

## **EE/CprE/SE 492 WEEKLY REPORT 01**

**2/5/23 – 2/19/23**

**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 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. Furthermore, we continued to document our progress through youtube videos and other ways of documentation such as powerpoint to help us and future groups to understand how we are proceeding with our project.
- 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: Created “normal” questions for homework 7. Made a few UART questions. Talked with group members who took CPRE 288 about how to randomize the questions with the data sheet.
  - Ben: Finished homework 11 and made to mostly autogradeable, I also started working on an assembly emulator so that i can make future assembly questions more interactive and autogradeable.
  - Manny: Finished some videos for server documentation. Figured out implementing a c-auto grader for questions that need it. Continued to implement c-auto grader into questions.
  - Ryan D: Created all of question 10 HWs statically in prairie learn. Continued to collaborate with team members about how to go about making these questions interactive and autogradable, as it involves questions that require using the datasheet, and configuring registers.
  - Cody: Prototyped and developed the first version of the “normal” HW12 questions while getting some ideas from ben. Also worked on an assembly emulator with Ben, he mostly wrote the emulator while I was researching the exact functions of each ARM assembly instruction to make sure we were simulating them correctly.
  - Jack: Prototyped and developed HW9. Collaborated and presented HW9 with client. Contributed to server documentation. Working with ETG about new integrating with ISU Oauth. Working with TA about simulating microcontroller for c auto grading.
  - Ryan B: Worked 288 TA to get setup on our server to start getting feedback about our questions. Wrote documentation on how to use the JavaScript drawing elements from PrairieLearn. Figured out another way of using C-autograder than Manny, and working on implementing autograders into questions.
- 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
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Caden	Working on homework 7 and figuring out how to randomize with the data sheet	10	56
Ryan D	Continued to work on HW10 questions. They are already in PL and pushed. Working on making them randomizable and autogradable.	10	50
Ryan B	Worked on HW5 Question2 autograders. Wrote javascript instruction doc.	12	53
Cody	Working on HW12 questions as well as the ARM assembly emulator in python	10	50
Jack	Working on Oauth, hw9 and simulating microcontorller	10	50
Manny	Continued working on server documentation and continue to setup auto grading for questions.	13	57
Ben	Finish up homeworks and get them organized, started making assembly emulator for one of the more interactive questions.	8	61

- Comments
  
- Plans for upcoming weeks
  - Caden: finish homework 7 and implement multiple versions of the questions with the data sheet
  - Ben: Check all homeworks and make sure they are mostly if not all autogradable. Continue work on assembly emulator.
  - Manny: Finish up server documentation and create a “Issues had and how we fixed it” video. Make sure all auto graded questions are done.
  - Ryan D: Create the first version of HW10 datasheet questions autogradable, and randomizable. Goal is to try to get some part of it finished to demo to the group.
  - Cody: Get HW12 questions finished with use of the assembly emulator to autograde questions. Get TA’s to test the emulator to make sure it’s working as expected. Go over finished homework questions revising them to be more interactive when possible.
  - Jack: iterate on HW9 questions, collab with TA and ETG. Oauth and microcontroller simulating.
  - Ryan B: Continue working implementing C autograded for questions. Iterate current questions based on feedback from 288 TA’s.
  
- Summary of weekly advisor meeting (If applicable/optional)
  - We talked with our advisor/client Phillip Jones, about our progress on the homeworks and how we are implementing the homeworks he provided us with into PrairieLearn. We also discussed more about documentation and how we are going to be getting some more feedback about it in the next meeting.