

## Sprint 3 Reflection Report, UNT's Best

### **Accomplishments**

Sprint 3 has accomplished many significant backend, frontend, and infrastructure achievements. Mohamed has been working on user flow creation, frontend integration with JWTs, creating an onboarding page, user-specific storage, and updating the requirement documents. Arnav has been creating JWT middleware, setting up Postman, creating Azure upload service, and setting up CI/CD. Matthew has worked on the Test document; contributed to the Microsoft Foundry AI implementation, and co-developed the LLM backend. Walid has updated the Test Plan, updated the dashboard UI, and co-developed the LLM backend.

### **AI Utilization**

The team has used several AI tools, including ChatGPT and GitHub Copilot, to assist with generating code, debugging, summarizing architecture, and refining requirement and design documents. The team's queries to the AI have included prompts for refinement, clarification requests regarding architecture, and requests for assistance in resolving errors. The output provided by the AI has been validated manually and errors corrected as necessary.

### **Highlights**

There has been excellent integration between the frontend and backend; CI/CD has provided consistent pipeline automations; the LLM backend is in working order; and, the implementation of the JWT security model has unified the application across all Codebases. The team also performed better as a result of definitively clarifying task ownership.

### **Opportunities for Improvement**

There needs to be an expansion of the breadth of Test coverage; API documentation should have a tighter consistency; and, the team should continue to refine UI flows based on feedback. Sync issues between the frontend and backend do happen early-on, necessitating alignment meetings.

### **Next Sprint Focus and Deliverables**

The focus of the next sprint will be on completing Full OpenAPI endpoints, implementing collaborative editing in the backend, broadcasting the position of the cursor to other users in real-time, polishing the User Interface, and implementing Accessibility fixes.