#### FINAL PROJECT RETROSPECTIVE

Github Link:

## https://github.com/gnithink/chat-application/tree/master

## **Objective:**

Develop a chat application in C and in the process learn C programming.

### Features:

There will be a single server and many clients. All the clients join a channel named "Common" channel. The clients can communicate with all the other users in the channel.

- Create Channel:
  - Each client can create a new channel using the command "/join <channel name>"
- List of Channels:
  - Each client can see the list of created channels using the command "/list"
- List of Users:
  - Each client can see the list of users in a specific channel using the command "/who <channel name>"
- Switching between channels:
  - Each client can switch between the different different channels using the command "/switch <new channel name>"
- Leaving a channels:
  - Each client can leave a specific channel if he is a part of it using the command "/leav <channel name>"
- Exit the chat:
  - Each user can exit the chat application using the command "/exit".

# Usage:

- Open many terminal windows. One window is for the server and the remaining windows are for the number of clients.
- To initialize a server use the command : ./server <server name> <port number>
- To initialize a Client or user use the command: ./client localhost <server port number> <username or client name>

## Retrospective:

- Implementing socket programming initially was a steep learning curve.
- Once a simple two way communication was set up between server and client implementing each feature at a time was less challenging.
- Overall it was a meaningful learning experience and I am more confident in programming in C.