Alexa Astorino
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ENCM 511 Assignment 2 Report

ENCM 511 Laboratory Contract

On this 2nd day of December, 2018, I Alexa Astorino confirm that Assignment 2 consists of only my own work and that Smith's 20 minute rule was followed at all times.

Name: Alexa Astorino Signature: A. Astorino

ID #: 30020706 Date: Dec. 2/2018

Terminal Printout of EUNIT Test Results

- I am testing the SPI Interface used in Lab 4. The main tests I have written check whether writing worked when its supposed to and did not work when it is not supposed to, as well as whether some registers involved with initializing the SPI contain what they should and shouldn't before and after calling initialize. I check if the correct LED's were lit by reading with the REB GPIO input library and wiring the REB board accordingly. Some other tests in my project are from Lab 4, allowing the SPI interface to run with the LCD screen through EUNIT.

```
Loading application: "H:\ENCM511_Fall2018\Lab4_Astorino_Core0\Debug\Lab4_Astorino_Core0.dxe"
Load complete.
Smith GPIO_REB_Input activated
EUNIT version Sep 27 2018
Not using I/O stream UNITTEST_USE_CUSTOM_STREAMS

Succesful link to test file TestDetails_cpp.
..\src\Lab4_Astorino_Tests.cpp(87): Expected Failure in WriteSomething: 15 != 10
Smith REB_SPI activated
..\src\Lab4_Astorino_Tests.cpp(96): Success in WriteSomething: 10 == 10
..\src\Lab4_Astorino_Tests.cpp(107): Expected Failure in SomeInitializeRegs: 0 != 1394
..\src\Lab4_Astorino_Tests.cpp(108): Expected Failure in SomeInitializeRegs: 0 != 80
..\src\Lab4_Astorino_Tests.cpp(109): Expected Failure in SomeInitializeRegs: 0 != 65040
..\src\Lab4_Astorino_Tests.cpp(110): Expected Failure in SomeInitializeRegs: 0 != 5
Smith REB_SPI activated
..\src\Lab4_Astorino_Tests.cpp(115): Success in SomeInitializeRegs: 0 == 0
..\src\Lab4_Astorino_Tests.cpp(116): Success in SomeInitializeRegs: 80 == 80
..\src\Lab4_Astorino_Tests.cpp(117): Success in SomeInitializeRegs: 65040 == 65040
..\src\Lab4_Astorino_Tests.cpp(118): Success in SomeInitializeRegs: 5 == 5
Succesful link to test file Lab4_Astorino_Tests_cpp.
Success: 8 blackbox tests passed.
Blackbox Assert statistics: 0 Failures, 5 Expected Failures, 5 Successes.
Whitebox Assert statistics: 0 Failures, 0 Expected Failures, 0 Successes. (Includes C Test statistics)
Test time: 190.28747500 seconds.
```

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Source Code for EUNIT Test Project

- Please refer to the Lab4_Astorino_EUNIT_src.zip in the D2L dropbox

Source Code for Coffee Pot Project

- Please refer to the CoffeePot_Astorino_Assign2_SRCCode.zip in the D2L dropbox
- My code only allows the Coffee pot to be controlled, using my own functions and Fast Forward, when a core timer interrupt occurs
- PLEASE NOTE: Assignment 1 reassessment - I have now added the required assembly code to control water inflow for the coffee pot. Refer to My_WaterInFlow_ASM.asm inside CoffeePot_Astorino_Assign2_SRCCode.zip