

**WELCOME TO MASLAB!**

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# Today

- ▣ Overview Lecture (Eric)
- ▣ Sensors Lecture (Buro)
- ▣ Get Your Kits
- ▣ Complete Assignment 1
- ▣ Start planning/building your robot!

# Maslab Requirements

- ▣ Attend Lectures
- ▣ Write in your team journal.
- ▣ Complete all seven assignments.
- ▣ Attend Mock Competitions
- ▣ Attend Sponsor Dinners
- ▣ Write a 5-7 page paper summarizing your Maslab experience.
- ▣ Complete your team assignments.
- ▣ Majority of work in lab.

# Team Assignments

- ▣ Cleanup lab
- ▣ Mock Contest Setup
- ▣ Mock Contest Teardown
- ▣ Sponsor Dinner Setup
- ▣ Sponsor Dinner Teardown
- ▣ Contest Teardown

# Lab Locations

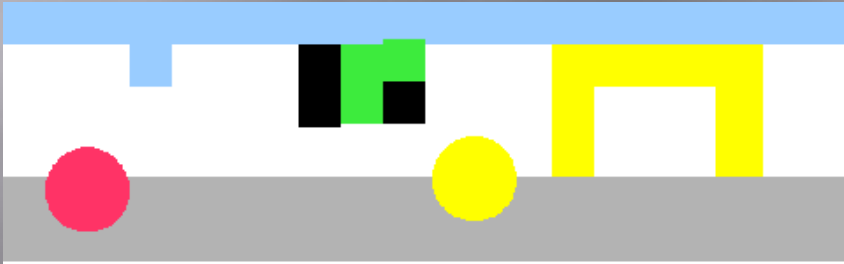
- ▣ 38-5xx
  - Our shop is located here.
  - Open noon – 10 PM most weekdays.
  - Open noon – 5 PM most weekends.
  
- ▣ 34-501
  - Open 24 hours (NO TOOLS ALLOWED!!)
  - Outer Door Combo: 83721
  - Inner Door Combo: 41048\*

# Robot Rules

- ▣ Footprint Restricted to 14" x 14"
- ▣ ~30 Sensor Points
- ▣ 1 Camera
- ▣ Totally Autonomous

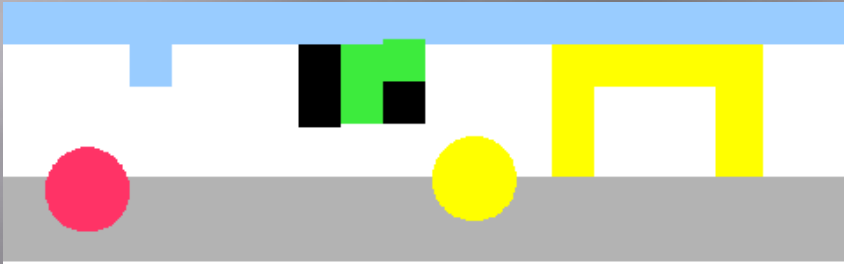
# Game Rules

- ▣ 8 Red Balls
- ▣ 8 Yellow Balls
- ▣ 1-2 Red Goals
- ▣ 1-2 Yellow Goals



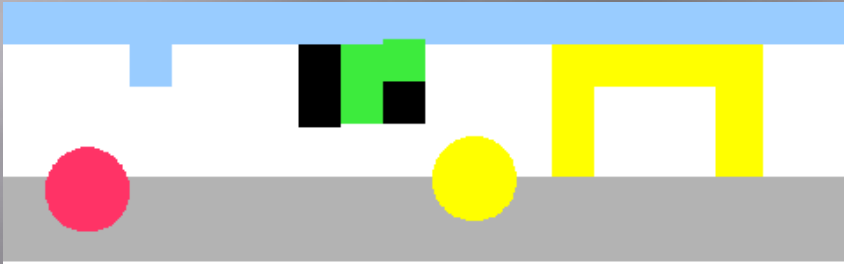
# Game Rules

- ▣ Points:
  - 4 – Ball inside correct color goal.
  - 1 – Possession of any color ball.
  - 2 – Ball on porch of correct color goal.



# Game Rules

- ▣ Penalties
  - 3 – Not stopping within 10 seconds of 5 minutes.
  - 2 – Ball in wrong color goal.
  - 0 – Ball on porch of wrong color goal.



# Your Kit

- ▣ eeePC with Ubuntu
- ▣ uOrc
- ▣ Electronics
  - Motors
  - Sensors
- ▣ Battery
- ▣ Peg Board
- ▣ Raw Materials

# Software Development

- ▣ Supplied with .jar of uOrc classes.  
<http://web.mit.edu/6.186/2009/maslab.jar>  
<http://web.mit.edu/6.186/2009/orc.jar>
- ▣ SVN repositories in:  
<https://svn.csail.mit.edu/maslab/2009/team#>
- ▣ Subclipse (SVN integration into Eclipse) can be found at:  
<http://subclipse.tigris.org/install.html>

# Resources

- ▣ Your wiki:  
<http://maslab.mit.edu/2009/wiki>
- ▣ Last year's wiki:  
<http://maslab.mit.edu/2008/wiki>
- ▣ Technical Information:  
<http://maslab.mit.edu/techinfo/wiki>
- ▣ Maslab Manual:  
<http://maslab.mit.edu/manual/wiki>

# Have Previous Engagements? You Do Now.

- ▣ Mock Contests: 12<sup>th</sup>, 16<sup>th</sup>, 22<sup>nd</sup>, 26<sup>th</sup> from 1-5 in 26-100.
- ▣ ITA Dinner:
- ▣ Sponsor Dinner: 20<sup>th</sup> from 6-8 in Grier Room.
- ▣ Impounding: 29<sup>th</sup> 4:45 in lab.
- ▣ Competition: 30<sup>th</sup> from 2:30 until done in 26-100.

# If You Remember Nothing Else

- ▣ WIKI!!!!!!

<http://maslab.mit.edu/2009/wiki>