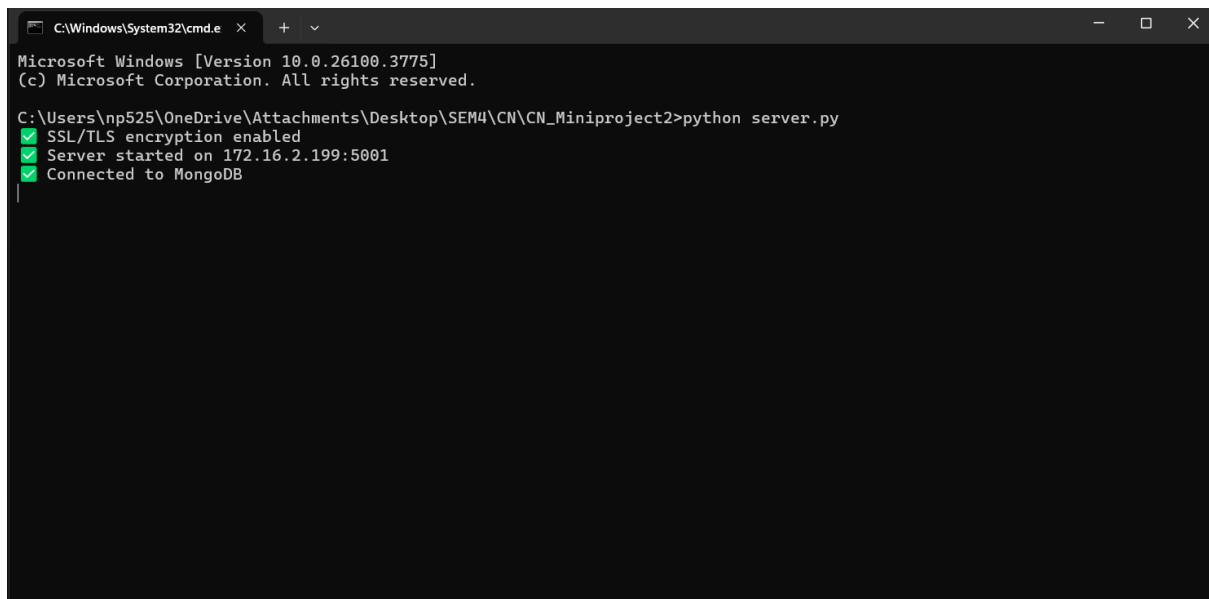


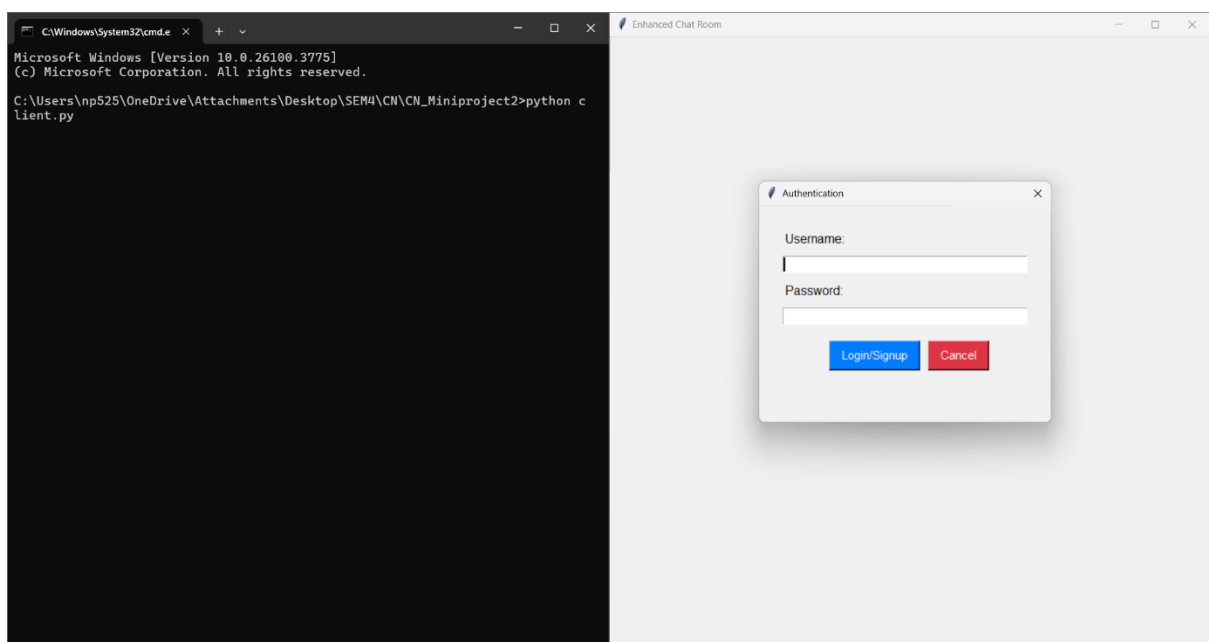
1. STARTING SERVER

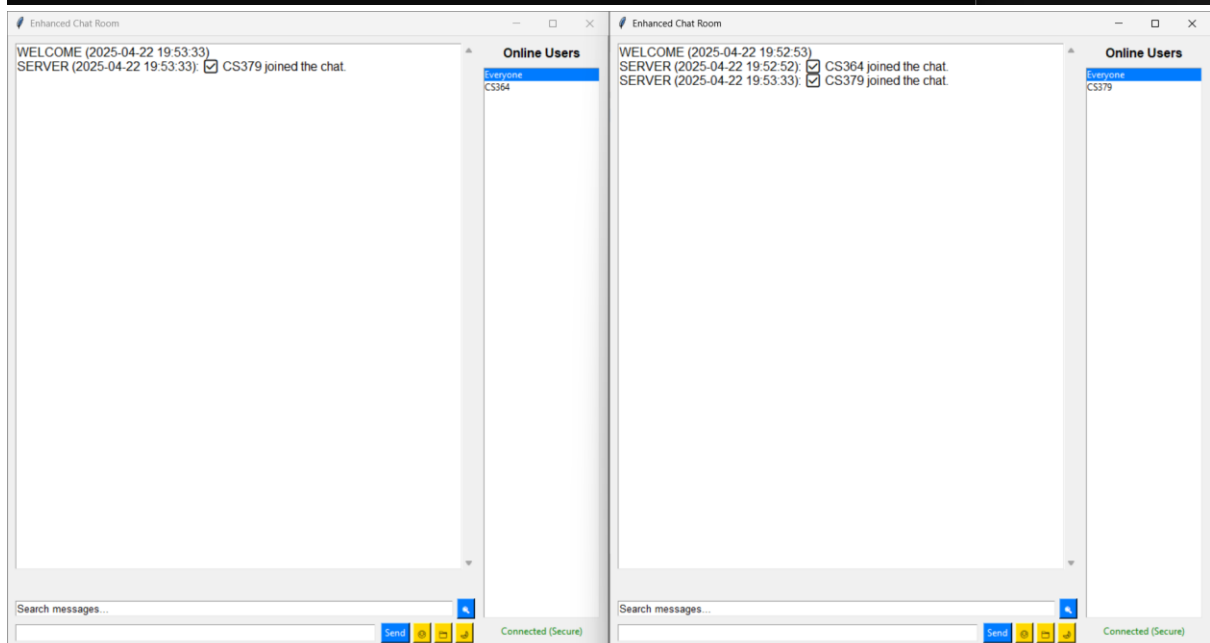
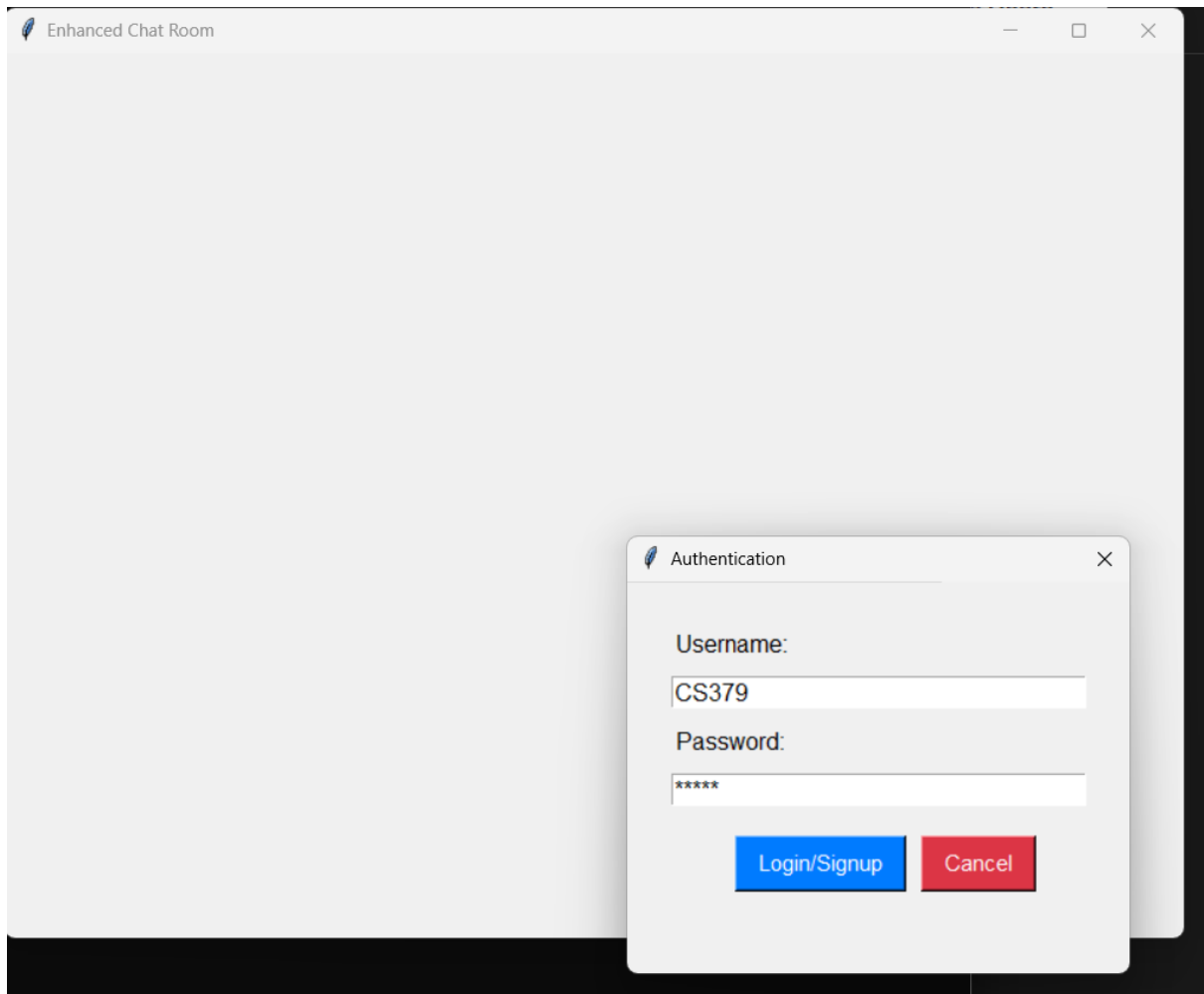


```
C:\Windows\System32\cmd.e x + v
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.

C:\Users\np525\OneDrive\Attachments\Desktop\SEM4\CN\CN_Miniproject2>python server.py
[✓] SSL/TLS encryption enabled
[✓] Server started on 172.16.2.199:5001
[✓] Connected to MongoDB
```

