Fish Tank Monitor Week 20 Updates

Savannah Tanner, Kaye Neill, Astrid Delestine

Dear Project Partner,

Since our last message, we have continued with steady progress on the development of the Fish Tank Monitor. We have completed our final block validation documents for three of our blocks. These include the user interface, the test strip activation module, and the modular enclosure.

The user interface is now capable of receiving inputs from the user through buttons and potentiometers. This allows the device to operate between screens at the user's request. The block works closely with the sensor control block which is utilized to control the thermometer and the color sensor. These sensors are key to obtaining data on the aquarium.

As for the testing methodology, we continue to push forward with the mechanisms. The design now can hold the test strip cylinder, along with the seven interior test strips. Design work has begun on attaching various parts of testing together, and hopefully will have a roughly functional testing mechanism by the beginning of next term.

We have also presented our blocks for verification. The blocks presented by each member of the team are as follows:

Savannah: user interface, sensor control

Kaye: test strip cylinder, test strip activation module.

Astrid: power supply, enclosure

In addition to these presented blocks we have many more that are nearing completion and will need to be completed for the entire system to be fully functional. The motor control, user controls, and power supply blocks have all been completed in their design. Thus the PCB will be ordered shortly.

We are now preparing for our first system verification. In preparation for this, we are updating the Project Document that we began working on at the beginning of our project. These updates include adding proof of our engineering requirements, our block validations, and our system verifications.

Finally, have also updated our order sheet and have calculated total cost of the systems. We are currently below budget but not by much and we are concerned that we may surpass our budget by the end of this project.

Thank you and we look forward to discussing the project more soon,

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