

Log

Server Log:

2025/10/29 10:15:41 [Server] Chit Chat service running on :50052

2025/10/29 10:15:57 [Server] JOIN: Alex (ID=3300) at L=1

2025/10/29 10:16:02 [Server] Message from Alex

: Hello World! (L=2)

2025/10/29 10:16:11 [Server] JOIN: Aske (ID=4800) at L=3

2025/10/29 10:16:14 [Server] Message from Aske

: Hello Alex (L=4)

2025/10/29 10:16:31 [Server] Message from Alex

: I will try to type a really long message (L=5)

2025/10/29 10:16:50 [Server] Message from Aske

: I could not see the msg (L=7)

2025/10/29 10:16:59 [Server] Message from Aske

: Now I will leave the chat (L=8)

2025/10/29 10:17:14 [Server] JOIN: Bob (ID=9400) at L=9

2025/10/29 10:17:22 [Server] Message from Aske

: exitexit (L=10)

2025/10/29 10:17:27 [Server] REMOVED: Aske (ID=4800)

2025/10/29 10:17:41 [Server] Message from Bob

: Can I send a message now. (L=12)

2025/10/29 10:18:22 [Server] Message from Bob

: Oh, great. It seems to work now. (L=13)

2025/10/29 10:18:26 [Server] Message from Bob

: (L=14)

2025/10/29 10:18:46 [Server] Message from Alex

: What about now (L=15)

2025/10/29 10:18:46 [Server] Error sending to Bob: rpc error: code = Unavailable desc = transport is closing

2025/10/29 10:20:51 [Server] Message from Alex

: I am alone (L=16)

2025/10/29 10:21:04 [Server] Message from Alex

: goodbye (L=17)

2025/10/29 10:21:05 [Server] REMOVED: Alex (ID=3300)

Client 1 (Alex) Log:

Enter your name: Alex

2025/10/29 10:15:57 [Client Alex

] Sent JOIN

Alex

:

[Server @ L=1] Alex: Participant Alex joined Chit Chat at logical time L=1

Alex

: Hello World!

Alex

:

[Server @ L=2] Alex: Hello World!

Alex

:

[Server @ L=3] Aske: Participant Aske joined Chit Chat at logical time L=3

Alex

:

[Server @ L=4] Aske: Hello Alex

Alex

: I will try to type a really long message

Alex

:

[Server @ L=5] Alex: I will try to type a really long message

Alex

: In this assignment you will design and implement Chit Chat, a distributed chat service where participants can join, exchange messages, and leave the conversation at any time. Chit Chat is a lively playground for

exploring the essence of distributed systems: communication, coordination, and the ordering of events in a world without a single shared clock.

Alex

:

[Server @ L=6] Server: Message too long (354 chars). Limit is 128.

Alex

:

[Server @ L=7] Aske: I could not see the msg

Alex

:

[Server @ L=8] Aske: Now I will leave the chat

Alex

:

[Server @ L=9] Bob: Participant Bob joined Chit Chat at logical time L=9

Alex

:

[Server @ L=10] Aske: exitexit

Alex

:

[Server @ L=11] Aske: Participant Aske left Chit Chat at logical time L=11

Alex

:

[Server @ L=12] Bob: Can I send a message now.

Alex

:

[Server @ L=13] Bob: Oh, great. It seems to work now.

Alex

:

[Server @ L=14] Bob:

Alex

: What about now

Alex

:

[Server @ L=15] Alex: What about now

Alex

: I am alone

Alex

:

[Server @ L=16] Alex: I am alone

Alex

: goodbye

Alex

:

[Server @ L=17] Alex: goodbye

Alex

: exit

Leaving chat...

2025/10/29 10:21:05 [Client Alex

] Stream closed: rpc error: code = Unknown desc = EOF

Client 2 (Aske) Log:

Enter your name: Aske

2025/10/29 10:16:11 [Client Aske

] Sent JOIN

Aske

:

[Server @ L=3] Aske: Participant Aske joined Chit Chat at logical time L=3

Aske

: Hello Alex

Aske

:

[Server @ L=4] Aske: Hello Alex

Aske

:
[Server @ L=5] Alex: I will try to type a really long message
Aske
: I could not see the msg
Aske
:
[Server @ L=7] Aske: I could not see the msg
Aske
: Now I will leave the chat
Aske
:
[Server @ L=8] Aske: Now I will leave the chat
Aske
: exit
[Server @ L=9] Bob: Participant Bob joined Chit Chat at logical time L=9
Aske
: exit
Aske
:
[Server @ L=10] Aske: exitexit
Aske
: exit
Leaving chat...
2025/10/29 10:17:27 [Client Aske
] Stream closed: rpc error: code = Unknown desc = EOF

Client 3 (Bob) Log: Bob leaves chat without typing exit

Enter your name: Bob
2025/10/29 10:17:14 [Client Bob
] Sent JOIN
Bob

:

[Server @ L=9] Bob: Participant Bob joined Chit Chat at logical time L=9

Bob

:

[Server @ L=10] Aske: exitexit

Bob

:

[Server @ L=11] Aske: Participant Aske left Chit Chat at logical time L=11

Bob

: Can I send a message now.

Bob

:

[Server @ L=12] Bob: Can I send a message now.

Bob

: Oh, great. It seems to work now.

Bob

:

[Server @ L=13] Bob: Oh, great. It seems to work now.

Bob

: Bob

:

[Server @ L=14] Bob:

Bob

: exit status 0xc000013a