

22nd July 2025 (Tuesday)

The focus of today's class was Database Structuring and Message Filtering. The mentor explained how a chat app's data must be well-structured for performance and scalability. We learned to separate chats based on unique sender-receiver pairs. Each conversation was stored under a node combining both users' IDs.

During the first hour, I redesigned my Firebase structure to include message grouping based on user pairs. This allowed each user to only access messages that belonged to their individual chat sessions.

In the second hour, I added sorting by timestamps so that newer messages appeared at the bottom of the chat. The mentor also encouraged us to handle edge cases like null data or message duplication. This task improved my database management skills, and I now better understood how cloud-based systems maintain logical relationships between multiple users.