525.446
DSP Hardware Laboratory
Assignment #1

Introduction to DSK

1) Read Ch.1 of Chassaing
2) Install Software (or use the computers in the laboratory)
3) Do Examples 1.1, 1.2
    a. Step through the examples as listed in the book

The goals of this week's assignment are simple. First, you are to get your development environment set up. Second, you are to become familiar with the tools so that you can write your own basic software and debug it on the DSK. This assignment is the (only!) one where you do not need to understand absolutely everything about your code. Code examples can be taken "as is", and understood at a basic level.

To Demo in class and turn in on Wednesday, Sept 9, 2009 (at the beginning of lab time)

a) Modify the sinewave generation example such that it creates a 2 kHz sinewave instead of a 1 kHz sinewave. Demonstrate the sinewave generator with the GEL slider (use the GEL slider to change the amplitude).
b) Turn in a hardcopy of your modified c-file at the demonstration.
c) Submit your homework assignment through the web interface.

Grading Sheet

Each lab will be accompanied by a grading checklist, which should communicate the objective (or subjective) criteria and points breakdown which the instructors will use in the grading of the lab. Not all labs will be graded solely on demonstrations; code efficiency and documentation are fair game for later labs.

1) ___ / 50 : Student Demonstrates a 2kHz sinewave coming from the dsk
2) ___/ 40 : Student Demonstrates the use of the GEL Slider to control the amplitude of the tone via. The JTAG debugger (i.e. from the development PC)
3) ___/ 10 : Student correctly submits (via web) the modified C file from the Chassaing example. Files should be named : lab1_yourlastname.c