CS380 — Project 1

January 5, 2015

Due: Wednesday, January 14, 2015 (30 points)

Description

In this project, you will be implementing an echo server and client. Basically, the client will connect to the server and then the user can type in messages. These messages are transferred to the server which will then echo them back to the client. The client should then print the server's response.

When a client connects to the server, the server should locally print out the client's address. You can use the uploaded Client.java and Server.java programs as examples for how to implement this project.

For this project, create two programs named EchoServer.java and EchoClient.java respectively.

On the client side, you should have a prompt display for the user to enter text with the label Client> and another prompt that displays the server's responses with the label Server> . An example test run should look similar to this:

Server:

\$ java EchoServer
Client connected: 127.0.0.1
Client:
\$ java EchoClient
Client> Hi server
Server> Hi server
Client> Testing testing

Server> Testing testing

Client>

It is not necessary for your server to handle multiple simultaneous clients, although you can feel free to implement such a feature using threads. If you want, you can have your client program exit when a user enters a message like "exit", "quit", etc.

Submission

Submit two Java files: EchoServer.java and EchoClient.java to Blackboard. Do not submit any other files. You should not package your classes, just leave the package blank. Your client and server programs should hard-code the same port and the localhost address. Use a port larger than 1024.