

P535 Pervasive Computing
Programming Assignment #3
Assigned 10/17/2014
Due: 10/24/2014 at 11:59 pm

Title: Morse Code

For this assignment, you are to use a pressure/force sensor to encode a message in Morse code. Your program should read the input from the pressure sensor, map the input to the appropriate character string and display that string to the screen.

These sensors register force on a scale from 0 to 1000. You will need to decide how to interpret long and short durations of pressure. We've discussed several approaches during lecture, including setting a range or setting a minimum pressure threshold in combination with measuring the duration of the signal (i.e. time).

- **App:** You should develop your program in stages. It should sense characters, a word, and words.
- **Comments:** You should document your code by including comments within the code.
- **Writeup:** In addition, you should submit a writeup that describes your encoding scheme and how you map the input to the appropriate character (e.g. hash map, tree, etc).

The grading of the assignment is based on several components:

Grading:

50 Points: Program contains no build errors

10 Points: Program recognizes "SOS"

10 Points: Program recognizes All characters, including alphabet and numbers

20 Points: Program recognizes and displays multiple words including spaces

10 Points: Writeup