## 1 Project Mentor Involvement

I planned and organized the two-week sprint for SyncNotes, leveraging my experience as a Full Stack Developer to break down tasks, assign responsibilities, and set achievable milestones. I conducted daily code reviews, ensuring clean architecture, proper integration of frontend and backend modules, and adherence to best practices learned from Laravel, Django, and React projects. Finally, I managed the final integration, resolving conflicts, verifying real-time collaboration, and preparing the application for deployment on Vercel and Render/Heroku.

## 2 Intern Contributions

### Intern 1 – Frontend Lead
Intern 1 designed and implemented the React-based user interface, integrating Context API for state management. They ensured offline support and real-time updates were fully functional, reflecting my guidance on responsive and maintainable frontend patterns. They collaborated with Intern 4 and backend leads to connect APIs and synchronize live editing.

### Intern 2 – Backend Lead
Intern 2 built the Node.js/Express backend, including authentication, CRUD APIs, and MongoDB database models. They optimized API performance and maintained data consistency, following patterns similar to my experience with Django and Laravel backend optimization. They coordinated with Intern 5 and the real-time engineer to integrate Socket.IO events with the database.

### Intern 3 – Real-time Feature Engineer
Intern 3 developed real-time collaboration using Socket.IO and implemented OT/CRDT logic for simultaneous editing. They tested concurrency scenarios and ensured smooth multi-user experience. They collaborated closely with frontend and backend teams to deliver fully synchronized live updates.

### Intern 4 – Frontend Developer
Intern 4 assisted with UI components, tag-based filtering, and offline editing capabilities. They ensured frontend state was properly synchronized with real-time updates. They worked hand-in-hand with Intern 1 to maintain design consistency and usability across the application.

### Intern 5 – Backend Developer
Intern 5 supported backend API development, wrote automated tests, and performed database optimizations. They ensured real-time data flow integrity and collaborated with Intern 2 to debug issues and enhance deployment readiness. Their work complemented the team's effort to deliver a stable and responsive backend.

## 3 Work Hours

All interns worked Monday to Friday, 4 hours per day, totaling 40 hours per intern over the two-week sprint, following agile practices and daily stand-ups.