Bi-weekly Report #2

Summary:

Right now we are working on incorporating the prior teams work into our own iteration of the product. We are the fifth team to try to develop this product, and we have been told that we can use prior teams finding to help us along with development. As will be detailed below, work is being done to research the prior teams findings and replicate the things we find favorable while improving/redesigning the aspects we find unfavorable.

Individual Contributions:

Samual Sklar:
- Summary: Looked at the circuit designs of previous teams and researched what I will need to do to accomplish some of the new functionality that we need to add. Started to think about what exactly I will need to research more, as I am working on more of a hardware side to the project with little previous hardware experience.
- Hours worked: 10
- Total Cumulative Hours: 18

Micheal Momot:
- Summary: Started familiarizing myself with node.js, as that is what the previous team used to implement their server. Identified OWFS which previous teams use to communicate with the hardware. Researching into the database schema of previous groups.
- Hours worked: 8
- Total Cumulative Hours: 16

Seth Jones:
- Summary: Reviewed the overarching goals of the project. Began looking into some of the options for embedded computers that we can use on our project (raspberry pi, arduino). This included seeing what worked for past projects. Set up a OneNote for collaborative note taking.
- Hours worked: 8
- Total Cumulative Hours: 16

Thomas Smith:

- Summary: Finished an initial rough draft of high level architecture of product. Has determined a regular meeting schedule for the team, as well as which platforms will be used for communication. Is starting the task of writing up tasks/stories for the team on a Trello board.
- Hours worked: 14 hrs
- Total Cumulative Hours: 22 hrs

Kailin Zheng:
- Summary: Had a preliminary understanding of the required hardware for the project. Read the instructions and design the circuit, and ready for complete the hardware safe training next week. Help team to complete the Trello board and website design
- Hours worked: 14 hrs
- Total Cumulative Hours: 22 hrs

Shubham Chauhan:
- Summary: Started working on the Interface component of the teams project. Looked at the previous semester's interface which was implemented. Working on maintaining the teams website. Started looking into the programming languages the previous teams had used in designing an interface and learning more about it.
- Hours worked: 12
- Total Cumulative Hours: 20

Pending Issues:

Last reporting period we mentioned the potential lack of hardware experience being an issue. While steps are being taken to mitigate this, the issue still persists in a certain capacity. Another issue is us compiling four different team's documentation into a usable state. This proved to be a bigger undertaking than we previously thought. Since each team did things a little differently than the prior, we need to pick which teams methods to use for different aspects of the product.

Plans:

We have decided that our overall plan for the semester is to recreate the product to the stage that the prior team had at the end of their entire senior design. This will be accomplished/feasible since we have all of their design documents at our disposal. This will leave the entire second semester for us to improve the design to the customers requirements.

Short term, our plan is to continue to parse through the prior teams' documentation in pairs. Pairs will be decided by who will be in charge of different aspects of the product. I.e., Our two hardware people will be paired together, our two website and interface people will be paired together, etc. This will allow each pair to decide on certain aspects of the project and then come together to present how each pair would like to go about their particular area of the product.

Once we have completed this, we will work out a high/medium level architecture for the product, and present that to our client. After this, we will proceed based on our feedback from the client.

Website:

http://sddec20-21.sd.ece.iastate.edu/