DMs Requirements

-> The user will be provided with a search bar to find other people who use the platform, using their username.

-> The search will be dynamic, matched results shall contain the prompt.

-> At most 20 concurent users can search for an username.

-> The user shall receive a list of usernames ordered alphabetically.

-> The user will be allowed to change between ascending or descending results from the search using a button.

-> The list will contain at most 10 users.

-> A message will appear if no users are found.

-> A user can block / unblock another use, making them disappear / reappear in the search results.

-> A user can invite a person from the search results to a dm.

-> A received invitation can be accepted or declined.

-> After an invite has been sent, a new window will open representing the chat box.

-> A user can host at most 5 chat boxes.

-> A server is automatically configured with the IP address of the person who initiated the invite, alongside a port.

-> The server will store the name of the founder.

-> The server will make the founder an initial admin.

-> Communications will use TCP.

-> The server will wait 3 minutes for a second client to join, otherwise will close itself and the chat box window.

-> Initially, the server allows 20 clients, but can be changed by the founder to a lower value.

-> An admin can make a user an admin.

-> An admin can kick / mute a user who is not an admin.

-> The founder can remove any admins, kick / mute all users.

-> Initial constraints still apply once the number of users reaches 1.

-> Founder closes all connections and the chat box on leave, after announcing the other users with a message.

-> The application shall allow the user to type messages into an input box.

-> The application shall also provide the user with a button to send his message.

-> A message cannot be empty.

-> Messages are encoded in ascii.

-> The window shall not keep track of previous messages.

-> Messages will be preceded by the username of the sender.

-> A message shall have at most 500 characters.

-> Messages are sent within 1 seconds on an internet connection with at least 5 Mbps.