

CECS 525 Microcomputer Design

Demo 3 Check List

Date _____ Name: _____

On demo day, have the tasks listed for each of the following parts ready to demonstrate. Have your demonstration code ready to open and execute. Your demonstration code should be your own code. Practice your demonstration and knowledge of these tasks before the actual demo. I suggest that you create your demonstration code as one complete project, demonstrating each task in your own original order and manner. Comment every line of your demonstration code and list your code in your report under the software heading. Print out a hardcopy of this document and bring to the demo with you.

Demo a floating point calculator program that is embedded in TinyOS and executed by a command called 'Fcalc'. The mathematical operations listed below must be computed by the VFP11 coprocessor driven by your VFP11 driver in boot.s. Use C code for the UI menu and control in main.c, use your float to unsigned int and unsigned int to float conversion routines to get numbers from the user and to display the result via the command line.

Menu Items...

Signed floating point subtraction works correctly. (3 points)

Signed floating point addition works correctly. (3 points)

Signed floating point multiplication works correctly. (3 points)

Signed floating point division works correctly. (3 points)

For the following menu item, ask the user for the radius of a sphere then calculate the sphere's volume.

Floating point volume of a sphere equation works correctly. (3 points)