

EE/CprE/SE 492 WEEKLY REPORT 02

2/19/23 - 3/4/23

Group number: sdmay23-46

Project title: Interactive Embedded Systems Learning using the Prairie Learn Framework

Client &/Advisor: Phillip Jones

Team Members/Role:

- Ben Stroup
- Caden Last
- Jack Kennedy - Git Team Lead
- Emmanuel Paz - Server Lead
- Ryan Dela Merced - Project Manager
- Cody Prochaska - Technical Team Lead
- Ryan Bumann

- Weekly Summary (Short summary about what the group did for the week. This should be about a paragraph in length. These are just a few questions to help you get started. What was the overall objective for the week? In general, what tasks were completed? Were there any changes made to the project?)
 - This week, we again continued to develop interactive homework questions using the prairie learn framework. Most of our interactive homework questions are already implemented, so our main focus this week was to try and explore the options of how we can autograde them, and make them more interactive, and randomizable. We also made sure to work more on documentation and we got into some of the harder parts of these questions like grading assembly.
 - Past week accomplishments (Please describe/summarize as to what was done, by whom, when and, collectively as a group. This should be about a paragraph or two in length. Bulleted points are acceptable as well. Please keep only your technical details related to your project. Figures, schematics, flow diagrams, pseudocode, and project related results are acceptable, but please ensure that they are legible (clear enough to read) and to provide an explanation. If researching a topic, please add a few details about what was learned and how it is relevant to the project. If two or more people worked on a single task, be sure to distinguish how each member contributed to the task. Specific details relating to the assistance provided to other members may be included here. Do not include classwork, such as individual reflection assignments, and group meetings as part of your duties.)

- **Caden:** Finished Homework 7. Went back through homework 7 to see how to make it dynamic. Failed attempt. Created a wiki explaining what our project is and how to re-create it. Added all of our documentation to the wiki.
 - **Ben:** Found an issue with blank homework questions being “ungradable” and not giving partial credit even if some answers were correct. Found a work around solution and implemented said solution into half of the homeworks. Also started reviewing past homeworks to make more dynamic and autogradable.
 - **Manny:** Finished autograding on questions with c. Created more videos for server documentation. Helped Cody with potential solution to assembly autograding.
 - **Ryan D:** Worked on HW10 questions, was able to create fully auto-gradable and dynamic questions for question 2b,c. Furthermore, getting more familiar with 288 concepts to create dynamic questions for HW10 question 1. These questions involve heavy usage of the datasheet.
 - **Cody:** I finished the rest of the possible HW12 questions. Looked at the rest of assembly code questions for HW12 and realized we would need an assembly autograder, worked with ben on a prototype before realizing a more solid solution like actually compiling and running assembly would be better, figured out a solid way of autograding student assembly code and applying this to all of the assembly code questions in the class with Manny.
 - **Jack:** Finished HW9. Created a server documentation presentation. Collaborated with TA and ETG about Oauth and microcontroller emulation/simulation or using the board
 - **Ryan B:** Continued working on autograder questions and making them dynamic
- Individual contributions (Creating this section is optional, but it is Required to include the “Hours Worked for the Week” and their “Total Cumulative Hours” for the project for each member somewhere relevant in your report. Your individual weekly hours should be at a minimum of 6-8 hours for this course. So please manage your time well. Also, ensure that individual contributions support your claim to the weekly hours. Be honest with the reports.)

Name	Individual Contributions	Hours last 2 weeks	Hours Cumulative
Caden	Created a wiki and collected all of our	10	66

	documentation and put it on the wiki. Finish HW 7		
Ryan D	Finished creating dynamic and auto-gradable questions for HW10 Q2. Reviewing CPRE288 concepts to develop further questions.	12	62
Ryan B	Experimented way to make dynamic graphics faster with svg's. Worked on autograder, specifically how to move data between all the different types of files, Python, JS, C. Worked on documentation for setting up external autograding for production and local.	22	75
Cody	Finished HW12 initial questions, set out good plan for implementing ASM autograder into the rest of HW12 ASM questions	12	62
Jack	Finished HW9. Created a server documentation presentation. Collaborated with TA and ETG about Oauth and	8	58

	microcontroller emulation/simulation or using the board		
Manny	More videos for documentation and created c autogradable questions.	9	69
Ben	Fixed issue with blank homeworks and started reviewing past homeworks to make better.	9	70

- Comments

- Plans for upcoming weeks
 - Caden: Finish up the wiki and add any new documentation/resources. Go back through finished homeworks and improve the questions
 - Ben: fix the rest of the homeworks and document the problem using a powerpoint/youtube video. Continue reviewing homeworks.
 - Manny: Finish up on server documentation and focus on assembly autograding.
 - Ryan D: Continue to develop datasheet questions for HW10 Q1. Help out with documentation and creating the wiki on our gitrepo
 - Cody: get the ASM autograder up and running with docker implementation and get working with WH12 questions
 - Jack: Present findings and create a plan for running microcontroller code through either emulation, simulation or using the physical board.
 - Ryan B: Continue expanding the type of programs that we can autograde using the C autograder.

- Summary of weekly advisor meeting (If applicable/optional)
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