CSNB314 Lab Work

Lab 5: Two-way Chatting Program (30 marks)

Start from the program that you have studied in Lab 4.

Question 1

Modify the UDP programs (both client and server) so that the server can reply back to the client. Both the client and server would then take turn sending messages to each other. Demo your program to the lecturer and show your understanding by answering his questions.

[15 marks]

Question 2

Modify the TCP programs (both client and server) so that the server can reply back to the client. Both the client and server would then take turn sending messages to each other. Demo your program to the lecturer and show your understanding by answering his questions.

[15 marks]

Bonus Marks

The UDP and TCP programs that you have written in this lab can only work synchronously, which means you cannot send the next message unless the other side has replied the previous message (i.e. you need to take turn sending messages). Modify the program so that you can send and receive messages asynchronously, just like in any instant messaging application.
(Hint: You need to implement multi-threading)

[20 marks]