

Capstone Weekly Status Report 4

Date and Time: September 28, 2025

Student Name: Satwik Alla

Capstone Project: Intelligent Accessibility Content Converter for Educational Institutions

Capstone Sponsor: No confirmed sponsor - proceeding with Professor Samarah's guidance for students without secured partnerships

Capstone Advisor: Prof. Mohammad Samarah & Prof. Melissa Sahl

Status Details:

Work accomplished this Week

- Final Proposal Submission: Successfully submitted comprehensive proposal on September 22nd with complete technical specifications, 15 user stories, and systematic sponsor outreach documentation
- Interactive Prototype Development: Created functional HTML-based prototype demonstrating all user stories including login flow, content conversion interface, accessibility settings, voice control, and administrative dashboard
- Technical Architecture Refinement: Finalized microservices architecture plan with React.js frontend, Python/Django backend, and AI service integration capabilities
- Project Documentation: Established comprehensive project timeline with alpha, beta, and final checkpoint deliverables aligned with course requirements
- Proposal Evaluation Preparation: Organized all deliverable components including prototype, technical specifications, and implementation roadmap for instructor review

Work Planned for Next Week

- Proposal Approval Response: Await instructor feedback on submitted proposal and address any requested modifications or clarifications
- Development Environment Setup: Begin establishing Git repository structure, development tools configuration, and initial project scaffolding pending approval
- Literature Review Expansion: Continue research on accessibility technologies, AI integration patterns, and educational technology best practices

- Stakeholder Research Planning: Prepare interview protocols and user research frameworks for potential UMBC accessibility services collaboration
- Technical Preparation: Evaluate AI service APIs, cloud deployment options, and integration requirements for immediate development start upon approval
- Alpha Planning: Develop detailed sprint planning for October 13th alpha checkpoint focusing on core text-to-speech conversion functionality

Problems, obstacles, needs, or questions that I need help with from client, advisor, or instructor

- Proposal Approval Timeline: Request clarification on expected timeline for proposal evaluation and feedback to ensure adequate development time before alpha checkpoint
- Scope Confirmation: Need validation that proposed technical complexity and AI integration requirements meet graduate-level capstone expectations
- Internal Project Assignment: Require guidance on process and timeline if proposal requires modification for internal university sponsorship consideration
- Development Priority Guidance: Request advice on balancing prototype refinement versus early development phases while awaiting final approval

Overall Status

- Project Status Color: Yellow (proposal submitted, awaiting approval)
- Project Status Color from Previous Week: Yellow