Requirement ID: 6

Description: Implement user identity (temporary usernames or login)

Artifact: This feature will be implemented to give each user a unique identity within the chat system. The solution supports temporary usernames so that full account registration is not necessary if the user wishes to just use the chat on its own. The artifact demonstrates how the system assigns a unique identifier to each of the connected users, ensuring that messages can be attributed correctly and consistently when moving across sessions and rooms. This implementation can be verified by acting as a user and assigning a username.

Requirement ID: 6.1

Description: Allow users to set/change display names

Artifact: For personalization, users can set their display names after joining. This implementation will focus on maintaining flexibility and keeping consistent identity tracking on the backend. This shows how synchronization is important in a system like this so that the message feed remains as close to an in person conversation as possible.

Requirement ID: 7

Description: Implement message persistence (save chat history to database)

Artifact: This requirement will be introduced to make sure that the chat history is not lost when the server restarts or users disconnect. This demonstrates the integration of our database system with the chat functionality to provide a more usable and continuous chat experience. The functionality of this can be verified through sending and receiving messages across multiple different sessions.

Requirement ID: 7.1

Description: Load previous messages when joining a room

Artifact: This feature goes further with message persistence, since even new users who have not previously interacted with any of the chat rooms are able to view the messages that have been sent. This will confirm that users entering the new rooms are given the context required to again, make a more usable and continuous chat experience.