

Iteration VIII - Group Project (Using sockets)

=====

Due: May 2nd, 11:59:59 pm

This iteration is the Group Project as discussed in the Overview that was dispensed at the beginning of the semester.

Groups

1. Groups must contain at least 2 people and at most 4 people. These groups may span both CS284 sections. Groups should e-mail, with the description of the group project, Brian the names of the members of the group.
2. Each project must be approved. Each group must present to Brian, in writing or by e-mail, a general description of what the group plans on implementing. Projects can be refused due to replication (i.e. there cannot be 10 FTP servers created).
3. Each group must present their projects outside of class. All Times can signed up for at Brian Sea's office door (CS339). The dates that are available for presentations are:
 - May 3, 5, 7 (almost all day)
 - May 6 (after 4 pm)

All members of the group must be present during their presentation. Every member should be prepared to orally answer questions about their project.

Project Specifications

1. All groups must implement a networked server with two or more clients.
2. Berkley sockets must be used. You may not use MPI or other IPC methods unless otherwise approved (MPI is NOT approved).
3. The server and client must, at a minimum, be able to transfer binary data. That is, the project cannot just be a basic chat server.
4. Examples of projects include (and you may use these):
 - A. FTP client (must have authentication)
 - B. IRC Client that does more than simple text (emoticons and transfers files)
 - C. Telnet client that allows the execution of remote applications (must include authentication).
 - D. Basic Card games (No two projects may implement the same game)

You may NOT implement a card game that was implemented last semester in Matt's class. These games include:

 - A. All variants of Poker
 - B. All variants of Spades or Hearts
 - C. Pitch
 - D. Any game with a ruleset similar to the above games
 - E. etc.

Grading

The Project is worth 100 points. Grade breakdown will be done as follows:

1. 30% Peer Review

Each member will complete a peer review of every member (including themselves). The average of these reviews will constitute the number of points you receive on this portion of the grade.

2. 40% Code

All code should be operational and in working order. Also, the code should be able to handle invalid user input properly.

Examples of penalties: Segmentation faults, accepting improper input, producing unexpected output, etc.

3. 20% Documentation/User Interface

All code should be well documented, and the user interface should be decent (i.e. I should be able to use your program without you telling me how).

Examples of penalties: Code lacks headers and comments, vague or improper directions on screen, confusing output, etc.

4. 10% Creativity/Oral Questions

Projects should involve at least a little thought. This gives the chance for groups to show a degree of creativity in their project.

Each member should also be prepared to answer oral questions about their project. Chances are that the more creative your project is, the less questions will be presented.