

91.450, Robotics I
Fall 2002
Prof. Yanco

Final Project

Due: Friday, 13 December 2002

Accepted until the exam review on Monday, 16 December with no penalty.

Prepare the following write-up to complete your final project. Please attach the graded copy of your project proposal to your write-up.

1. Briefly describe the task(s) of your robot(s). You discussed this in your proposal, but often the final outcome doesn't exactly reflect the proposal. If you changed your design between your proposal and the final project, please describe what you changed and why you changed it.
2. Describe the design(s) for your robot(s). Include a sketch and/or photo of your robot(s). What sensors did you use? Where did you place them? What were you using each sensor for? What was your drive train for each robot? How many motors did you use? How many wheels? What gearing? Also describe any other relevant structures on your robot(s). If you built an arm, describe its sensors, motors and structure.
3. Describe your code design for the robot(s). What were the behaviors you designed into your robots? Did you choose to multitask or did you have a single process? Use pseudocode to describe your code design.
4. Turn in your code for your robot(s). If you had two robots, please make it clear which code goes with each robot. Be sure to comment your code, at least one comment per code block.
5. Did your robot(s) behave as you had planned during open house? If not, what happened? Did the interactions people had with your robots happen according to design?
6. If you were to redesign your project, what changes would you make?
7. If you were to redesign the course, what changes would you make? (You may turn this in separately, if you wish. You will not be graded on this question.)