

## CS376 – Programming Assignment – Quote Server

We will discuss Sockets next week. Before then, read section 3.8.1.

Using a \*nix environment, modify the DateClient and DateServer code, figures 3.27 and 3.28 to create a QuoteServer and QuoteClient. The server responds to the client's request for quotes.

### Server Requirements:

The quotes must be stored in a file and somehow accessed from the server, they may not be hardcoded into your program. The name of the quote file should be a command line argument to your server.

Some ways to accomplish this:

Your quotes can be stored in a file and read in on startup.

Your quotes can be stored in a file and randomly accessed from the file during run time.

### Client Requirements:

Your client must take as a command line argument how many quotes to retrieve.

### General Requirements:

Your code should be written in Java, however, if you want to do it in another language, you're welcome to do that. Code must adhere to the department style guide and run from command line. All work should be submitted via Canvas. You must provide me with complete compile and run instructions in comments at the top of your program, right after your name, date, etc... info. Submit a zip of your run environment. Use good Object Orientation.

### Analysis:

You must answer the following question in a separate pdf document submitted to Canvas with your code: What are the advantages and disadvantages of each of the ways of accessing the quote file. Give a thorough discussion in terms of runtime, space, and operating system resources. Given your discussion which is the best one to implement in the context of a small OS class environment? Which would be better in a large internet environment?

### EXTRA CREDIT

Show me that your server can accept requests from your client running on a different machine

Break your quotes into categories (ie Geek, Money, School, Food...) and allow the client to request specific quantities of quotes of different types. You'll have to modify the command line arguments to accommodate this configuration. A good idea would possibly be to have a file of the types of requests as a command line argument. Your file could look like this:

2 Food  
6 Humor  
10 Geek