CPRE 491 -May20-04

CPRE 288 Embedded Systems Platform Movement and Code Optimization

Week 7 Report

October 27 to November 3

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 advisors at week 7. Individual team members working with specific issues now. Somehow, we need to make milestone to work on the project. Moreover, we will change the weekly report date to 1 week to 2 weeks after this report 4.

Past Week Accomplishments

Jacob Aspinall

- Solved issue with UART frames being lost, turns out ccs's built in printf pauses the program when printing, so interrupt handlers dont fire.
- Added servo simulation program
- Figured out how to load a program with DSS
- Figured out how to run programs on Keil's CortexM4 sim.
- Helped Nathan with UART and Sam with ADC programming.

Geonhee Cho

DSS work

- Done for DSS set up with using lab 1. Jacob helped this work.
- Made LCD test case for testing.
- Arrange the weekly report 4
- Arrange the lightening talk voice

Jisoo Han

Git repo

- Figure out if the different permission can be given to different folders in same repo. I came out with this is impossible to make it since we are using Gitlab. I found it can be possible to do this using Gitolite.

- Since we are pushing works to subfolders, we can't download single folder without accessing each subfolder.

Sam Rai

- I have been working on ADC: I want to make sure that the voltage coming from IR sensor is correct and the pin that received the signal are correct too. Therefore, to test this I have been using the Oscilloscope.
- IR sensor is one of the key components in our project. Therefore, it is very important to make sure we get proper data from IR for the automated test.

Issac Kleinsd

- Did tests for the wait millis function like i did with the wait micros.
- Put data in a spread sheet and graphed to find the error percentege.

Nathan Nordling

- began work on uart unit testing

Individual contributions

Team Member	Contribution	Weekly H	Total H
Jacob Aspinall	simulation, DSS, Helping teammates	9	49
Geonhee Cho	DSS set up is done, and made it to connect to Roomba LCD to show hello world to use lab 1 code.	7	44
Jisoo Han	Git repo work, tried different permission can be given to different folders in same repo	6	43
Sam Rai	Went over the chapter 2 and 7 to understand more about the GPIO and ADC.	6	42
Issac Klein	Continue to make test cases in a similar manner for all the timer methods	6	42
Nathan Nordling	UART unit testing begun	6	42

Plans for next 2 weeks:

Jacob Aspinall

- Add tests for servo
- Add push buttons into simulation + write tests
- Make a guide for installing/using Keil so students can code assembly at home
- Update Design Doc
- Research into QEMU
- Start looking at OI code

Geonhee Cho

- Read DSS TI API to learn
- Make test for LCD.
- Make the code to get the DSS data to console. To use Rerouting printf() output
- Arrange weekly report 5
- Research the Wi-Fi issues

Jisoo Han

- For the Git permission, after weekly meeting, a suggestion was giver which is creating each branch into master branches. (ex, 288 branches, 488 branches in master branch).
- Then, will this possible to give different permission to different folders in same repo? I will figure out if this is work or not.

Sam Rai

- ADC testing will be continuing until the IR is functioning well with automated test.

Issac Klein

- Im gonna test the accuracy of the other time related timer..c functions using a similar aproach.

Nathan Nordling

- spreadsheets for data, unit testing uart, pick up other issues as they come

Summer of weekly adviser meeting

This week, we meet our, and they talked about try to do Git branch work, add more people to DSS work and use QEMU. Advisers want to us to fix the team documentation.