EE/CprE/SE 4920 Status Report #3
2/14/2025 – 2/27/2025
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**

  During this reporting period, the team continued making steady progress on getting the code critiquer system into a workable, minimally viable product for an upcoming demonstration to the project's advisor. Notably, all current antipatterns in the system are fully documented, making implementing and understanding future ones easier. Furthermore, additional progress was made toward getting the analytics page operational, the implementation of the accounts more polished, and the integration of Code Composer Studio into the static analysis tests. Another significant milestone of the project is that TA accounts are now fully feature complete, bringing the system closer to a demonstrable state and allowing for the development of other functionality to begin.

- **Project Milestones**
  - TA Accounts are fully implemented and functional (Not fully tested)
  - All existing antipatterns are now fully documented

- **Past Week Accomplishments**
  - James Joseph:
    - Explained and documented all existing antipatterns
  - Samuel Lickteig:
    - TA accounts fully functional
      - TA home page set up with links to analytics and assignment editing(if given permissions)
    - Bug fixing student accounts
    - Removed anonymous submissions
    - Nearly complete updating student account creation file upload

- Originally just list of student netids
- Switched to csv file that contains student name, netid, lab section, major, and classification
    - Alix Noble:
        - Continuing work on analytics page.
        - Working on adding ui elements to dynamically create/update graphs
    - Andrew Sand:
        - Investigated potential options for getting code composer studio integrated with the team's project
            - Started looking at the code critiquer source code regarding how the static analysis is being done
            - Started getting accustomed to CCS and how it works
        - Began looking into how to better organize the team's work and goals within GitLab
            - The team needs a consistent set of goals to work toward, so the Issues section will need to be appropriately populated
    - Owen Sauser:
        - Working towards getting the code composer studio code compilation working. Will be doing that by taking the uploaded code and running a command line operation to compile the code.

- **Pending Issues** (If applicable)
    - James Joseph:
        - N/A
    - Samuel Lickteig:
        - N/A
    - Alix Noble:
        - N/A
    - Andrew Sand:
        - N/A
    - Owen Sauser:
        - Figuring out the best way for a user to upload their project and compile the files

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

NAME	Individual Contributions	Hours this Week	Hours Cumulative

James Joseph	Misc server configs and antipattern explanations	6	23.5
Samuel Lickteig	TA accounts and actions, bug fixing, removed anonymous submissions, updating student account creation	10	23
Alix Noble	Continuing work on analytics page	5	9
Andrew Sand	Researched code composer studio integration and began looking into better organising the team's work	3	8
Owen Sauser	Working to get code composer studio to compile the code after it is uploaded.	4	9

- **Comments and Extended Discussion** (Optional)
  N/A

- **Plans for the Upcoming Week**
  - James Joseph:
    - More weekly bug checks
  - Samuel Lickteig:
    - Finish up the student uploading change
    - Fix errors that James found in student creation
    - Look to priority list for more things to work on
  - Alix Noble:
    - Continue work on analytics page
  - Andrew Sand:
    - Update GitLab
      - Update the README to be laid out better
      - Add/Edit Issues based on the team's priority list to better organise goals and milestones
      - Clean up old branches
    - Research more about Code Composer Studio integration
      - See if there is a way to tap into its compiler without the full GUI
  - Owen Sauser:
    - Continue working on the code compilation so we can get the console output and analyze it.

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

2/17/2025 Advisor Meeting Summary:
- Asked Dr. Rover about TA permissions
  - Think of the system like the Canvas webpage for the course (CPR E 2880)
  - TAs have edit permissions for any assignments in the course
  - TAs should not be able to create/delete assignments though
  - TAs can view the same statistics for all sections, like an instructor account
  - Section numbers are mostly just for data filtering and analytics
  - Import TA accounts like the system imports student accounts (List of netIDs)
  - Consider also importing the student's major (I.E. SE, CPRE, etc.) into the account for further data filtering and analysis
- Look into pros and cons of using the Azure suggestion from James or using the current system of importing a list of users
- Looked over the Priority List that the team created at our last team meeting
  - Something to look into is connecting Code Composer Studio to compile and check, but not necessarily use the Virtual CyBot
- Suggestion from Dr. Rover: Allow students to give feedback or ask questions after analysing code
- Suggestion from Dr. Rover: Relate different antipatterns to different concepts in the system (She uploaded a list of concepts for CPR E 2880 to the Discord)
  - Might be good for filtering and analysis

2/24/2025 Advisor Meeting Summary:
- The meeting began by going over the most recent "bug of the week" (lab 4) from Dr. Rover in CPR E 2880
  - These will continue to give us good starting spots to implementing plausible test antipatterns to check
  - Would be a good idea to elaborate on when abstract syntax tree vs. regular expressions are used in our final report (Just something to keep in mind)
- This meeting mostly contained just some minor updates on the topics discussed last meeting
- Can we get some sort of demo working before Spring Break?
  - See if we can get close to the MVP
  - Discuss more on our Thursday meeting