Faculty Meeting  
March 20, 2007  
Team D.E.A.D.S  
Presents: Dr. Wall, Ngon Du, Lassen Loop, Travis Taylor

**Agenda:**

1) Review team research on sensors and solenoids technology with Dr. Wall  
2) Narrow down solution choices and use decision matrix to select the final design choices  
3) Others/What’s next?

**Action:**

- Lassen showed two options for sensor technologies. Some of them didn’t have datasheet; showed available sensors as PCB from GlobalSpecs that seem relatively cheap and meet some of the project specs.  
- Ngon had sensor from Honeywell but no datasheet is available.  
- The datasheet for sensor technologies will be posted on web to help team member formulate the decision matrix  
  
  Note: If there are sensors that you see that could be used for our project, try to contact the manufacturer for datasheet/specifications

**Problem1:** Some of the sensors meet the project specifications but cost more than allowed budget, some are relatively cheaper but don’t meet some of the project specs (i.e. long detection range).

**Answer1:** Dr. Wall discussed about the design tradeoff. You won’t always find a design solution that fits perfectly to the client’s specifications. So use something like a decision matrix to find the best of all gathered alternative solutions.

**Decision Matrix:**

- Rate the following factors in our decision matrix: battery-life, indoor/outdoor, easy of integration, day/night operation, weight, detection range, communication range.

- For each item: give it a weight 1-5 (1=high priority, 5=low priority)  
- Give sensors with communication a 1, and 0 for sensors without communication  
- Will formulate a decision matrix for sensors, communication, control/actuator, valves/solenoids  

=> Contact clients: tell them what we found and maybe settle for 1 sensor because we might have to use one long range sensor.
Goals For Next Time:
- By Wed afternoon, send links and data sheet for sensors to team website in order for everyone to formulate their decision matrix.
- Research on solenoids/valves technology