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CMPE - 012
#1368039
M/W 2:00PM - 4:00PM
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Title:
Uno32/PIC32 IO

Purpose:
The purpose of this lab is use Uno32/PIC32 IO on Windows operating system and create a program that allows an user to communicate with the hardware that was provided from BELS at Jack Baskin Engineering. This hardware is provided to use Uno32 language, or Assembly language and create a program. The lab assignment consists of three parts.

Algorithm and Other Data:
-How did you go about designing your program?
It was necessary to learn an entirely new language. In order to clarify what I need to work on, I visited the lab session several times and then I had to figure out how the programming language works. Afterward, I drew a flowchart to imagine how the program will work.

-What sort of bugs did you encounter while writing your program?
It was my first time trying a program that can be reacted on the other hardware and on computer screen. There were some bugs that we have faced such as LEDs on hardware lighted up all the time, which should not be happened.

-Describe how the registers for the ports works? Don't just repeat what is in the reference manual, give a description that a non-computer person might understand.
-What is a hardware timer?

-Why is it better than a just putting in some instructions in a while or for loop?

-What happens if you forget to put a nop after your branch?

What went wrong and what were the challenges?

This lab assignment was the last assignment that we had to work on. This lab assignment was required to write in a completely new language and then it had to be compiled in a totally new compiler on MPLEX. We have never used this compiler and we have never used this hardware before. It was very frustrating to figure out everything since we had to learn a brand new programming language to create a program that works like LC-3 programs we have done previously. We have very limited time to work on this and we could not understand the tutorial properly. I think it would be better if the professor could have given us the lab assignment earlier so that we can work on it and have enough time to work on it.

Conclusion:

Even though I could not finish this lab, I wish I had enough to figure a new programming and work on the lab assignment 8. The programming language looked similar to the LC-3 programming language, but I had to understand what is going on with every single lines of code. Even though we could use C programming language to work on this lab, I found it hard to program the lab 8 in C language since I could not figure out what was going on with the lab 8.