SE/EE/CPR E/CYB E 492 – Spring 2024
PrairieLearn Senior Design Team
Week 14 Report

February 24 - March 1

Faculty Advisors: Phillip Jones

Team Members:

Chris Costa - Auto-Drawing
Matt Graham - Emulator
Mitch Hudson - Technical Lead - ARM Assembly Auto grading
Carter Murawski - Note Taker
Tyler Weberski - Project Manager, Auto-Drawing
Andrew Winters - ARM Assembly Auto grading

Summary for Progress this Week

- Finished up randomization for H5_Q2
- Finished up randomization for H8_Q1
- Write-up for PrairieLearn Auto-drawing created
- Finished homework 12 questions 2-5
- Wrote bare-metal ARM auto-grader
- Made write-up for bare-metal ARM auto-grader
- HW4 and 7 are ready for TA review
- Updated question names / assessment formatting for hw1-3
- Got HW4 and 7 ready for external review

Past Week Accomplishments

- Created ARM autograder
- Working on HW12
- Continued peer reviews and getting HWs ready for TA review
- Implementing Prairielearns recommended drawing technique

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Chris Costa	Worked on H5_Q1 creating the drawing and and experimenting with inputs, started working on HW9_Q2 question with drawing	6	80
Matt Graham	Completed revisions for homeworks 4 and 7, refactored C autograder questions in homeowrks 4 and 7,developed pi pico comparison to CPR E 288 microcontroller started experimenting with the pi pico emulator	8	82
Mitch Hudson	Completed code for bare-metal ARM grader	28	200

	Made writeup for bare-metal ARM grader Cleaned up HW7 and responded to some feedback Finished hw12 q2-5 Updated question names and formatting for hw1-3 Pushed hw 4 and 7 to master for TA review		
Carter Murawski	developed pi pico comparison to CPR E 288 microcontroller started experimenting with the pi pico emulator	7	70
Tyler Weberski	I have almost finished H5_Q2 with the randomization and autograder (1 note about question for part b grading in comments/extended discussion). Randomized H8_Q1 picture, and did the writeup for the PrairieLearn drawing	6	77
Andrew Winters			68

Comments and Extended Discussion

- With part 2 of H5_Q2, how do we want to approach until we figure out UART, should I just wait, or change what previous group currently has for current work, so that we can push out Homework 5 for TA review
- For H8_Q1, I had an idea about randomizing with the code section, specifically using possibly SS1-3 as well compared to just SS0
- For scoring on the different questions, Can we just get an update on how each question should be scored points wise for you? (No point values set in homeworks so far)

Plans for Coming Week

- Homework 8 done and sent out for review

Summary of Weekly Advisor Meeting

- Add random generation and autograding to HW 12
- Contact previous group for autodrawing
- Change randomization from I/O to ports and wires for HW 4 Q2
- HW5-Q1, fully randomize values in the PCTL and AFSEL registers
    - See if we can have users add text to a drawing
- Change value ranges for HW7 Q6