

Implemented features and details

All the required features are implemented. I also implemented a list command to view all the users connected to server, and a help command to view available commands. Because of the choice of using drand for RNG in the precode, which in most implementations (including the one on the ifi servers) generates very small numbers when unseeded in the first few calls, I chose to increase the amount of initial tries the client has to connect to the server from one to five. Otherwise both the client and server behave as specified.

Choice of datastructure

I chose a linked list as the datastructure used both in the server and the clients for the storage of different hosts to communicate with. The client also uses a queue of msgs for each host. Lists work well here because it is easy to implement and dynamically allocate more memory as we add or remove clients. Queues work especially well for messages well because we only care about whats in front of queue, and always add new messages to the end.