Training Day-9 report

02 July, 2025

Today, I successfully completed the implementation of two major features in the messaging application — **file upload** and **message editing**. Although both were planned earlier, several issues delayed their completion. Today's efforts focused on debugging and finalizing these functionalities.

Work-Undertaken:
• Finalized the **file upload feature**, enabling users to attach and share files.
• Fully implemented the **edit message functionality**, allowing users to modify their sent messages.
• Conducted extensive debugging to resolve path errors and frontend visibility issues.

Challenges Faced:

1. **File Upload Path Error:**
   – The upload path mistakenly included an extra /src directory.
   – This caused the file-saving process to fail and resulted in repeated upload errors.
   – The issue took **half of the day** to identify due to its subtle nature and indirect impact.

2. **Session Data Missing on Client Side:**
   – The **username (from session)** was not being passed to the client properly.
   – As a result, **edit and delete buttons** didn't appear on the frontend, even though the logic was correct.
   – Spent significant time checking middleware, backend routes, and rendering logic.
   – Finally diagnosed the problem using console.log() statements and took assistance from **GitHub Copilot** to understand and implement the fix.

Key-Learnings:
• Understood the impact of small path configuration mistakes on file systems and their debugging complexity.
• Realized the importance of **sending complete session data** to the frontend when dynamic elements depend on user-specific context.
• Strengthened debugging skills by tracing problems across multiple layers (backend, session handling, and frontend rendering).

Conclusion:
Despite time-consuming challenges, today marked a productive milestone with two key features completed and functional. These implementations enhance both usability and interactivity in the messaging application. Tomorrow's focus will likely be on polishing the interface and testing for edge cases.

Ravjot Singh   CRN-2315191   URN-2302646