EE/CprE/SE 4910 Weekly Report #10

11/15/2024 - 11/21/2024

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

Weekly Summary

With progress proceeding steadily on the project, the team is also beginning to look ahead to the rapidly approaching end of the semester. As the faculty panel gets closer, the team is focused on getting the program into a fairly usable state with fixed bugs and some key improvements over the starting point from the prior senior design group to be shown as a prototype and tested in the spring. Furthermore, documentation is coming along nicely, which will be a significant boon for the faculty panel, design document, and planning how work will continue into next year.

• Past Week Accomplishments

- James Joseph:
 - Started test design
- Samuel Lickteig:
 - Student setup
 - Professor can insert txt file of netids and students will be added to database with randomly generated passwords
 - Student screen to show assignments
- Alix Noble:
 - Began slides for faculty presentation
 - Continued work and research for instructor feedback page
- Andrew Sand:
 - Continued communication with Iowa State's ETG
 - Got the rest of the team access to the virtualized CyBot repository

- Worked on screen sketches for the web application UI update
 - Completed rough sketches for several critical pages (Login, About, Instructor Home, Code Upload, and Analysis Results)
- Owen Sauser:
 - Continued to work on project uploading feature
 - Practice lightning talk presentation

• Pending Issues

- James Joseph:
 - N/A
- Samuel Lickteig:
 - N/A
- Alix Noble:
 - N/A
- Andrew Sand:
 - N/A
- Owen Sauser:
 - Same issue as last week involving uploading two files with the same name.

• Individual Contributions

NAME	Individual Contributions	Hours this Week	Hours Cumulative
James Joseph	Started test development	2	46
Samuel Lickteig	Student setup and screen	5	41
Alix Noble	Began faculty presentation slides	3	28
Andrew Sand	Worked on UI update screen sketches	3	38
Owen Sauser	Lightning talk prep and Project uploading	3	30

• Plans for the Upcoming Week

Note: The upcoming week refers to the period of time between 11/21/2024 and 12/5/2024 due to the Thanksgiving holiday break.

- James Joseph:
 - Finalize a test or two
- Samuel Lickteig:
 - Send students email when professor inserts files
 - Work on Faculty Panel Presentation
- Alix Noble:
 - Continue work on instructor feedback page
- Andrew Sand:
 - Update web application About page
 - Work on Faculty Panel presentation
 - Work on final Fall Semester Design Document Final Draft
 - Update website
- Owen Sauser:
 - Will be able to work more because of break
 - Do the cccignore formatting
 - Try to figure out how to make files with the same name work

• Summary of Weekly Advisor Meeting

- Began by discussing if the CPR E 2880 material has changed substantially to see if we can use prior lab information to begin creating per-lab antipatterns
- Discussed being in a "flow state" when programming
 - Research suggests that students should get into that state and practice being in it to improve problem solving skills
 - Will this design project be detrimental to this?
 - O What can we do to prevent this?
 - Things to keep in mind
- Discussed virtualized CyBot specifics
 - Look into the emulator that Dr. Jones mentioned in last week's interview meeting
- Look into pros and cons of each dynamic analysis platform
- How do we create student accounts in the system?
 - Use ISU sign in authentication?
 - Probably just use a system where the professor inputs student email addresses, a student signs in with a provided code, sets a password, and then can use that