EE/CprE/SE 491 Weekly Report #3

9/27/2024 - 10/3/2024

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
Samuel Lickteig - Backend System Design
Alix Noble - Testing
Andrew Sand - Team Organization
Owen Sauser - Client Interaction, Frontend System Design

Weekly Summary

This past week was rather significant for the team because the first project advisor meeting occurred during this time. During the meeting, the team met the project advisor, Dr. Diane Rover, and began discussing the project's expectations, outcomes, and logistics. Furthermore, members from the prior senior design group, sdmay24-34, were contacted, and one of them responded, giving the team some advice, notes, and access to their GitLab repository. Because of this, the group will be able to examine what has already been constructed for the project by the previous design group and be able to make more informed decisions henceforth. Members also researched the feasibility of tailoring the project to be compatible with different environments and applications used by the CPR E 288 course, namely Code Composer Studio.

Past Week Accomplishments

- James Joseph:
 - Examined previous project's goals and accomplishments
 - Developed ideas to more effectively provide desired results
- Samuel Lickteig:
 - Examination of the past teams code and documentation
 - Created and added to initial set of antipatterns
- Alix Noble:
 - Read previous team's reports and documents
 - Brainstormed requirements to extend upon previous team's work
- Andrew Sand:

- Researched the feasibility of integrating the project with Code Composer Studio (CCS)
 - The team is deciding if integrating with CCS is a worthwhile endeavor, so research and a feasibility report needed to be created
- Reorganized some of the team documentation and Discord server to better fit the project situation
 - Since one of the sdmay24-34 members has been contacted and responded, a new Discord role, permissions, and channels needed to be created
 - With the introduction of lightning talks, more needed to be added to the team Google Drive to accommodate these assignments (Templates, folders, and other documentation)
- Owen Sauser:
 - Communicated with member of previous team
 - Invited him to the discord
 - Obtained access to their gitlab and then added the rest of the team to it.
- <u>Pending Issues</u> (If applicable: Were there any unexpected complications? Please elaborate.)
 - James Joseph:
 - Getting other people's feedback on the pros and cons of proposed ideas
 - Evaluating the team's strengths and weaknesses to best mold the proposed ideas to our abilities
 - Samuel Lickteig:
 - Don't have prior experience with Python so it will take some time to fully understand past teams project
 - Spent a decent amount of time looking for more antipatterns that seemed feasible to catch with the critiquer, but currently unable to find much
 - Alix Noble:
 - Dig into the previous team's code to assess the state of the project. This will allow us to see what we want to keep and what we want to overhaul
 - Andrew Sand:
 - Was not expecting Code Composer Studio to be undergoing such a massive overhaul in the near future

- This means that determining if the team wishes to target that environment will be more challenging than expected
- Owen Sauser:
 - Need to look through previous teams code more to see what we want to add or change

• Individual Contributions

NAME	Individual Contributions	Hours this Week	Hours Cumulative
James Joseph	Research and Ideation	4	10
Samuel Lickteig	Research and antipattern listing	3	8
Alix Noble	Research/brainstorming	2	7
Andrew Sand	CCS Research and Documentation Management	3	10
Owen Sauser	Communication with previous team member and code acquisition	2	5

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

Plans for the Upcoming Week

- o James Joseph:
 - Picking a plan
 - Drawing up designs for the plan or plans' architecture
- Samuel Lickteig:
- Alix Noble:
- Andrew Sand:
 - Reach out to Dr. Jones and CPR E 288 TAs with James and Owen
 - Begin investigating the shared GitLab from sdmay24-34
- Owen Sauser:
 - Reach out to Dr. Jones and the CPR E TAs.
 - Look into project code.
- Full Team:
 - Continue discussions with our advisor to better refine the definition of our project and beginning steps

• Summary of Weekly Advisor Meeting (If applicable/optional)

First advisor meeting summary:

- Introduced ourselves
- Began discussing team operations
 - A few members have taken CPR E 288
 - No members have priorly worked together
 - Discussed agile-like development
- Discussed personal and team goals of the project
 - Most members wish to gain more C experience
 - Additionally, a motivation is to create something that will benefit other students, instructors, TAs, and researchers
 - Have a usable version of the project operational for the spring to collect feedback and give a trial run
- Discussed project scope
 - Potentially integrate with Code Composer Studio
 - Can edit and selectively use implemented features from the prior group's progress
 - Al or using tools like pre-existing static code analysis programs or linters might be beneficial
- Next Steps
 - o Think about project users, needs, and requirements
 - Create a set of requirements
 - Brainstorming