

Project Proposal: A multi-party chat client supporting groups of participants as well as file transfer.

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Project name: A multiparty chat client supporting groups of participants as well as file transfer

Goal of this project is to build a simple multi-party chat client, similar to whatsapp, where multiple clients are connected to single server which handles the communication between different clients.

Features

- 1) Clients can connect to any other client
- 2) Groups can be created where client can join the group and participate in the chat
- 3) In first type of group, the client who created the group will become Group Admin. He can add any client to the group. He can also remove any client from the group.
- 4) In second type of groups, any clients can be join the group. There is no group admin to this type of groups.
- 5) Every communication between clients happens through server.
- 6) Server lists all it the members connected.
- 7) Members of the group can be listed.
- 8) Members can transfer files to other members and also to groups.
- 9) Implement a parser for command line options or a configuration file that allows the user to fine-tune the behavior of the implementations.
- 10) Include logging support so the user can later on study how the service has been used. You can use, for example, the syslog facility for this purpose.

Implementation details Multi-client server model is implemented using select() and fork() functions. All the communication passes through server. Server uses TCP protocol.