
EE/CprE/SE 491 Weekly Report #8
11/1/2024 – 11/7/2024
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

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- **Weekly Summary**

  During this time period, most of the team continued fixing various issues with the preexisting code from the prior senior design group and began working on implementing new features. Specifically for the new features, members worked on the ability to upload an entire directory instead of individual files and continued working toward the instructor feedback and analytics functionality. Additionally, progress was made toward establishing user requirements gathering, and the team's website was updated to include necessary project information.

- **Past Week Accomplishments**
  - James Joseph:
    - Created Docker containers to ensure a reliable environment for runtime analysis
  - Samuel Lickteig:
    - Worked on two new tables in backend
      - Failure table to hold an assignment id, pattern id, and section id (name subject to change)
        - Made so professor can eventually get count of each antipattern in each section
      - Section table to hold section name and professor id
      - Working on having failure table be automatically populated whenever someone uploads a file, but going to opt for pattern id instead of section id for now as we don't have sections implemented yet

    - Alix Noble:
        - Continued work on instructor feedback page
        - Got proof of concept running for charts using Bokeh
    - Andrew Sand:
        - Responded to the ETG about getting access to the virtual CyBot code
        - Further prepared for User Requirements Gathering
            - There is an upcoming meeting with Dr. Jones next reporting period for user requirements gathering
            - Refined and added questions based on feedback from this report period's advisor meeting
            - Generally prepared the document for collecting notes to create formal requirement definitions from
        - Sorted out issues with local installation of the project
            - Turns out there were some local configuration problems
            - Local installation should now be working correctly on Ubuntu
        - Updated the team's website
            - Added the Project Overview
            - Added team member roles and bios
            - Added recent weekly reports
    - Owen Sauser:
        - Continued working on the project uploading feature.
        - Looked into the practicality or usefulness of certain features.

- **Pending Issues** (If applicable: Were there any unexpected complications? Please elaborate.)
    - James Joseph:
        - The makefile is still having complications even when running in a fresh environment. More testing and modifications will be needed to get the unit tests up and running.
    - Samuel Lickteig:
        - Some sections of the code have less comments explaining things than anticipated, so it's taking more time than expected to understand the full feedback system in the backend.
        - Pythons dynamic typing is making it more difficult to understand the current backend code
    - Alix Noble:
        - N/A
    - Andrew Sand:
        - N/A

- Owen Sauser:
  - Trying to figure out how to do recursive file selection.
    - As in if a user selects a folder to upload, it will upload the files in that folder and the files in any folders inside of that on and on until all are found.
  - Making syntax for cccignore

- **Individual Contributions**

NAME	Individual Contributions	Hours this Week	Hours Cumulative
James Joseph	Runtime analysis configuration	4	37
Samuel Lickteig	Setting up backend for sections and failures	4	31
Alix Noble	Bokeh charts on instructor feedback page	2	21
Andrew Sand	Furthering User Requirements Gathering, Updated Website, and Fixed Local Installation	6	31
Owen Sauser	Project upload feature development and learning flask	2	22

- **Plans for the Upcoming Week**
  - James Joseph:
    - Fix makefile and report results back to the code
  - Samuel Lickteig:
    - Complete integration of section and failure tables on backend with a ‘default’ section so it can be tested
    - Fully decide as a team the main changes we are going to make to the current project (setting up sections, TAs, etc.)
  - Alix Noble:
    - Make custom Bokeh charts with my fake data
    - Possibly start getting real data from backend into charts
  - Andrew Sand:
    - Reach out to a CPR E 2880 Teaching Assistant for user requirements gathering
    - Begin working on first GitLab Issue (Updating the application’s About page to be more relevant)

        - Begin drafting some rough screen sketches for the planned UI overhaul
        - Look into the CourseGPT resources that Dr. Rover provided the team
    - Owen Sauser:
        - Get a picture of myself for our website.
        - Try to get a working prototype of the project upload feature working

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

- Dr. Rover was not here last time, so everyone needed to get caught up over the past two weeks
- Members have been attempting to get the prior team's code running
    - There have been a lot of errors
    - Trying to get the project to a usable state
    - Maybe get a meeting set up with Connor to get stuff figured out
- Need to get a server set up for the project
    - Contact ETG about getting this configured
- ETG got back to us for the CyBot and CCS
    - Meet with Dr. Jones next advisor meeting to discuss CCS and User Requirements Gathering
- Look into CourseGPT (From Dr. Selim) as a compliment
    - Might be a good complimentary tool for the project
    - Don't use this for generating code, use it for more conceptual concepts
    - Parse data sheet and other course material
    - Just need to consider the pros and cons of using AI (Ethics)
- Look into VS Code with a specific extension instead of CCS
    - Might be good thing to talk about with Dr. Jones next semester
- Want to be able to only allow students to be added that are actually taking the course
    - Currently, anyone can create an instructor account
- Telemetry to measure
    - Lab sections
    - Number of logins
    - Amount of time logged in?
    - Number of errors per run
    - Amount of specific types of errors