

## **EE/CprE/SE 492 BI-WEEKLY REPORT 04**

**3/24/23 - 4/7/23**

**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 questions, but focused on documentation. Our documentation included adding comments to all of our code, creating new youtube videos to help guide future groups that are going to work on prairie learn which will allow them to be able to easily catch up to speed. Furthermore, we are looking into a new way to help CPRE 288 students by creating a interactive dataflow problem system that allows students to practice setting up different peripherals on the microcontroller.
  - 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:** I went through and added new documentation to the wiki page then went through the old videos. Finished info.json file for questions that needed it and fixed up questions that could use it.
- **Ben:** I created a Documentation overview page and also created two presentations with corresponding videos going over how to create course instances and homeworks, and how to fix some errors in questions.
- **Manny:** I created a video walking through the process of mounting a course to PrairieLearn and worked on presentation for local development.
- **Ryan D:** I worked on commenting all of my code that I have written for HW questions that I made. Furthermore, I created a powerpoint that showcases examples and ideas for dataflow problems that can be used.
- **Cody:** Made a video on creating custom auto grading docker image. Fixed all errors with ARM assembly code grading. I also researched the ARM emulator type I was using to better fully understand what was happening when running binaries intended for a different CPU architecture.
- **Jack:** revising server documentation videos, creating server documentation overview slides for server documentation and videos
- **Ryan B:** Worked on auto grading methods doc, doc revisions, creating presentations for documentations I've written, and go back and make sure the code I wrote is all commented. Worked on flow problem UI for adding different peripherals to the controller and create problems based on that.
- 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	Work on editing videos. Adding new documentation to wiki. Adding information to questions. Improving questions that could	11	86

	use it. Look over videos. Make powerpoint for video. Recorded question making video.		
Ryan D	Commented on all of my code I wrote for HW questions, created a powerpoint that has examples of dataflow problems for future use.	10	77
Ryan B	Worked on auto grading methods doc, doc revisions, creating presentations for documentations I've written, and go back and make sure the code I wrote is all commented. Worked on flow problem UI for adding different peripherals to the controller and create problems based on that.	11	98
Cody	Made a video on creating custom auto grading docker image. Fixed all errors with ARM assembly code grading. I also researched the ARM	14	86

	emulator type I was using to better fully understand what was happening when running binaries intended for a different CPU architecture		
Jack	revising server documentation videos, creating server documentation overview slides for server documentation and videos	12	76
Manny	Created video and worked on presentation for another video.	6	78
Ben	Creating documentation overview page and creating 2 presentations with corresponding videos	9	85

- Comments
  
- Plans for upcoming weeks
  - **Caden:** Finish recording and editing first question video then make slides and video for the more questions video.
  - **Ben:** Wait for feedback on current documentation and help others with theirs to set up best for people using our documentation.

- **Manny:** Finish up documentation and transfer over authentication for google, ssh to Phillip.
- **Ryan D:** Finish commenting all my code, add onto existing dataflow problem ideas powerpoint with more examples and how we can incorporate them into our project
- **Cody:** make another documentation video on assembly grading. Finish assembly grading and integrate into the rest of HW 12.
- **Jack:** Finish revising server documentation vidoes based on client feedback
- **Ryan B:** Finish documentation and presentations. Create videos based on them. Finish the flow problem UI and be able to dynamically create and grade configuration problems.

Summary of weekly advisor meeting (If applicable/optional)

- Dr. Jones gave us a powerpoint showcasing how dataflow problems can be created, we are to expand on that topic.