SE/EE/CPR E/CYB E 492 – sdmay24-33
PrairieLearn Senior Design Team
Week 2 Report

January 26 - February 9
Faculty Advisors: Phillip Jones

Team Members:

Chris Costa - *Role not yet assigned*
Matt Graham - *Role not yet assigned*
Mitch Hudson - Technical Lead
Carter Murawski - Note Taker
Tyler Weberski - Project Manager
Andrew Winters - *Role not yet assigned*

Summary for Progress this Week

- Continued development of the 288 assignments
- Worked on Final design document presentation
- Completed HW 10
    - Needs review
- Wrote Okta Integration writeup
- Merged all branches back to master
- Corrected homework 2
- Reviewed homeworks 1, 4, 5, and 11

Past Week Accomplishments

- Met with advisor for Spring semester planning
- Went through and peer review a lot of each others work
- Able to work through peer review with Advisor to finalize before showing off progress to TA

Pending Issues (from Git Issue Board)

- In Development
    - HW6
    - HW7
    - HW8
    - HW9
    - HW12
- Ready for Peer Review
    - HW10
    - Cleaning Up Template Questions
- Peer Review in Progress
    - HW1
    - HW2
    - HW3
    - HW4

- HW5
- HW11

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Chris Costa	Week 1: Looked at the provided code, prepped hw2 and hw5 for review, merged HW 2 and HW 5 Week 2: Edited homework 2 based on peer review, prepped homework 9 for review	10	61
Matt Graham	Week 1: Looked into the emailed code from the professor, reviewed homework 2, and prepared homework 3 for review. Week 2: Reviewed homeworks 1 and 5	10	62
Mitch Hudson	Week 1: Completed HW 10, wrote up PrairieLearn Okta Integration document, looked at professor code and merged old HW 7 and 4 branches from Fall semester Week 2: Updated homeworks 3 and 4 with peer review feedback. Wrote HW11 so it is ready for peer review. Finished setting up Okta SSO. Started watching tutorial videos to determine what needs to be updated	28	139
Carter Murawski	Week 1: Reviewed Homework 3, and started review on HW 5 Week 2: Reviewed homework 4, helped fix HW 2	10	60
Tyler Weberski	Week 1: Finish up work on HW1, from both stuff they missed (H1_Q3c), added the question I did (H1_Q5), and the work the last group did. On top of that made it into an assignment, which includes next step into handing to other group members for review. Week 2: Finished up homework 1 and pushed it to the peer review, and started peer reviewing homework 11	10	61
Andrew Winters	Week 1: Looked at the code emailed to us and pushed stuff from last year to the main branch Week 2: started working on homework 12, still have more work to do on it, reviewed homework 1	10	56

Comments and Extended Discussion

N/A

Plans for Coming Week

1) HWs for external review:

- Goal to minimally have HWs 1-3 ready for external review by next meeting.

- Provide a link to a nicely structured Google doc to allow external reviewers to easily provide the team with feedback

2) Technologies that need work:

- Drawing: Auto-drawing. For use in questions like **HW5.2** (drawing mostly done last year), **HW5.1** (will need some thought), **HW8.1** (ADC question looks straightforward once drawing technology is understood), and likely are other questions were this technology would be useful
  - Youtube link (see: second of two approaches): https://www.youtube.com/playlist?list=PLxBunBHKyhAdOXsxX1PimgDjUFbvVTM0K

- Auto-grading / Auto-generation for Assembly type questions, and C memory-map type questions:
  - Setting up a Docker image that supports Assembly auto-grading: https://www.youtube.com/watch?v=rN2Qdl52o48&list=PLxBunBHKyhAdOXsxX1PimgDjUFbvVTM0K
    - Uses QEMU, and ARM cross-compiler
  - Current state from last year, and next steps: https://www.youtube.com/watch?v=VEqql1cvd88&list=PLxBunBHKyhAdOXsxX1PimgDjUFbvVTM0K

3) Microcontroller device emulation:

- Javescript-based Pi Pico emulator: for auto-grading non-configuration type microcontroller device questions.

Summary of Weekly Advisor Meeting

Advisor meeting Thursday 2/2/24

- For reviewing questions, see if any inputs break the question
- Look into Octa access
- Look through DR. Jones's code and see how to implement it with the other controllers
- Fix the reviewer's comments

Advisor meeting Thursday 2/9/24

- Come up with and sort module names in PL
- What will a manual grader see on their end
- Have HW 1,2 and 3 ready for review