EE/CprE/SE 4920 Status Report #2 1/31/2025 – 2/13/2025 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

Progress Summary

During these past two weeks, the team made progress in many places. We started configuring the server to function properly by fixing the build pipeline and its tests, allowing the server to stay up to date. We have also made a good start in implementing the ability to send emails containing the student's temp passwords for new users. This functionality was accomplished by using the gmail Simple Mail Transfer Protocol. We then required that the temporary passwords be reset on the first login to something decided by the student.

• Project Milestones

- Fixed Pipeline
- New Antipattern checks
- Password sending
- Password resetting

• Past Week Accomplishments

- James Joseph:
 - Configured server
 - Fixed pipeline
 - Fixed original pipeline tests
 - Fixed pipeline build
 - Created 2 mains Xpath
 - Set up nginx reverse proxy
- Samuel Lickteig:
 - Looked into the email solutions alongside Owen

- Completed automation of emailing passwords to students
 - Decided on Gmail SMTP
 - Have new generic email (<u>sdmay2523@gmail.com</u>) set up for use
- Made improved database diagram
- Began adding TA functionality
 - TA login and page
 - TA account creation
- Alix Noble:
 - Continued work on analytics page
 - Experimented with different chart layouts and data types
- Andrew Sand:
 - Experimented with UI Screen Sketches
 - Not ready for actually usage/development yet
 - Experimented with some different ideas that I had and set up some stuff in drawing software (I.E. setting up templates for screen size)
- Owen Sauser:
 - Looked into the email solutions alongside Sam
 - Added student password resetting
 - On a students first log in they are required to set a new password before they can do anything
 - This is to make sure that they aren't using the temp password
- <u>Pending Issues</u> (If applicable: Were there any unexpected complications? Please elaborate.)
 - James Joseph:
 - Tried to let pipeline run in docker, but gitlab-runner doesn't have great port exposure support
 - docker shared runner makes tests fail 33% of the time. Switching to vm and configuring server to make tests work
 - 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)

NAME	Individual Contributions	<u>Hours this</u> <u>Week</u>	<u>Hours</u> <u>Cumulative</u>
James Joseph	Pipeline and server work two mains checking	15.5	17.5
Samuel Lickteig	Set up gmail, completed automated emailing for student account creation, made improved database diagram, worked on TA functionality	10	13
Alix Noble	Continued work on analytics page	3	4
Andrew Sand	Experimented with UI sketches	3	5
Owen Sauser	Looked into email solutions and added password resetting	4	5

• <u>Comments and Extended Discussion</u> (Optional) N/A

• Plans for the Upcoming Week

- James Joseph:
 - Get tests for labs up and running
- Samuel Lickteig:
 - More TA and section implementation
- Alix Noble:
 - Continue work on analytics page
- Andrew Sand:
 - Create screen sketches for the UI update
 - Look into other ways to contribute to the Minimal Viable Product
- Owen Sauser:
 - Work more with students, TAs, and sections
- Summary of Weekly Advisor Meeting (If applicable/optional)
- Continued going over the presentation
- Conceptual Sketch
 - General overview of the system

- Can be how users will interact with the system
- Can be how an example antipattern is handled by the system
 - Used two mains as an example in the meeting
- Project Overview
 - Add something more specific about describing antipatterns
- Look into costs of maintaining the project once it is done
 - TA Training?
 - Pay someone from ETG to maintain it?
 - As labs change and the course evolves, antipatterns need updating, hosting platforms might change, libraries might become defunct, etc.
- Do students know which antipatterns their code is getting tested for?
 - On the assignment upload page, have a list of antipatterns that are getting tested
 - Maybe test for all of them at all times, but only show the students feedback from selected ones
 - This would play well into the statistics/telemetry page