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CS331 - Computer Networks

11/23/2015

IRC Project Summary

For our project, we worked on the Internet Relay Chat protocol, as specified in RFC 1459, and sub-specified in RFCs 2810 through 2813 (Architecture, Channel Management, Client Protocol, and Server Protocol, respectively). This protocol operates at the application layer; it is itself an application to be used by regular people. The purpose of the protocol is to provide the structure for a robust chat system, with high level user and channel management available to administrators, channels being the equivalent of chat rooms for a given topic. With regards to our implementation, we used Python, version 3.4.1, to implement a client and a server with some channel management. Most of the complexity is on the server side; it is a fairly liberally accepting server, in accordance with the robustness principle. The server does basic password checking and supports simple channels and private messages. See the server instructions.txt file in the root directory of our project for instructions on running the server. In order to run the client, simply enter "python IRCclient.py", then enter, separated by spaces, the server address and port. Once this is done, commands may be entered in the GUI that appears. Note that once the connection is made, you must begin entering commands before the timeout value (that was set when starting the server) is reached. Although the currently-implemented commands follow the IRC specification, due to time/project size constraints, we were unable to implement modes and server-query commands. Please see readme.txt for a list of implemented commands as well as a description of each file.

Sources:

1. "Internet Relay Chat Protocol", https://tools.ietf.org/html/rfc1459

2. "Internet Relay Chat: Architecture", https://tools.ietf.org/html/rfc2810

3. "Internet Relay Chat: Channel Management", https://tools.ietf.org/html/rfc2811

4. "Internet Relay Chat: Client Protocol", https://tools.ietf.org/html/rfc2812

5. "Internet Relay Chat: Server Protocol", https://tools.ietf.org/html/rfc2813