

Design and Develop Chat Room Protocol

1.

Port number (NO HTTP, we use our own port number) 5555

Character Encoding (text) - TEXT (ASCII, UTF-8 [used by default])

2.

Identification: Handle/Username

When you join, create a username (command to specify a username).

Only use alphabetical characters for username and with maximum length of 20

3.

Request

- Join chat room
 - Join command: **JOIN username\n** (ex. JOIN dd\n)
 - include username
 - Server will send JOIN username\n to all clients except joining client
- Send message
 - Send command: **SEND username <message>\n** (ex. SEND dd Hi, how are you?\n)
 - character limit: 280
 - username and message
- Leave chatroom
 - Leave command: **LEAVE username\n** (ex. LEAVE dd\n)
 - Server will send LEAVE username\n to all clients except joining client

Server

→ array list clients: Buffered... writer

→ Vector message queue string (client A, client B, ...)

→ Broadcast Thread: needs reference to array list and vector, job to see if there is any message in the queue and write to clients