

INDIVIDUAL PROJECT POST MORTEM
CIS 4250 – Software Design V
Instructor: Prof. S. Scott

Section 1: Individual Accountability Report

Q1. Student Name: Naza Anyaegbunam

Q2. Student ID: 1158144

Q3. Associated Team Deliverable: Sprint 4

Q4. Team #: Group 6 Section 2

Q5. What were the main technical or methodological knowledge, skills and/or abilities (KSAs) that were required to complete this team deliverable? What prior courses or experiences (e.g. co-op, group project, etc.) from your Software Engineering degree did you draw on for these KSAs? (bulleted list is preferred):

- Frontend development using React (Vite), JSX, and Tailwind CSS
- State management and React hooks
- Backend API development using Express.js and MongoDB
- Schema design with Mongoose (MongoDB ODM)
- Real-time data handling using Socket.IO (if applicable)
- Version control with Git and project coordination using GitLab
- User experience design, especially for privacy-focused features like vanish mode
- Debugging and testing asynchronous UI behavior (timers, conditional rendering)
- Prior experience from CIS2750 (*Software Systems Development and Integration*) and CIS3750 (Software Engineering) group projects
- Co-op experience helped with understanding project scoping, testing edge cases, and documenting properly

Q6. What was your existing level of experience with these topics/skills before your team began working on this deliverable? (1-2 sentences):

Before starting this deliverable, I had a good understanding of React, Express, and MongoDB from previous coursework and co-op. I had not previously implemented temporary message behavior or features involving real-time updates, so vanish mode was a new and interesting challenge.

Q7. Comment on your individual KSAs learning during this deliverable, and what additional learning may be needed to understand or be more competent with these topics / tasks in the future?

I learned how to integrate frontend and backend logic for a privacy-focused feature, how to conditionally render components based on time and state, and how to pass custom flags through APIs. I became more comfortable modifying data models and updating controller logic. In the future, I want to learn more about real-time features like WebSockets, and how to scale privacy features with user-configurable settings (e.g., message expiration time).

Q8. What specific contributions did you make to this team deliverable? This should include technical or project management contributions.

- Implemented the "Disappearing messages" feature from end to end with Ike
- Updated the database to support temporary messages
- Designed and coded the backend vanish mode toggle and message timer logic
- Helped write the GitLab wiki documentation for the feature
- Participated in user testing and demo preparation

Q9. With whom did you collaborate for any of the above contributions (be specific – saying “all team members” is not sufficient. State which parts you worked on with whom)?

- Collaborated with Ike on the Disappearing Messages user story
- Wrote the wiki individually
- Updating the database to support temporary messages was with Ike
- Helped write the GitLab wiki documentation for the feature along with Eddie, Dawoud, Ike and Jake
- Participated in user testing and demo preparation along with Jake, Dawoud, Ike and Eddie

Q10. Comment on how well you managed your time over the time period allocated in the Course timetable to this team deliverable (i.e. the time between the prior team deliverable to this team deliverable).

I managed my time well by setting clear internal deadlines and focusing on one sub-feature at a time. Breaking the vanish mode implementation into backend and frontend stages helped reduce overwhelm. I stayed on track with meetings and made sure to allocate extra time for testing and documentation.

Section 2: Overall Contributions to the CIS 4350 Team Project

Throughout the course of the project, my main contributions were focused on front-end development and UI design. I played a significant role in implementing and refining the chat interface, improving its layout, responsiveness, and visual consistency. I also helped ensure the navbar and profile pages followed a consistent design language, based on the Figma mockups I helped create. These contributions were important to the user experience, which was a core goal of our project.

A particularly notable contribution was my work on state management in the chat system, where I helped troubleshoot issues related to message rendering, online status, and selected conversation tracking. This not only improved the functionality of the chat feature but also strengthened my understanding of how data flows through our application.

If I could improve one area, it would be my initial time spent re-familiarizing myself with Tailwind CSS. Although I caught up quickly, I could have benefitted from dedicating time earlier in the project to deepening my comfort with responsive design techniques. This would have allowed me to contribute more efficiently from the start.

Section 3: Technical Skills

Over the duration of the project, I significantly improved several technical skills that were directly applicable to my team's success. One of the most valuable was my use of Tailwind CSS to create responsive and clean user interfaces. At the beginning of the term, I had only a basic beginner level understanding of Tailwind, and most of my experience was with standard CSS or styled components. By the end of the project, I became much more comfortable using Tailwind's utility-first classes to build scalable UI components.

I also strengthened my understanding of state management using Zustand. When we first began, I had limited experience managing global state in React apps, but as the project progressed, I became more confident in using Zustand to persist user data, track online/offline status, and handle conversation selection.

In terms of skill assessment, I measure my progress by the level of independence I gained, by the end of the term, I was able to resolve complex front-end bugs on my own, contribute meaningfully to code reviews, and help other teammates debug their work. I now feel confident implementing full-featured UI components using modern JavaScript tools and libraries.

Section 4: Resource and Project Management

As a design team member, I contributed consistently to team coordination, documentation, and sprint planning. I helped create and maintain the visual design mockups in Figma, which served as a guide for our front-end implementation. These designs ensured we had a cohesive layout and a clear direction during development.

I also participated in planning meetings and contributed to issue tracking on GitLab. I regularly updated the status of issues, commented on progress, and helped adjust task priorities during standups. In terms of team presentations, I contributed to the sprint demo by preparing visuals and participating in our recorded walkthrough, ensuring we effectively showcased our progress.

In terms of leadership, I often stepped into a supportive role, especially when teammates encountered blockers in front-end components. I offered suggestions, helped troubleshoot code, and shared resources when needed. While I didn't lead the team formally till I became Agile Coach in the last sprint, I consistently supported group cohesion and contributed to a collaborative, solution-focused environment.