

sdmay19-30: EE 448 Stroboscope

Week 5 Report

September 26 - October 3

Team MembersKatrina 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/Communication Manager/Chief Software Engineer***Summary of Progress this Report**

During this period, we worked together to prepare for the second round of lightning talks. We had a few more discussions on the future of the project. On the software team, we looked through the given Python files and researched Python to figure out how to execute the GUI through the command terminal, set up a simple GUI using PyCharm and the information gathered, and researched PWM mode of the TIVA board to determine how to output a waveform. On the hardware team, we researched LEDs to match the output Lux of the stroboscope datasheet, then ordered the LEDs that we believed matched well, made a mock design of a stroboscope with the bench waveform, an LED array we found, and the MOSFET from the 201/230 kits, and started simple calculations for the circuit we have designed.

Pending Issues

The hardware team needs to learn how to design PCB using MultiSim before moving on because no one on our team has any background in PCB design. The software team needs to expand on the simple GUI to one with more features and put the TIVA board into PWM mode.

Plans for Upcoming Reporting Period

For the upcoming reporting period we will have calculations for the supply finished, have researched PCB design and hopefully have a nearly completed PCB design, have set the TIVA board to PWM mode, and have a GUI with more features.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Katrina Choong	I researched what type of LED would best fit our design by looking at the output lux (lumens) on the stroboscope datasheet. I also helped looked through digikey to order the LEDs. Finally, I looked for programs to design PCB.	8.5	25.5
Meghna Chandrasekaran	I looked more into the Python files given to us. I was trying to figure out how the files we were provided used Python to create the GUI	7	25

	and run it through the terminal. I set up a simple GUI on PyCharm, met with my software team, and started to look at what is necessary for PWM.		
Seth Noel	I ordered parts, worked on calculations for the present circuit, downloaded MultiSim, and finished the project plan.	7	28
Kyle Zelnio	I made a mock design with the bench supply, LED array, and MOSFET switch. I also started board design in Eagle.	8	27
Jessica Bader	I looked through the datasheet for the TIVA processor to figure out how to use PWM mode to create a waveform. I also looked at Python to start learning how to create a basic GUI.	7	25

Gitlab Activity Summary

Action: pushed to branch master, Thu Sep 20 2018

Author: jabader

Action: pushed new branch software, Tue Oct 2 2018

Author: meghnac

Action: pushed to branch software, Tue Oct 2 2018

Author: meghnac
