

CSC 435 Computer Networks, Spring 2019
Instructor: Dr. Natarajan Meghanathan
Project 1: Single User Chat Application

Due by: February 25th, 4 PM (submit in Canvas)

Max. 100 points

50 points for each of (i) and (ii)

Develop a simple chatting application using (i) Connection-oriented and (ii) Connectionless sockets. In each case, when the user presses the “Enter” key, whatever characters have been typed by the user until then are transferred to the other end. You can also assume that for every message entered from one end, a reply must come from the other end, before another message could be sent. In other words, more than one message cannot be sent from a side before receiving a response from the other side. For connectionless communication, assume the maximum number of characters that can be transferred in a message to be 1000. You may want to use the trim() method on received message String before printing it. The chat will be stopped by pressing Ctrl+C on both sides.

Where to run the programs: You could run on your personal computer, using the localhost option.

What to Submit:

(1) A **video file** (either one of these formats: .mp4, .wmv, .avi) that is generated by desktop recording your explanation of the working of your program for each question and the logic/approach you took to implement them. You should display the program for each question on the desktop and walkover the different sections of your code as well as explain the execution flow of the programs. You should also record demonstrating the working of your programs, as specified in the question.

Note that the contents of the desktop/programs captured through your video should be clearly readable.

Submit the video through Google Drive (using your JSU email address) and send the link via email to natarajan.meghanathan@jsums.edu

You could try using one of the **desktop recording software** (or anything of your choice):

CamStudio: <http://sourceforge.net/projects/camstudio/files/legacy/>

Debut: <http://www.nchsoftware.com/capture/index.html>

(2) A **report** featuring the code for each question and the screenshots of the sender/client and receiver/server screens showing at least three messages sent and received.

Submission:

(1) Video file shared (to: natarajan.meghanathan@jsums.edu) via Google Drive

(2) Hardcopy of the report, submit in class