

CECS 327 Intro to Networking and Distributed System
Socket Programming (100 points)

Assignment 3

Requirements: You are required to write an Echo Client and an Echo Server program. The echo client communicates with the echo server using UDP. The programs should fulfill the following requirements:

Client:

1. Prompts the user to input the IP address, port number of the server, and a message to be send to that server.
2. Sends the message to the server.
3. Displays whatever the server sends back by using the same socket.
4. Displays an error message if the IP address or port number were entered incorrectly

Server

1. Receives the data from the client.
2. Echoes it back to the client by using the same socket.

Note:

1. Java language should be used.
2. Do NOT hard code the server address and port number in your source code.
3. Your program should work under MS-DOS window.
4. Try to get your partner IP address and make your client send message to his/her server. Are you able to send the message? If no, why is that?
Support your answers with screenshots.

Deliverables:

1. Java source files for the client program and server program
2. An "Instructions for Users" CLEARLY describing how to compile and run your client and server program.

Marking Scheme:

1. Completeness (all required deliverables are included)
2. Correctness (the required items in the “requirements” section)
3. Documentation (descriptive in-line code comments)

Notes:

1. This is group assignment. One team member need to submit the solution on behalf of the team. However, both team members need to demo the work in the class. Failure to demo the assignment will make you loss points.
2. Assignment 3 is **due by 11/22/2020 @ 10:00 PM (Sunday)**. Late assignments are not accepted.
3. Lecture notes can be used as a starting point for the answers.