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## **EE/CprE/SE 491 WEEKLY REPORT 3**

**9/27/24 - 10/3/24**

**Group number: sdmay25-33**

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

**Client &/Advisor: Philip Jones**

### **Team Members/Role:**

**The delayed development of Team Member Roles has been discussed with Professor Shannon.**

**Rachel Druce-Hoffman — Notetaker**

**Justin Cano — Server Manager**

**Joey Krejchi — General Team Member**

**Caden Otis — General Team Member**

**Devin Alamsya — General Team Member**

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### **○ Weekly Summary**

The overall objective for this week was to get familiar with the Prairie Learn Framework and see what the previous team did for the current version of the project. We looked through the official Prairie Learn documentation to understand what we can do with it, looked through the team of the previous team's GitHub repository and documentation, and watched videos from the previous team to understand more about how they designed and developed the project in its current state. The documentation made from the previous team also left us with next steps for the project, so we now have a good idea on where we'll start on our project. We have obtained a virtual machine, but still need to start our own repo to begin development of our project.

### **○ Past week accomplishments**

- All team members looked more into the Prairie Learn framework and the documentation created by the previous team, including videos and written guides.

### **○ Pending issues**

- None at the moment

○ **Individual contributions**

| <b><u>NAME</u></b>   | <b><u>Individual Contributions</u></b><br><i>(Quick list of contributions. This should be short.)</i>  | <b><u>Hours this week</u></b> | <b><u>HOURS cumulative</u></b> |
|----------------------|--|-------------------------------|--------------------------------|
| Caden Otis           | I looked into the previous team's documentation, Github repo, Youtube videos, and some of the Prairie Learn documentation to learn more about the framework and catch up on what the previous team did for the current version of the project  | 2                             | 4.5                            |
| Joey Krejchi         | I read through the PrairieLearn documentation to learn how to write questions and assignments and also looked through the previous year's documentation. I also did some quick research into QEMU and how that functions. I also demoed the previous year's website.   | 1.5                           | 4                              |
| Justin Cano          | I got our VM set up through ETG so we could start building our project. I also started reading through last years documentation to try and start getting Prairie Learn setup on the new VM.  | 2                             | 5                              |
| Rachel Druce-Hoffman | I continued watching videos from the last group, primarily the initial PraireLearn setup/basic question guides as well as the videos covering where the last team left off and what they would have done next.   | 1.5                           | 4.5                            |
| Devin Alamsya        | Looked through the documentation of last years team and tried to understand their process and how the project is to work. Looked into Prairie Learn and the documentation available on it. I also looked through some of the old homework assignments to get an idea of the questions we're being asked to make interactive. | 2                             | 2                              |

○ **Plans for the upcoming week**

- Caden Otis: I will start to look through the past CPRE 288 HWs and continue to look through the previous team's documentation to get some ideas for how we can make questions more interactive for students. I will also look more into the different emulation tools (QEMU and Pico) to understand how we can utilize emulators to make questions more interactive. I will also download a VM on my machine to access a local version of Prairie Learn, and I will make a test question to learn the basics of using the Prairie Learn Framework.
- Joey Krejchi: I will learn more about how QEMU works and do more research on how the previous years implemented this technology. I will also review some of the 288 concepts because it's been a few years. I will also setup PrairieLearn on my personal laptop and make a question or two.
- Devin Alamsya: I will be going through old resources on CPRE 288 to brush up on knowledge and skills with the class. Continue to look through old CPRE 288 homeworks to get an idea of how old homework questions can be easily automated. I will install prairie learn locally and start toying around with making test questions as well.

- Rachel Druce-Hoffman: I want to begin trying to implement questions from homeworks into Prairelearn to get a feel for the basics. From there, I will focus on specific aspects to modify in already-implemented questions (pictures and adding more randomness in general). As we begin teaching ourselves these mediums, we will be able to refine a timeline and plan for our project development.
- Justin Cano: I plan to keep following the previous years documentation on how to get our VM setup. After that, I will start doing research into how to create questions on prairie learn and use the CprE 2880 materials to start making questions.

○ **Summary of weekly advisor meeting** *(If applicable/optional)*

During this week's advisor meeting, we learned more about our next steps for working on the project, where each team member needs to create 1-2 test questions on a local version of Prairie Learn (by next meeting) to learn the basics of how to use the framework. We also gained some insight into how our collaboration will look throughout the duration of the project, where each task we take on will be completed in groups of two. We also learned more about the general progression of the project on a week-by-week basis. Each week, we'll need to implement/polish existing questions that the previous team created, and we'll also need to develop something new in some way: new tech aspect, question type, etc. Overall, this week's advisor meeting focused on talking about how we'll work on the project and what we can do to ensure we make adequate progress each week.