

COSC 625 Programming Project #3: for Arduino or other microprocessor

Groups of size TWO at most.

Distributed: 4 October 2010

Due: 25 October 2010

Synopsis:

In PP#1, you have written code to control the flashing of an LED to display the Morse code of a hardcoded message on the LED. Now your job is to take Morse code input to the push button, decode the letters and display the letters to the Serial Monitor. Repeat the message without end.

See <http://morsecode.scphillips.com/jtranslator.html> for a Morse code translator.

Note: you will need to consider issues of switch debounce (see the tutorials at arduino.cc)

Part 1

Also display the dots and dashes to a green LED

The message is:

... --- ...

Part 2

Also display the dots and dashes to a green LED and to a piezo element.

The message is:

.- .. .- ... -.-.-

Deliverables:

- Entire group must be present and demonstrate.
- Each member of the group is expected to be able to explain code and modify code on-the-fly.
- Hardcopy of code. Use coding standards!

Grade based on:

- Following specification: 75%
- Following coding standards: 25%

If a member of the group cannot perform the demo, explanation, and modification, then that member's grade is reduced by 30%.