2. STARTING CLIENT



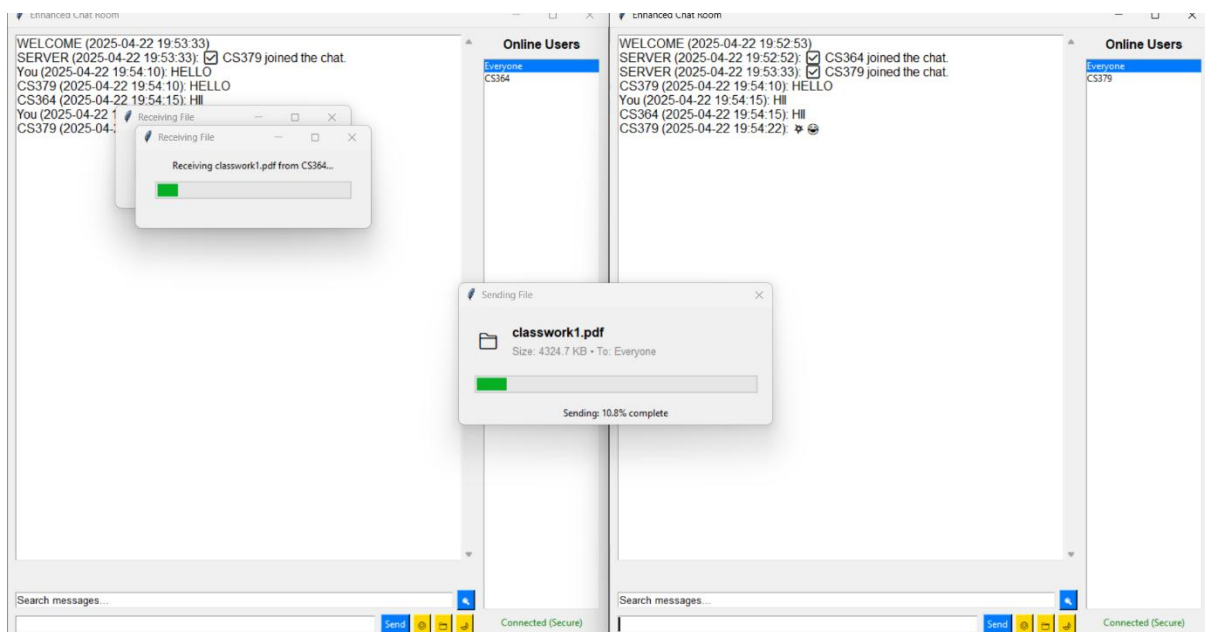


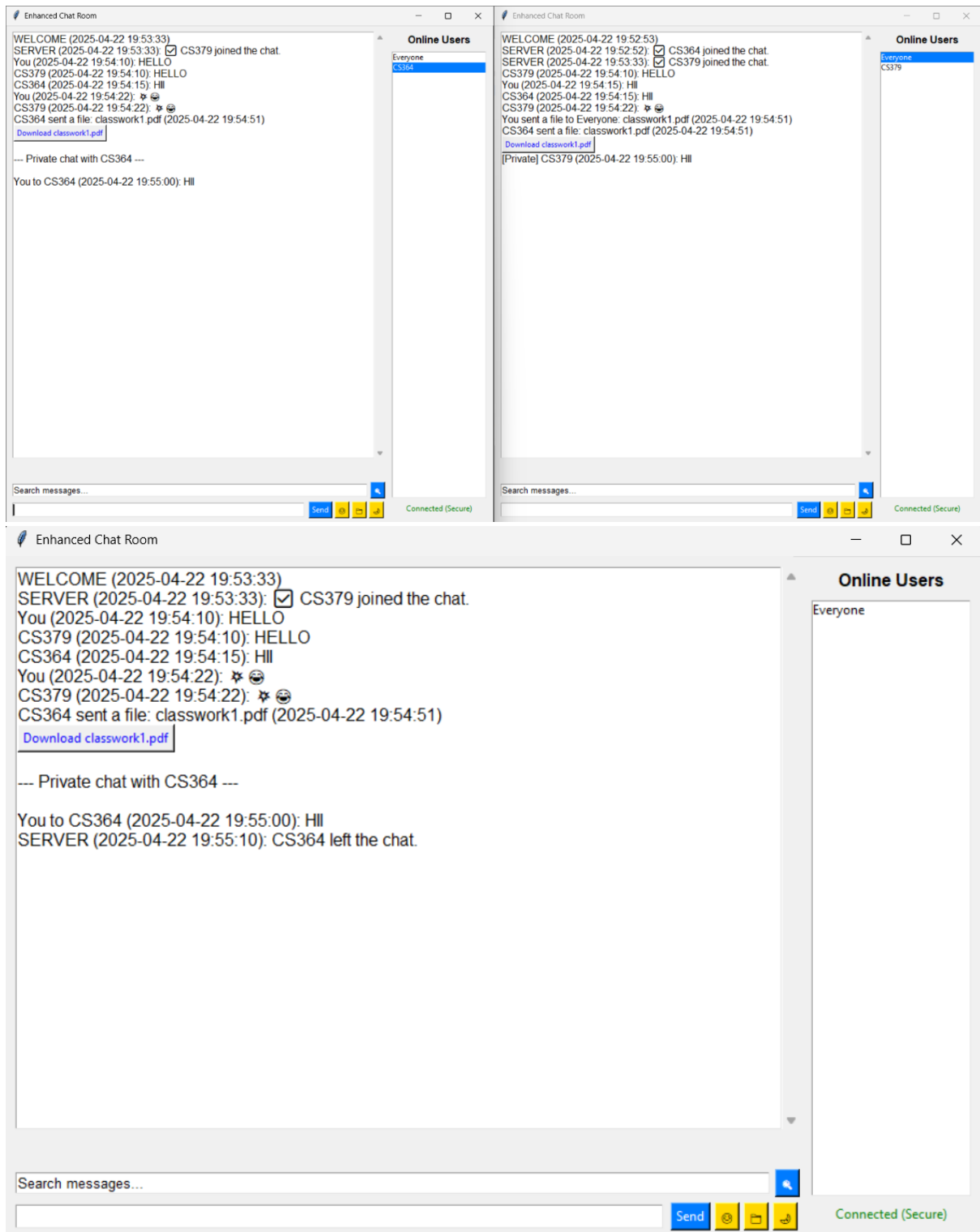
3. SERVER CAPTURING ALL MESSEGES

```
C:\Windows\System32\cmd.e x + v
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.

C:\Users\np525\OneDrive\Attachments\Desktop\SEM4\CN\CN_Miniproject2>python server.py
[✓] SSL/TLS encryption enabled
[✓] Server started on 172.16.2.199:5001
[✓] Connected to MongoDB
[✓] Connection from ('172.16.2.199', 59330)
[Broadcast] SERVER: [✓] Neha joined the chat.
[Broadcast] SERVER: Neha left the chat.
[✗] Neha disconnected.
[✓] Connection from ('172.16.2.199', 59354)
[Broadcast] SERVER: [✓] CS379 joined the chat.
[✓] Connection from ('172.16.2.199', 59367)
[Broadcast] SERVER: [✓] CS364 joined the chat.
[Broadcast] SERVER: CS364 left the chat.
[✗] CS364 disconnected.
[Broadcast] SERVER: CS379 left the chat.
[✗] CS379 disconnected.
[✓] Connection from ('172.16.2.199', 59441)
[Broadcast] SERVER: [✓] CS364 joined the chat.
[✓] Connection from ('172.16.2.199', 59465)
[Broadcast] SERVER: [✓] CS379 joined the chat.
```

