### sdmay19-30: EE 448 Stroboscope

Week 1 Report August 27 - September 5

### **Team Members**

Katrina Choong — Chief Hardware Engineer, Timeline Manager
Meghna Chandrasekaran — Meeting Facilitator, Chief Software Engineer
Seth Noel — Chief Hardware Engineer
Kyle Zelnio — Project Manager
Jessica Bader — Scribe, Chief Software Engineer

## **Summary of Progress this Report**

This week we started by meeting with our client to discuss his needs and expectations for this project. Then, we compiled the information we learned from him into a list of client needs. Finally, we used these needs to create a rough draft of requirements for our final project. In addition, our client requested we make a set of pro/con lists for several key design decisions. We decided to discuss the decisions of modular design vs. a single board, a GUI, knob, or both to adjust the speed, and whether to use the TIVA board, an AC circuit, or a different board. The software team created a high level software design rough draft which included a modular design of the software and a list of the functions we would need to satisfy with the software. We also did a set of screen sketches.

## **Pending Issues**

We will need to walk through our pro/con lists with our client to come to final decisions based on these lists. While the decision to use the TIVA board was a general consensus, we are divided on whether or not the design should be replaceable at a modular level or if that would make it too prone to breaking, as well as whether or not a knob would benefit or hinder our final product.

# **Plans for Upcoming Reporting Period**

For the next period we plan to finalize our requirements by coming to decisions on several aspects we left vague, such as accuracy and range of the final product as a team. Our full team also plans to meet with our client to make design decisions based on our pro/con lists, because we would like his input on which factors are more important for him. The hardware team (Kyle, Katrina, Seth) is going to start a supply list so we can figure out what parts we will need to find to create our first prototype. The hardware team is also going to create their high level hardware design. Katrina is going to create a rough draft of our timeline. The software team (Meghna and Jessica) will work on identifying which languages we will use and what programs we will need to download to start making software progress.

### **Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Katrina Choong	Katrina helped review Tiva data sheet to determine whether or not the Tiva board will be sufficient for our needs. She also helped with the pros/cons list for the hardware	2	2

	design decisions, including which board to use. She participated in the team effort to		
	define requirements.		
Meghna Chandrasekaran	Meghna helped design the screen sketches. She also helped with the high level software design, including defining the modular design of the software and making a list of needed functions for the software to execute. She also helped define requirements, especially related to high level requirements and software-related requirements. Finally, she helped with the pros/con list, such as the GUI decision and modular design.	3	3
Seth Noel	Seth helped design the screen sketches. He also looked at Tiva data sheet to define whether or not the Tiva board will be sufficient for our needs. He also helped with the pros/con list for the hardware design decisions, including which board to use. He participated in the team effort to define requirements. He also researched hardware implementation for how we can design our hardware components.	5	5
Kyle Zelnio	Kyle helped with the pros/con list for the hardware design decisions, including which board to use. He participated in the team effort to define requirements as well.	2	2
Jessica Bader	Jessie helped design the screen sketches. She also helped with the high level software design, including defining the modular design of the software and making a list of needed functions for the software to execute. She also helped with the pro/con list, such as the GUI decision and modular design. She also helped define requirements, especially related to high level requirements and software-related requirements. pros/cons, requirements.	3	3

# **Gitlab Activity Summary**

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Action: joined, Tue Aug 28 2018

Author: sanoel

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Action: joined, Tue Aug 28 2018

Author: kjzelnio

Action: joined, Tue Aug 28 2018

Author: meghnac

Action: joined, Tue Aug 28 2018

Author: kachoong

Action: joined, Tue Aug 28 2018

Author: jabader