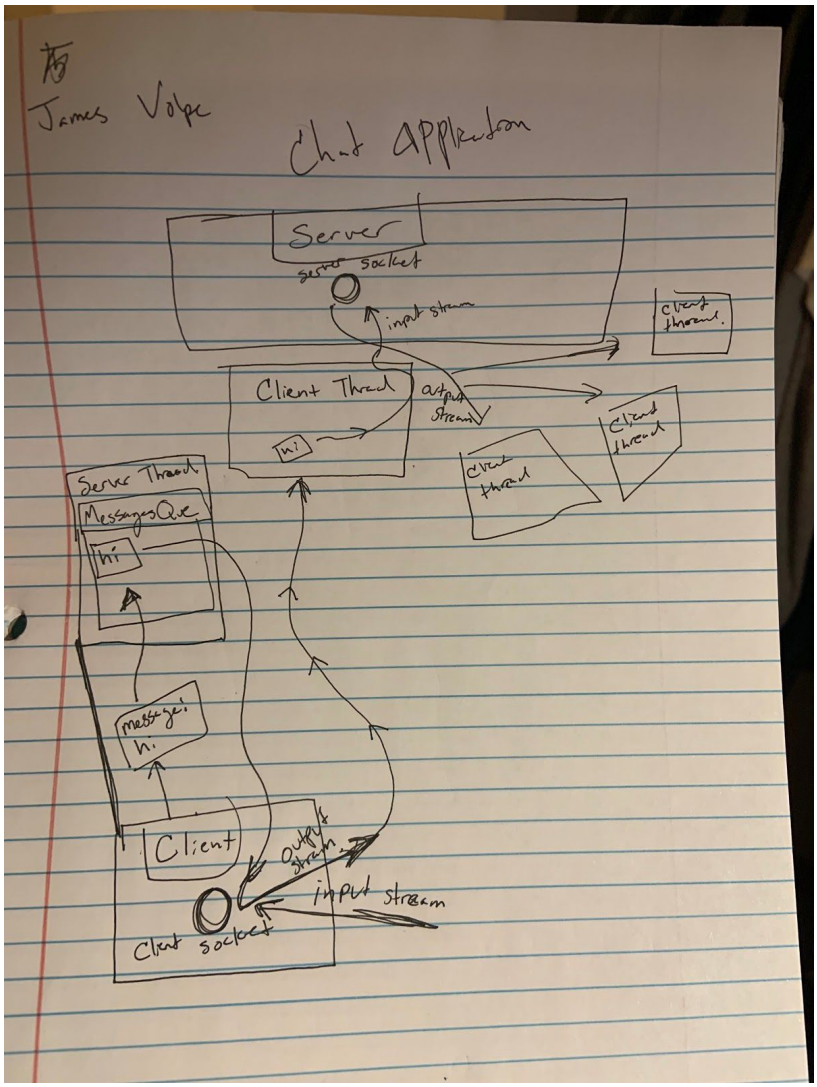
James Volpe
COM S 319
27 January 2019
Professor Jannesari

Chat Application Report

The approach I took for the assignment was moderately complex in my opinion. I've included a diagram of how my solution functions below.

