Special Topics: Simple Robots and Microprocessors

ECE 292
Lecture Notes 5

Reading: Chapter 3

Due on June 30th – Statement of Work

Include on the Statement of work:

- Your names
- 1 paragraph statement of work
- Estimated materials
- Approximate schedule (effort needed)
- August 6 race task
- Magazine you will write
Make a MS Project schedule

- Proposal due 6/27
- Rough draft due 7/30
- Race 8/6
- Paper Due 8/10

6/13 6/20 6/27 7/2 7/9 7/16 7/23 7/30 8/6 8/10

Proposal
Design
Implementation
Final report

Rules of the contest

- Formica Flat track
- On board microcontroller
- Multiple Trials
- Distance based on length of robot (4x)
- One sensor
- Max size 12” by 12”
- Use only nitinol as propulsion
- Springs allowed
- Award for best design
What's next?

• Next week we will start to examine some more embedded systems topics like:
  • polling versus interrupts
  • micro-controllers and memory architectures
  • I/O dependencies

• Visit the Parallax site (http://www.parallaxinc.com) and read about the Basic Stamp 2

Lab 5 . . . .

• Lab 5 will introduce you to the Basic Stamp 2 – architecture, code development, and software instructions.
  • A separate lab assignment will be handed out.