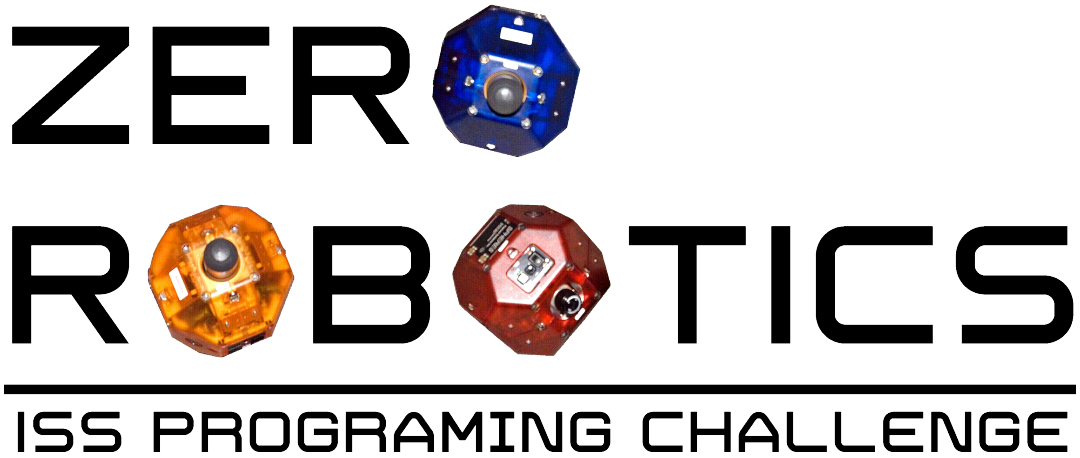

Middle School Summer Program

Session 1 Tag up

June 5, 2015

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ZERO ROBOTICS
ISS PROGRAMING CHALLENGE

Outline

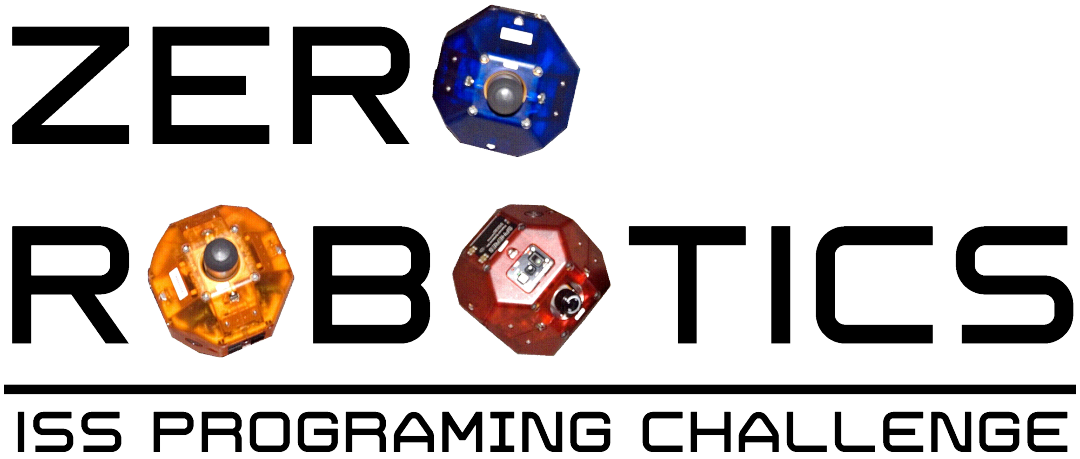
- Complete and provide info to state coordinator (excel doc.)
- Student accounts (creating student accounts)
- Team Management (add students to the ZR team roster)
- ZR Evaluation (educator, student, training/pre-post)
- Review Schedule of program
- Review location of materials
- Update on new materials
  - Game CoronaSPHERE_MS_2D
- Questions
  - getmyZRState example

Questions?

Student Account Setup

What do I do if my student does not have an email account, and does not have parental permission to create an email account?

1. Email zerorobotics@mit.edu with the first name and last name of the student
2. The ZR team will set up that student with a “sandbox” account and reply to you with the following details:
   - username: firstname@zerorobotics.mit.edu
   - password: zerorobotics



