Wio Link For SVH

GNG 2101 - Deliverable E

Submitted by Team E24

[Gavin Lanteigne, 300072424]

[Jack Redmond, 300115877]

[Clement Boissier, 300096931]

[Philippe Leclerc, 300018544]

[Kaleigh Ionadi, 300112110]

[David MacPhee, 300063204]

Date: October 15th 2020

University of Ottawa

Group Presentation

https://docs.google.com/presentation/d/1sCJd-gmDthMHpWZpm0X4siE0JOcwW-Jm1cm6kFhIP OY/edit?usp=sharing

Project Deliverable Key Components

Project Plan

At the beginning of the semester, our group developed a plan for how we were going to execute all the requirements for our project. There have been some hiccups along the way, but we are doing a rather good job at staying organized and on schedule.

Each week, two different team members are responsible for coordinating that week's project deliverable. So far, every individual has stepped up when it was their week and gotten the task done on time.

There had been one week where a team member was unable to coordinate their deliverable, so we had to stray from the original project plan and swap deliverables between that particular team member and one from the following week.

We have also encountered several deliverables already where they have required quite a bit of extra work, for example, deliverable D when we had to produce our first prototype. These project components that required a portion of work from every team member also caused us to stray from our plan a small bit, however the two members assigned to the deliverable for that week become responsible for dividing up tasks, this way fairness is ensured and we are still staying within the scope of our project plan.

Our Project plan has been working for us however it has cost us at times when miscommunication has been an issue. Moving forward, our plan will continue to cost us if we do not improve these communication issues.

In conclusion, our project plan has worked for us and helped us to finish our prototypes and deliverables with a considerable level of effectiveness and by the dates outlined in said plan. In order to continue to track our plan, it would be helpful for our group to refer back to the original Gantt chart, as a reminder of the agreed upon structure and deadlines expected of each specific project component.

Client Feedback

In our second client meeting, we presented our concept for the project to our client. Though the client was happy with the work we had done up until the meeting, he provided us with some feedback that allowed us to gain a better understanding of his vision for the final product.

Our client loved the simplicity of our menu but had some criticisms behind our general understanding of his expectations. He clarified that he simply wants us to create an interface which can connect to many different hardware that they are already familiar with over at the hospital. In particular, he wants our interface to work well with SensAct, a product they use daily in his line of work.

He spent the time showing us where to begin our research which really helped us to understand better what he wanted us to do, and it greatly helped us when working on our first prototype. Our group is now more confident that we understand the client's expectations, and we believe this is reflected in the creation of our first prototype.

With the information from client meet 2, we modified our prototype to contain a menu with a few simple functions, including the most important one as stated by our client, the "call nurse" button. We made the menu to modify the settings accessible to staff only, instead of on the basic main menu, since the client said he didn't want the patients to be able to change the settings. We also placed an order for some basic Wio Link sensors so we could test our next order.

In conclusion, our client had lots of feedback for us at our second meeting which allowed us to gain a deeper understanding of his expectations and modify our prototype accordingly.

Prototype Development

Prototype I was a low fidelity prototype that used Node-RED dashboard to create a basic user interface. It was more of a proof of concept, it would help us gain more knowledge on the project and help us decide how we would like to proceed with future prototypes. Moving towards Prototype II, there are a few things that we decided are important to keep in check..

- 1. Consider what mistakes and/or shortcomings our previous prototype had and refine them to make them closer to our goal
- 2. Decide what our minimum requirement is for new components on the prototype and prioritize what needs be added first. Add the new components.
- 3. Test prototype with purchased physical components at least 3 days before due date to allow time for modifications.
- 4. Perform any modifications required. If we are working on a time constraint, return to the list of priorities to fix the most important things first.
- 5. Repeat steps 3 and 4 until the desired results have been achieved or time has run out.
- 6. If there's time at the end, add other components that were suggested, but not prioritized in step 2
- 7. Perform one final test before deadline
- 8. Submit prototype

Our next prototype will contain more programming tying it to the physical components used at the hospital. For example it should include the program that connects the touch sensor to the menu.



≡ Wio link Setup				
	PROXIMITY SENSOR	What would the user like to be able to o		
	TOUCHPAD		🗹 Call Nurse	
	MOTION SENSOR		Browse Web	
	Information			