CPRE 492 - May 20-04

CPRE 288 Embedded Systems Platform Movement and Code Optimization

Bi-Weekly Report 2

January 30 ~ February 13, 2020

Client: ISU 288 Dr. Jones and Rover. Matthew

Team Members:

Jacob Aspinall – Team communication leader Geonhee Cho – Report manager Issac Klein – Note taker Jisoo Han – Team Git master Sam Rai – Team web master Nathan Nordling – Team data manager

Weekly Summary

We met the advisor 2 times for last 2 weeks. We continue to work individual task that we assigned as below.

Weekly Issues

So far, we did not get any issues.

Past Week Accomplishments

Jacob Aspinall

- Added functionality to IO code to prevent Roomba from being left turned on by students
- Started working on simulation for OI in order to write tests
- Helped Sam on IR sensor work

Geonhee Cho

- Wrote Python code to read log file from DSS compile result
- Test through the CI/CD at GitLab to check the code (added into yml file)
- Write the bi-weekly report 2

Jisoo Han

- Review team design document and advisor meeting requirement
- Establish the repository and submodule, then test if it can copy repository correctly
- Make two separated repositories.

Sam Rai

- Started writing test code for IR sensor, but we will not be going to use IR sensor while testing.
- DAC device is placed and connected with the wires to both microcontrollers in our testing boards, which is created by Jacob, one of our team members.

Issac Kleinsd

- Researched about Wi-fi problem at project requirement
- Testing the accuracy of the other time related timer..c functions using a similar approach.

Nathan Nordling

- Wrote manual UART tests
- Worked on potentially automating them

Individual contributions

Team Member	Contribution	Weekly H	Total H
Jacob Aspinall	OI, Helping teammates	20	44
Geonhee Cho	For the testing result read, I wrote the simple Python code to read everything from the compile result from the bash script and test it out from CI/CD section at GitLab	12	24
Jisoo Han	Git repo work	12	24
Sam Rai	DAC device is placed and connected with the wires to both microcontrollers in our testing boards	12	24
Issac Klein	Continue to make test cases in a similar manner for all the timer methods. Researched about Wi-fi for another lab	12	24
Nathan Nordling	UART unit testing written	12	24

Plans for next 2 weeks:

Jacob Aspinall

• Finish OI sim and write tests for movement code/OI code

Geonhee Cho

• Finish Python code to read and make sure the test result will show up at continuous integration work

Jisoo Han

- Research with Wi-fi problem
- Try to finish git sub-module.

Sam Rai

- Trying to finish the test code.
- Start testing the values by comparing the values converted by DAC device with the values that are saved into one of the microcontrollers.

Issac Klein

- Testing the accuracy of the other time related timer..c functions using a similar approach.
- Look through the Wi-fi problem at team project

Nathan Nordling

 Spreadsheets for data, write more UART tests, continue to look into potential automation for UART tests

Summer of weekly adviser meeting

We met 2 times with our advisor last 2 weeks. We got some feedback and added some issues from the advisor; however, it was all solved at last meeting. Team members will continue to work with their part to complete this project.