

**EE/CprE/SE 492 WEEKLY REPORT 03**

**3/5 – 3/24**

**Group number: Team 25**

**Project title: Con-Sea-Erge**

**Client: Cara Fila**

**Advisor: Dr. Fila**

**Team Members/Role:**

**Devin Milligan - Firmware/Hardware**

**Ethan Peterson - Firmware**

**Ryan Hickok - Firmware**

**Drake Dodson - Frontend/Backend**

**Hunter Northern - Enclosure Design**

**Josh Van Drie - Frontend/Backend**

**Brian Tran - Frontend**

- **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 were able to accomplish a couple of our goals for this semester. For the enclosure we were able to explore a new possibility for standardizing our feeding amounts and getting an enclosure that fully adheres to client expectations. The application is close to completion, this week more functionality was added to send tank data to the database, change the tank name from the application and update it in the database, and populate most of the values on the app straight from the database.

- **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.**)*

- Ryan
  - This past week, I continued to work on cleaning up the code to make it more readable. I also started to look into what it will look like code-wise to intentionally move the motor at appropriate times.
- Devin
  - This past week I verified the design of the circuit board. I received the circuit board and I verified that all the components were able to fit into their respective locations. As well, used a multi-meter to confirm all connections on the pcb were correct to ensure no shorts were made. This board was also tested with code made by our team to confirm its functionality.
- Ethan
  - This week, I continued my work on the scheduling functionality with the use of the data from the backend. I also did some testing with the motor functionality.
- Brian
  - This week, I worked on updating the error messages and started to implement disablement of login/account registration buttons to prevent the user from pressing them until requirements are met. Also continued researching image uploading.
- Drake
  - I've primarily been working on making improvements to the feeding schedule view. I've implemented a Apple spinner that pops up when you want to change a time.
- Josh
  - I added a component to select the days of the week to feed the fish. My feedtime component needs to be combined with Drakes to take positive aspects from both and combine them. I also wrote a few more functions to send and receive specific tank information from the database and be able to edit the tanks name.
- Hunter
  - More enclosure tweaking and redesign to counteract possible issues when working with the other design aspects of other teams.

- **Pending issues**

- None for the past two weeks

○ **Individual contributions**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b> <i>(Quick list of contributions. This should be short.)</i>	<b><u>Hours this week</u></b>	<b><u>HOURS cumulative</u></b>
Devin	- Verification and Testing of circuit board/pcb	6	18
Brian	- Error messaging updating and research	6	16
Ethan	- Work on Scheduling functionality for the firmware.	6	17.5
Hunter	- Further enclosure design	6	18
Ryan	- Continued to work on cleaning up the code - Began looking into intentional movement of the motor	6	18
Drake	- Started working on improvements to the feeding schedule view - Did some clean up of the code	6	15
Josh	- Sending and receiving data functions - Style cleanup - Feeding scheduler component	12	30

○ **Plans for the upcoming week** *(Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.)*

- Ryan
  - I will start to move my focus away from code readability and spend more time working with Ethan on the scheduling functionality as well as fully implementing the motor into the code. This will include researching how to move the motor at appropriate times along with some physical testing with the motor.
- Devin
  - I will start working with either the firmware or hardware team to ensure progress continues on in those sections of the team. Either helping with

enclosure design and function or aiding in the firmware development.

- Ethan:
  - Next week, I am shooting to complete the scheduling functionality for the feeding schedule so we are able to do testing for this. This should give us enough time to discover bugs and fix them.
- Brian:
  - Next week, I will continue to update error handling and continue research to implement photo uploads. I will also need to figure out image storing for firebase.
- Drake
  - I need to continue to work on my new additions to the feeding schedule view and I plan on working with Josh to merge our changes together and make the app look better. Another thing I need to do is work with the whole group to figure out how we are going to implement the timings of the feedings.
- Hunter
  - Planning to continue working on the enclosure specifications and to print more prototypes of the housing component
- Josh
  - I am hoping to finish all the functions that are needed to send and receive data from the database. Make the components fully customizable so that the user is able to make all changes that are necessary for the final product. Maybe start working with firmware to figure out how to connect to physical device from application.

### **Grading criteria**

Each weekly report is worth 10 points. Scores will be awarded as follows:

- **8 – 10:** Progress for your project seems to be suitable. Documentation and hours reported by team members are adequate.
- **6 – 8:** There is scope of improvement both in your report and your project progress. Can consult with instructor/TA after class for further inputs.
- **< 6:** Please talk to instructors/TA after class hours about any difficulties that you/your team is facing.

Each weekly report should be unique in that they have a unique set of supporting details for your contributions. So please do not just copy your reports from the previous week. In addition, please avoid any personal pronouns (he, she, I, you). Try to keep your reports as neat as possible.