is as follows:

Step 1: User A establishes a TCP connection with User B.

Step 2: User A sends his/her user name to User B.

Step 3: User B accepts the request, and sends a confirmation to User A.

Step 4: After identity verification, User A and B start to exchange the messages. All the conversations should be recorded in a log file.

Step 6: To terminate the chat, both sides can use a command called “Bye” to terminate the communications.

II. Assignment Submission

- (1) This is a group assignment (with at most 3 members).
- (2) You are required to submit the source codes (in a single compressed file) to Dr. Ricky Hou by Email (“rickyhou@uic.edu.hk”) on or before the **22nd Nov 2016 (Tuesday, before 9:00am)**.
- (3) You are required to give a 10-minutes English presentation with demonstration on the **22nd or 24th Nov 2016**.