

---

## EE/CprE/SE 4920 Status Report #6

4/4/2025 – 4/17/2025

Group sdmay25-23

Project title: Code Critiquer System for the C Language and Embedded C

Client &/Advisor: Dr. Diane Rover

### Team Members/Role:

James Joseph - Secure System Design, CPR E 2880 Liaison

Samuel Lickteig - Backend System Design

Alix Noble - Testing

Andrew Sand - Team Organization, CPR E 2880 Liaison

Owen Sauser - Client Interaction, Frontend System Design, CPR E 2880 Liaison

---

- **Status Summary**

For the status report period, the team continued preparing the code critiquer system for the final prototype and other deliverables. Notably, a lot of work was done these past two weeks on the Design Document's first draft, which has been great for reviewing all of the work accomplished on the project. Additionally, Alix implemented a student report feature that allows instructors to download detailed reports of operating analytics and student behaviors. Finally, the complete overhaul of the frontend's user interface was an easily viewable improvement. James integrated the Bootstrap framework into the project, allowing more visually appealing HTML and CSS elements to be easily included. Overall, the team is continuing to get everything ready for the rapidly approaching end of the semester and project work time.

- **Project Milestones**

- A first draft of the Final Design Document has been completed
- UI/UX overhaul
- Student report implemented for instructors

- **Past Week Accomplishments**

- James Joseph:
  - UI/UX overhaul
  - AST imports for Tiva header files fixed
- Samuel Lickteig:
  - Testing features and page flow from previous work period
  - Fixed personal virtual environment issues

- Unsure why this randomly starting occurring again, but was able to fix after some troubleshooting
    - Added feature for toggling antipatterns on student upload screen
    - Reviewed design documentation for changes
  - Alix Noble:
    - Created student report
      - Added button to analytics page to download csv file with data on tool usage and student feedback
      - Got feedback from Dr. Rover on initial design and implemented some changes
  - Andrew Sand:
    - Worked extensively on documentation final deliverables
      - Added new sections to the Design Document
      - Completely rewrote chunks of the Design Document and other relevant documentation
      - Cleaned out and reorganized parts of the team's Google Drive
  - Owen Sauser:
    - Gave detailed instructions for how to use the code upload feature and what it does
    - Worked on documentation for getting code composer compilation set up on a new device
    - Worked on a writeup about our use of code composer studio for our advisor.
- **Pending Issues** (If applicable)
  - James Joseph:
    - AST is not pulling immediates in #define macros from external header files (like the tiva ones). This makes it impossible to look for board memory and peripheral access
  - Samuel Lickteig:
    - N/A
  - Alix Noble:
    - N/A
  - Andrew Sand:
    - N/A
  - Owen Sauser:
    - N/A

- **Individual Contributions** (Note: The “Hours Cumulative” section is independent from the members’ cumulative hours from the Fall 2024 semester)

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b>	<b><u>Hours this Week</u></b>	<b><u>Hours Cumulative</u></b>
James Joseph	UI overhaul and AST troubleshooting	29	82
Samuel Lickteig	Testing, virtual environment fix, antipattern toggle view feature, design doc	8	45
Alix Noble	Student Report feature	10	29
Andrew Sand	Worked on Final Documentation Deliverables	12	32
Owen Sauser	Documentation, instructions for code upload, and CCS writeup	8	33

- **Comments and Extended Discussion** (Optional)

N/A

- **Plans for the Upcoming Week**

- James Joseph:
  - Maybe update LLVM libclang to properly handle #define immediates
  - Look at other bug of the weeks that are more possible to implement
- Samuel Lickteig:
  - Potentially look into letting professors make personal descriptions for public antipatterns
  - Design doc work
- Alix Noble:
  - Refine student report
- Andrew Sand:
  - Continue working on Final Documentation Deliverables
- Owen Sauser:
  - Continue documentation
  - Further work into the final design doc.

- **Summary of Weekly Advisor Meeting** (If applicable/optional)

**Summary 4/7/2025:**

- Demoing Admin and Student roles in the system to Dr. Rover
- Would be good to have some sort of setup script that sets up the admin account and secret token stuff
- Implement some way for instructors to test an assignment
- Should have a couple line user-friendly descriptions in the UI of the antipatterns