**ELTN 117 – Introduction to Digital Logic and Programming**

**Homework 10 - Project guidelines / selection process assignment**

Please select two to three possible projects for your final class project. The instructor will need to approve the project, and may make recommendations for changes. The following are some guidelines that need to be followed to determine an appropriate project:

1. Ideas - think about a project that YOU are interested in! Try to find something that is appealing. If you get stuck, feel free to ask for suggestions, or spend time researching other projects.
2. Research – research hardware that you can interface to an Arduino. Examples include LED modules, LCD’s, motors, sensors, wireless devices (Bluetooth, XBEE), sound generators etc.
3. Budget – determine how much the parts will cost. Remember that if you are working on a small project that the goal is to finalize your project by putting it in an enclosure.
4. Complexity – make sure the project you choose is not too simple (can be completed in two weeks), or so complex that you can’t complete it on time.
5. Schedule – create a schedule based on the steps we discussed in class.

Based on these criteria, write a short paragraph describing each possible project. Determine the steps required to complete the project (as discussed in class), and based on the steps, try to estimate the time requirement and budget and see if it will work. Good sources of hardware are sparkfun.com and adafruit.com – however, there are many other online companies that sell hardware and parts that interface with Arduinos.