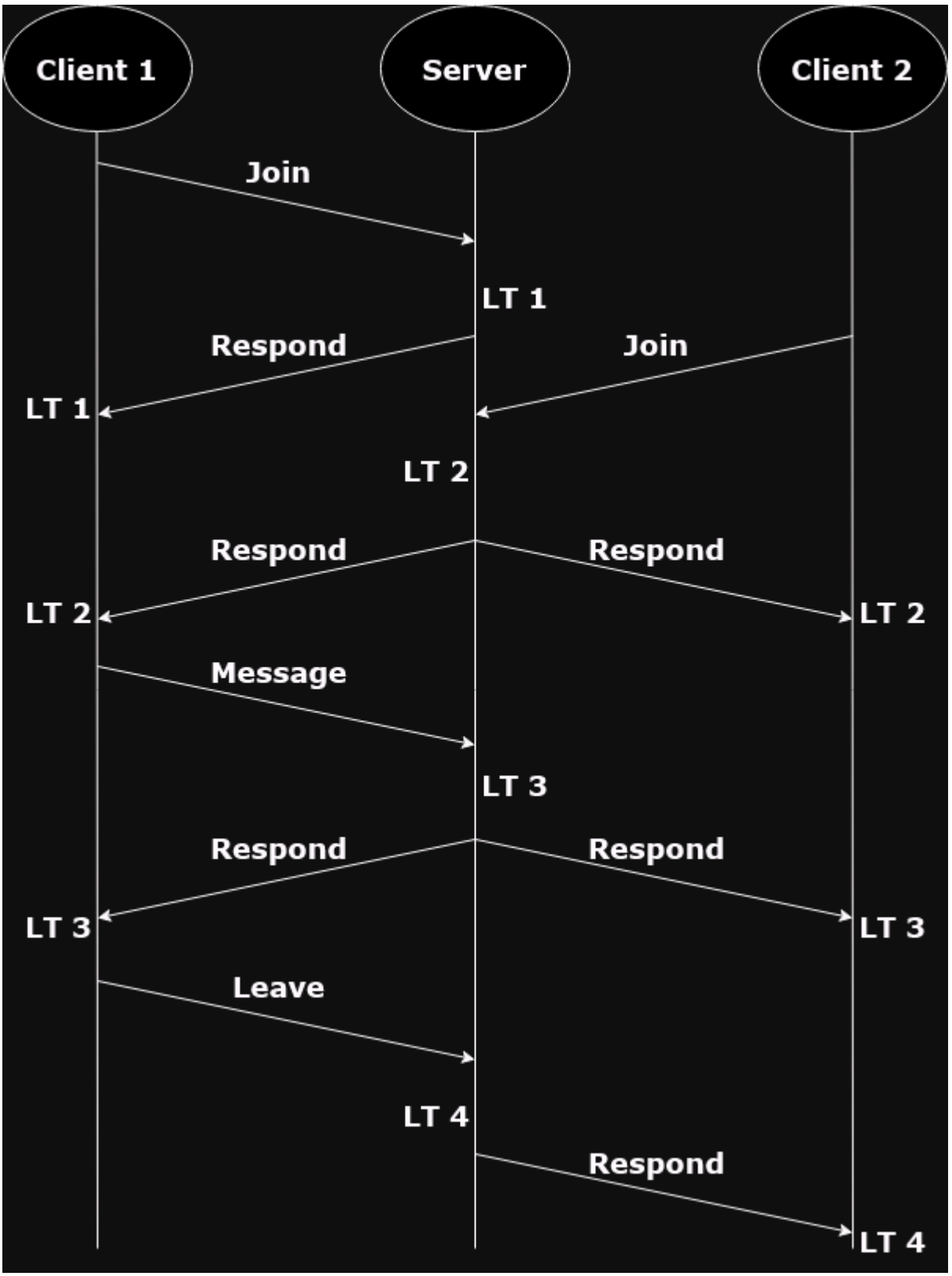
Github Link: https://github.com/StrippedSoma/Dis_Zyzz

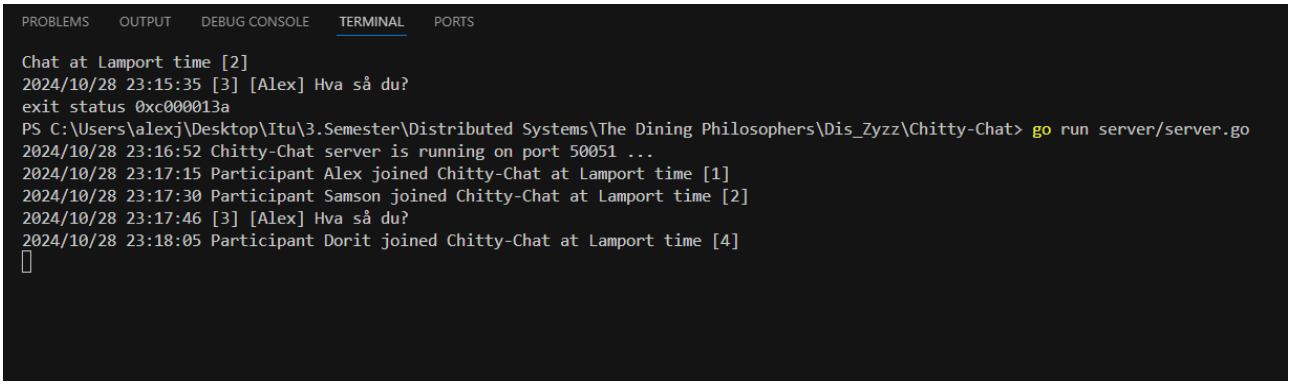
We have decided on using the server-side streaming because we thought it would be sensible for clients to just send messages to a host server, which in turn then could send the message out to every individual client.

The architecture we have is a server-client architecture that connects multiple clients to a single server. This way we can continually add more clients, ensuring that each of them are connected to one another through the server.

We are using a publish request as our RPC.

The way we calculate our Lamport timestamps are from the server. We increment the Lamport clock each time a user does an action. That would be joining, leaving or sending a message. We use locks in the increments to ensure that the clients wouldn't fall into a race condition.


Client 1
Server
Client 2
Join
LT 1
Respond
Join
LT 1
LT 2
Respond
Respond
LT 2
LT 2
Message
LT 3
Respond
Respond
LT 3
LT 3
Leave
LT 4
Respond
LT 4


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
Chat at Lamport time [2]
2024/10/28 23:15:35 [3] [Alex] Hva så du?
exit status 0xc000013a
PS C:\Users\alexj\Desktop\Itu\3.Semester\Distributed Systems\The Dining Philosophers\Dis_Zyzz\Chitty-Chat> go run server/server.go
2024/10/28 23:16:52 Chitty-Chat server is running on port 50051 ...
2024/10/28 23:17:15 Participant Alex joined Chitty-Chat at Lamport time [1]
2024/10/28 23:17:30 Participant Samson joined Chitty-Chat at Lamport time [2]
2024/10/28 23:17:46 [3] [Alex] Hva så du?
2024/10/28 23:18:05 Participant Dorit joined Chitty-Chat at Lamport time [4]