LEGO Robotics Second Competition (Nov 18)

Challenge

- Make a robot that moves through an obstacle course in the least amount of time. The obstacles are cardboard boxes (19"L, 13"W, >10"H), and the robots should avoid colliding with the boxes.
- The obstacle course is described in the drawing attached.
- You cannot use any other material but the LEGO core set.
- In principle, this competition will be held in the college plaza (outside; concrete floor). However, in case of inclement weather, we will move it to the lobby of the Smithtown Science building.
- Robots must be first presented for a quick inspection by the judges.
- Next, one robot at a time will be aligned and race. Time will be measured with stopwatches.
- The winner of the race receives 40 points; second place gets 25 points if robot completes the race; third place gets 10 points if it completes the race.

Competition day

BEFORE the competition day, groups must make sure they have done all the necessary adjustments, and loaded all necessary programs into their robots. There will be no time for adjustments on the day of the competition. Make sure to leave your robot ready on top of the LEGO core box. This is how it will be transported to the competition venue.

Robots will be brought in by faculty.

Groups must be at the lobby of the Smithtown science building to present their robots precisely at 11:15am, no delays are accepted. Late groups will be disqualified.

One group at a time, the robots will be presented to the judges for visual and manual inspection, and questions to the team.

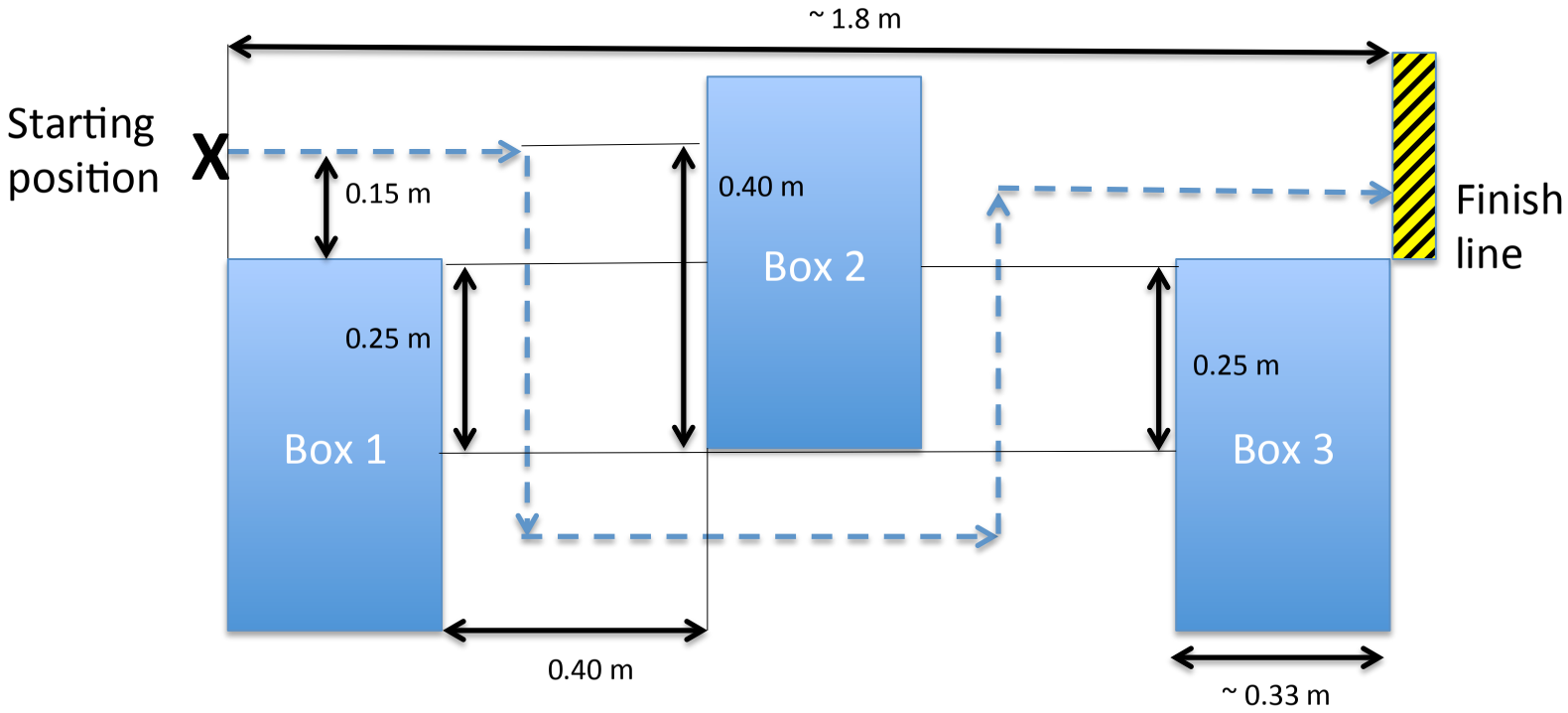
Once the inspection is over, groups will align their robots (one at a time) at the starting position, and prepare to click on their programs (to start motion) when Prof. Denicolo gives the signal.

The race accounts for 40% of the points in the competition. 60% of the points are received in regards to design and teamwork.

AFTER the competition, the groups are invited for pizza & beverage in room T12, when the 3rd and final challenge will be presented (3rd competition day: Dec 09).

2nd competition

The starting position is fixed.
Robots will finish the race when they cross the finish line in any position.



The dimension of the boxes are approximately 19”L, 13”W, >10”H

- - - → indicates example of robot’s path through course