Diagram

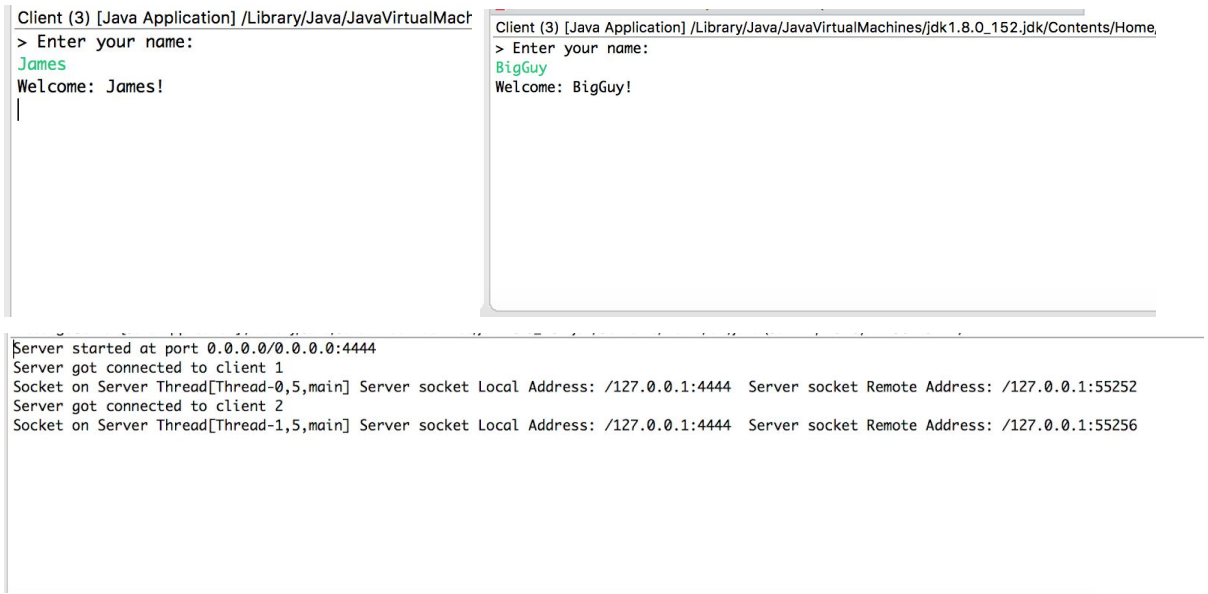


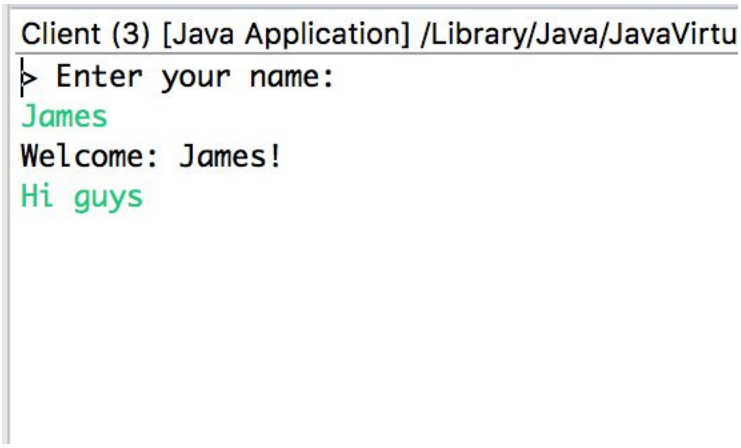
Description

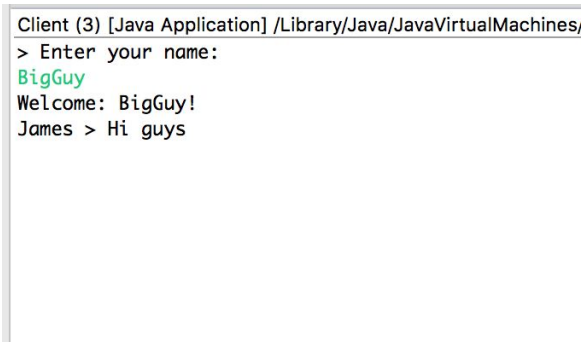
Each client creates a server thread when it connects to the server. This server thread contains a que of messages that the client types into their console. It is the server thread's job to take these messages, and using a PrintWriter, send them through the output stream of the client's socket. In addition, it is also the server thread's job to receive any messages coming in through the socket's input stream, and print them to the console of the client.

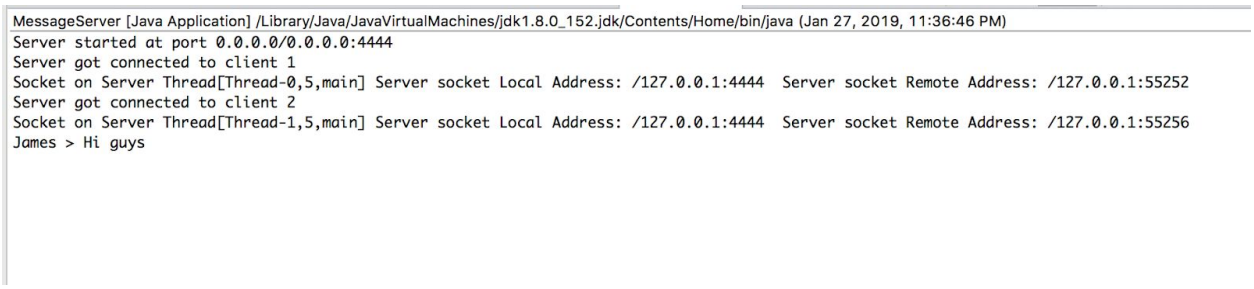
Each time a client connects to the server, a client thread is created. It is the client thread's job to receive messages coming through the input stream of the server's socket, print them to the server console, and then send them out (using a PrintWriter) to every client thread the server has.

Screenshots




Client (3) [Java Application] /Library/Java/JavaVirtu
> Enter your name:
James
Welcome: James!
Hi guys


Client (3) [Java Application] /Library/Java/JavaVirtualMachines/
> Enter your name:
BigGuy
Welcome: BigGuy!
James > Hi guys


MessageServer [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_152.jdk/Contents/Home/bin/java (Jan 27, 2019, 11:36:46 PM)
Server started at port 0.0.0.0/0.0.0.0:4444
Server got connected to client 1
Socket on Server Thread[Thread-0,5,main] Server socket Local Address: /127.0.0.1:4444 Server socket Remote Address: /127.0.0.1:55252
Server got connected to client 2
Socket on Server Thread[Thread-1,5,main] Server socket Local Address: /127.0.0.1:4444 Server socket Remote Address: /127.0.0.1:55256
James > Hi guys