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**TCP**

* The client sends an integer of a 1 to the server indicating current version
  + Server receives the integer and closes the connection if it does not match.
* On success, server sends a prompt to the user to enter a username.
* Client sends the username by sending the length of a string, then an encoded string indicating username.
  + Server closes the connection if the username is a duplicate.
* On success, server sends a log following log structure.

After client is successfully connected

* The client will receive the log of the past 10 messages in the history of the server.
* Client sends the length of the string and then the encoded string of the message.
* Server receives the information, appends time and username, and sends an integer, followed by the length of the name, the bytestring for the name, the length of the time, the bytestring for the time, the length of the message, and the bytestring of the message.
* Client receives this information.

**UDP**

* On connection, a string composed of the number 1 plus the name is sent.
  + If any client finds their username is the same, they send a 9. New client receives this and quits because of it.
  + Client sends a string composed of a 2 with all messages in log appended, the messages in the message log are separated by the group separator character.
* On success, the client receives a message log of the 10 most recent messages.
* Clients should be sure to maintain a log of only 10 messages.
* Clients then can send messages, the messages are composed of a string containing the number 3 followed by the username, then the file separator character, then the message.
  + Other clients receive the message, format it with the time, and add it to the message log.

Log Structure:

* A length integer of how many messages are included, followed by another length integer, followed by the length of name, bytestring for name, length of time, bytestring for time, and length of message, bytestring for message, for all messages.