6.270 Team Assignment 3

Released: Friday, Jan. 19, 2001 Due: **Wednesday**, Jan. 24, 2001 5PM
Course website: `http://web.mit.edu/6.270/`

Timely and satisfactory completion of this assignment is required for you to pass 6.270.

Purpose

The goal of this assignment is to teach all there is to know about building a qualifying robot.

Deliverables

3.1 Qualifications

In order to qualify, your robot must:

– be able to finish calibration in 60 seconds or less

– have its IR beacon between 17” and 18” above the playing surface

– not false start (by supplying power to actuators or IR) twice in the same round

– start based on the starting light

– learn orientation by itself

– demonstrate ability to score points

– turn off actuators and IR after 60 seconds

– only use parts from the kit

– must fit within 1’ cube of the 6.270 box (exceptions in course notes)

– have all parts connected by lego (exceptions in course notes)

– not separate or drop legos intentionally

– not damage opponent's board or beacon

– not be a safety hazard

3.2 Presentation and Demonstration

In advance, arrange a meeting for your team, organizer, and TA. If your team is expeditious, an earlier meeting time is probably beneficial to your robot. Keep in mind that Friday is the absolute due date, not a recommended meeting date. Give a short, impromptu presentation. Demonstrate your robot. Expect some short questions afterward. If things are in order, your organizer will check you off and clear you to work on Team Assignment 2.

Throughout the contest, you should endeavor to keep your organizer and TA up-to-date on your progress and thought process. Their expertise may (or may not) save you considerable amounts of time and energy.

Help and Advice

As always, if you have questions, feel free to email your staff pair, use the zephyr instance, or email all of us at `6.270-staff@mit.edu`. Good luck!