

## Client/Server Exercise

Check out the project called Fall2012Week11Lab. For this exercise you will write two classes that will facilitate a “chat” session between two people.

The first class is **ChatServer**. This class will coordinate communication between two clients.

The second class will be **ChatClient**. Two ChatClients will talk to each other by first connecting to the server, and then sending messages directly to the server, which relays the messages to the other client. (The protocol for these transactions is illustrated in the chart below.)

If possible, try to get the server running on one machine, and then use two other machines to chat to each other via the server.

Hints:

- Don’t forget that there is a similar Client/Server example in the project called 132Spring13Lec24Examples.
- For BufferedWriters, be sure to call **flush** immediately after **println**.

To illustrate the desired protocol, the boxes below represent what might appear on the consoles when a Server and two Clients are communicating. (This shows the output that each of the three applications will generate).

Server	Client #1	Client #2
Waiting for first Client...	Connected. What is your name? <i>Fawzi</i>	
Waiting for second Client...		Connected. What is your name? <i>Nelson</i>
Got both clients.		
Fawzi: What r u doing?	What would you like to say to Nelson? <i>What r u doing?</i>	
Nelson: Watching TV.		Fawzi: What r u doing? <i>Watching TV.</i>
Fawzi: Anything good on?	Nelson: Watching TV. <i>Anything good on?</i>	
Nelson: Nope.		Fawzi: Anything good on? <i>Nope.</i>
Fawzi: Why not turn it off?	Nelson: Nope. <i>Why not turn it off?</i>	
Nelson: I don't know how.		Fawzi: Why not turn it off? <i>I don't know how.</i>
	Nelson: I don't know how.	