sdmay23-25: Con-sea-erge [Team 2]

Week 1 Report

September 26 - September 30

Team Members

Ryan Hickok — Backend Lead
Devin Milligan — Firmware Lead, Client Correspondent
Brian Tran — Frontend Lead
Josh Van Drie — Frontend Support
Hunter Northern — Hardware Lead
Drake Dodson — Backend Support
Ethan Peterson — Firmware Support

Summary of Progress this Report

In the first period of this project we were able to complete the user needs document by talking to our clients, Cara and Jamie, about how they care for their fish around the clock and the needs that the fish need to be met. As well, we were able to ask the clients how they would like a device to act and how they would interact with it to fully meet their needs. We also were able to create a great draft of the requirements for this project based on the needs of the clients and the functionalities requested. We started looking into possible hardware, software, and firmware ideas for advancing to an actual product. We did this by giving different solutions to each team member to research and then we will be deciding the best approaches, as a team, from the research that was done.

Pending Issues

We have to confirm that our device will be allowed to connect to the Iowa State wifi/network, in order to be able to connect to the application backend. We would also like to confirm with the clients that our requirements document fulfills all of their needs as well as the fish's needs. In doing that, we hope to present some of our initial ideas to the client to get an idea of what they hope the design will both look and function like.

Plans for Upcoming Reporting Period

We plan to solidify the approach to the type of hardware we will be using to move forward with this project. We also plan to continue to research more into the types of backend hosting platforms that we are able to use to allow the application to work anywhere with an internet connection. Lastly, we will start to generate ideas for what the device will look like and how it will interact physically with the tank.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Ryan Hickok	Began to research backend options as well as brainstorming design ideas.	3	0
Devin Milligan	Researched firmware possibilities and helped to brainstorm ideas for system design.	3	

Brian Tran	Began looking into and try out potential designs for the frontend	3	
Josh Van Drie	Began looking into and try out potential designs for the frontend	3	
Hunter Northern	Began to look into potential ideas for board design as well as system design as a whole.	3	
Drake Dodson	Began to look into potential backend designs	3	0
Ethan Peterson	Began to look into potential designs for the board and system as a whole	3	

Gitlab Activity Summary

Nothing to report.