

## **Internet and World Wide Web**

### **Internet Secure Chat Assignment 2**

Posted on the 4<sup>th</sup> April 2019

#### **I. Assignment Description and Requirements**

Students are required to write an **Internet Secure Chat Program** by using Windows Socket Programming C++. The program should ensure that the users can chat securely 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 encrypted messages by using their predefined key(s). All the conversations (decrypted messages) should be recorded in a log file.

**Step 6:** To terminate the chat, both sides can use a predefined command to terminate the communications.

#### **II. Assignment Submission**

- (1) This is a group assignment (up to 2 people). Please send your group members to me by Email on or before the **11<sup>th</sup> April 2019**.
- (2) Students 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 **7<sup>th</sup> May 2019 (Thursday, before 9:00am)**.
- (3) Each group is required to give a 10-minutes English presentation with demonstration on the **7<sup>th</sup> and 9<sup>th</sup> May 2019**.