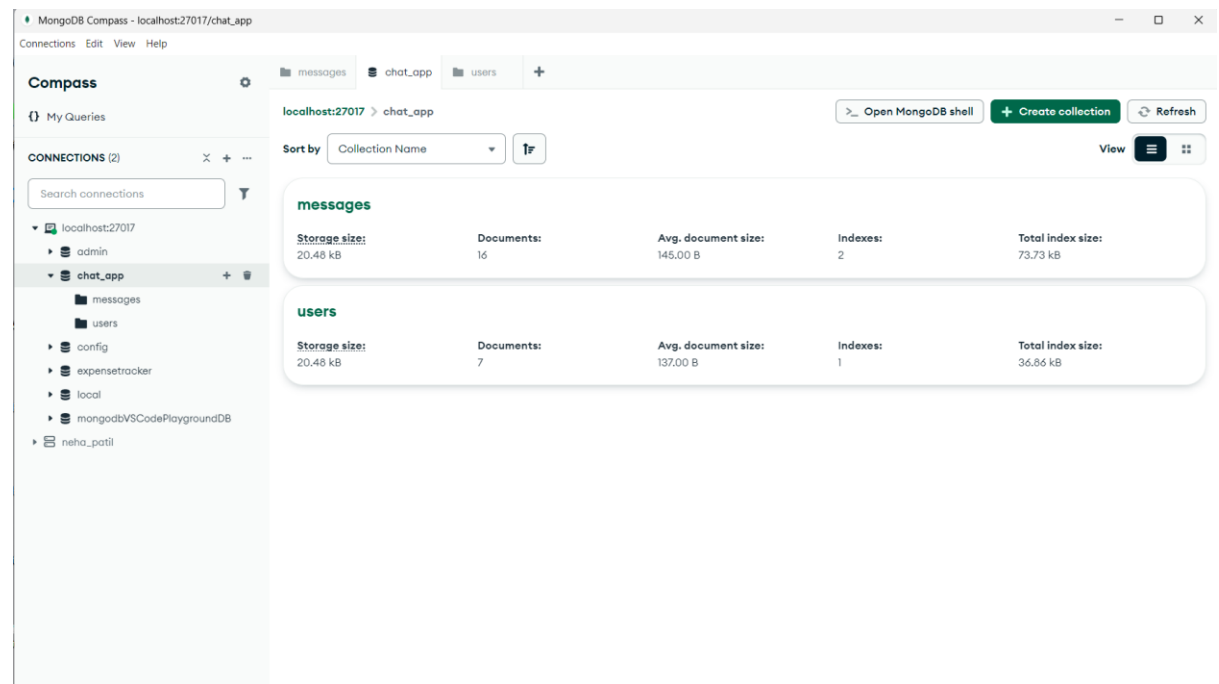
4. FILE SHARING, EMOJI, AND PRIVATE MESSAGES





```
C:\Windows\System32\cmd.e x + v
[✓] SSL/TLS encryption enabled
[✓] Server started on 172.16.2.199:5001
[✓] Connected to MongoDB
[✓] Connection from ('172.16.2.199', 59330)
[Broadcast] SERVER: [✓] Neha joined the chat.
[Broadcast] SERVER: Neha left the chat.
[✗] Neha disconnected.
[✓] Connection from ('172.16.2.199', 59354)
[Broadcast] SERVER: [✓] CS379 joined the chat.
[✓] Connection from ('172.16.2.199', 59367)
[Broadcast] SERVER: [✓] CS364 joined the chat.
[Broadcast] SERVER: CS364 left the chat.
[✗] CS364 disconnected.
[Broadcast] SERVER: CS379 left the chat.
[✗] CS379 disconnected.
[✓] Connection from ('172.16.2.199', 59441)
[Broadcast] SERVER: [✓] CS364 joined the chat.
[✓] Connection from ('172.16.2.199', 59465)
[Broadcast] SERVER: [✓] CS379 joined the chat.
[Broadcast] CS379: HELLO
[Broadcast] CS364: HII
[Broadcast] CS379: 🌟🌟
[File] CS364 is sending classwork1.pdf (5766KB) to Everyone
[File] Transfer complete: classwork1.pdf from CS364 to Everyone
[Private] CS379 to CS364: HII
[Broadcast] SERVER: CS364 left the chat.
[✗] CS364 disconnected.
[Broadcast] SERVER: CS379 left the chat.
[✗] CS379 disconnected.
```

