CMPE 460 Lab Exercise One Lab
Intro. To K64F GPIO and Keil uVision

Joel Yuhas
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Lab Section: 01L1
Instructor: Louis Beato
TA: Adrian Tygart
Bao Thai

Lecture Section: 01
Professor: Ray Ptucha

Description:

The “Intro. to K64F GPIO and Keil uVision” exercise involved learning how to set up and create a project in Keil uVision, initializing the “freedom development board”, and modifying registers in order to change the LED color in a specific sequence upon pushing a button.

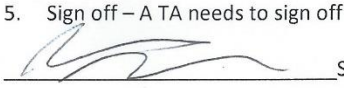
Table 1: C Command Table

GPIOx_PDOR=<value>	Sets entire register to “<value>”
GPIOx_PSOR=<value>	Sets all bits in the register for which “<value>” has a “1” bit
GPIOx_PCOR=<value>	Clears all bits in the register where “<value>” has a “1”
GPIOx_PTOR=<value>	Toggles all bits in the register where “<value>” has a “1”
If(GPIOx_PDIR=<value>)	Test an input register, can be used to check if specific pin is high or low

Lab Worksheet

Please, submit one lab worksheet per individual. The Lab worksheet for this week should include:

1. Title of the Lab, your name, date the lab was performed, course name, TA's name and instructor's name.
2. Two line description of lab
3. Insert filled out table from Step 4.
4. List out what each of the below GPIO commands do:
   - GPIOx_PDOR = <value> sets entire register to "<value>"
   - GPIOx_PSOR = <value> Sets all bits in the register for which "<value>" has a '1' bit
   - GPIOx_PCOR = <value> clears all bits in the register where "value" has a "1"
   - GPIOx_PTOR = <value> toggles all bits in the register where "value" has a "1"
   - If (GPIOx_PDIR == <value>) toggles input register, can be used to check if specific pin is high or low
5. Sign off – A TA needs to sign off on Step 8. Include a line that says:


Step 8 of Lab 1 is working correctly

Submit the worksheet (with signoff from a TA) and code to the MyCourses dropbox by the start of next lab. (Note: lab reports will, in general be due at the beginning of the next lab.)