5. MONGODB CONNECTION – storing all messages and user details



MongoDB Compass - localhost:27017/chat_app.messages

Connections Edit View Collection Help

Compass

My Queries

CONNECTIONS (2)

Search connections

- localhost:27017
 - admin
 - chat_app
 - messages
 - users
 - config
 - expensetracker
 - local
 - mongodbVSCodePlaygroundDB
- neha_patil

localhost:27017 > chat_app > messages

Documents 16 Aggregations Schema Indexes 2 Validation

Type a query: { field: 'value' } or [Generate query](#)

EXPLAIN RESET FIND Options

ADD DATA EXPORT DATA UPDATE DELETE

25 1 - 5 of 5

recipient: "Everyone"
content: "HII"
timestamp: "2025-04-22 19:54:15"

_id: ObjectId('6807a69667f855f065a8b14b')
type: "message"
sender: "CS379"
recipient: "Everyone"
content: "🔥🔥"
timestamp: "2025-04-22 19:54:22"

2025-04-22 19:54:22

_id: ObjectId('6807a69b67f855f065a8b14c')
type: "file"
sender: "CS364"
recipient: "Everyone"
filename: "classwork1.pdf"
filesize: "5984712"
timestamp: "2025-04-22 19:54:27"

_id: ObjectId('6807a6bc67f855f065a8b14d')
type: "message"
sender: "CS379"
recipient: "CS364"
content: "HII"
timestamp: "2025-04-22 19:55:00"

MongoDB Compass - localhost:27017/chat_app.users

Connections Edit View Collection Help

Compass

My Queries

CONNECTIONS (2)

Search connections

- localhost:27017
 - admin
 - chat_app
 - messages
 - users
 - config
 - expensetracker
 - local
 - mongodbVSCodePlaygroundDB
- neha_patil

localhost:27017 > chat_app > users

Documents 7 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#)

EXPLAIN RESET FIND Options

ADD DATA EXPORT DATA UPDATE DELETE

25 1 - 2 of 2

_id: ObjectId('6807a63c67f855f065a8b147')
username: "CS364"
password: "\$2b\$12\$FeHqY9derzTUMRpJ6o4StuSkSwTVdpY0/09V/2d1C4QABqnLrtWr."
created_at: 2025-04-22T19:52:52.919+00:00

_id: ObjectId('6807a66567f855f065a8b148')
username: "CS379"
password: "\$2b\$12\$qVHSeS4vtvWQj03lqU3cVetpWGDAGIS2Lr/x/TubjrjwIeJq5V/Du"
created_at: 2025-04-22T19:53:33.334+00:00