Invite Students to Your Team

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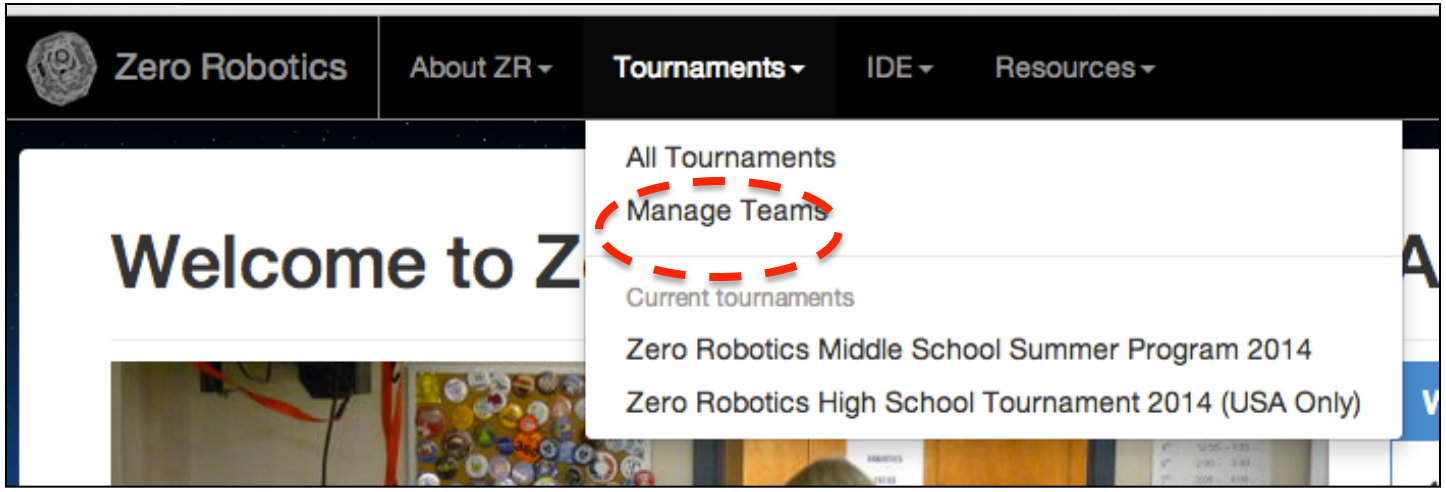
Invite Team Members

To begin:

- Log into the ZR website
- From the “Tournaments” menu select “Manage Teams”

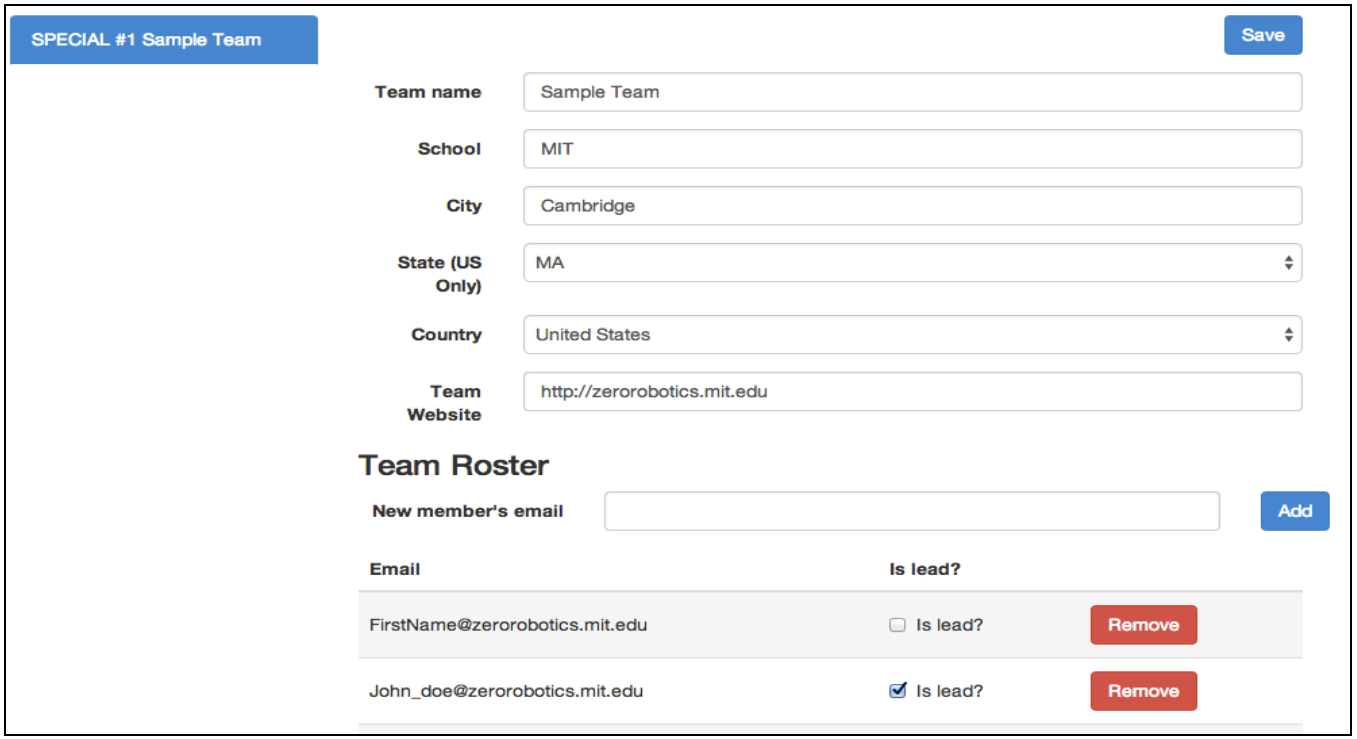


Invite Team Members (cont.)

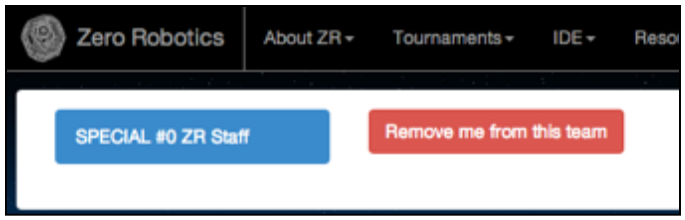
If you are a team lead a window will open with:

- Team information
- Team Roster

Edit the information as desired



Not a team lead? A window will open with the Team Name only like this:

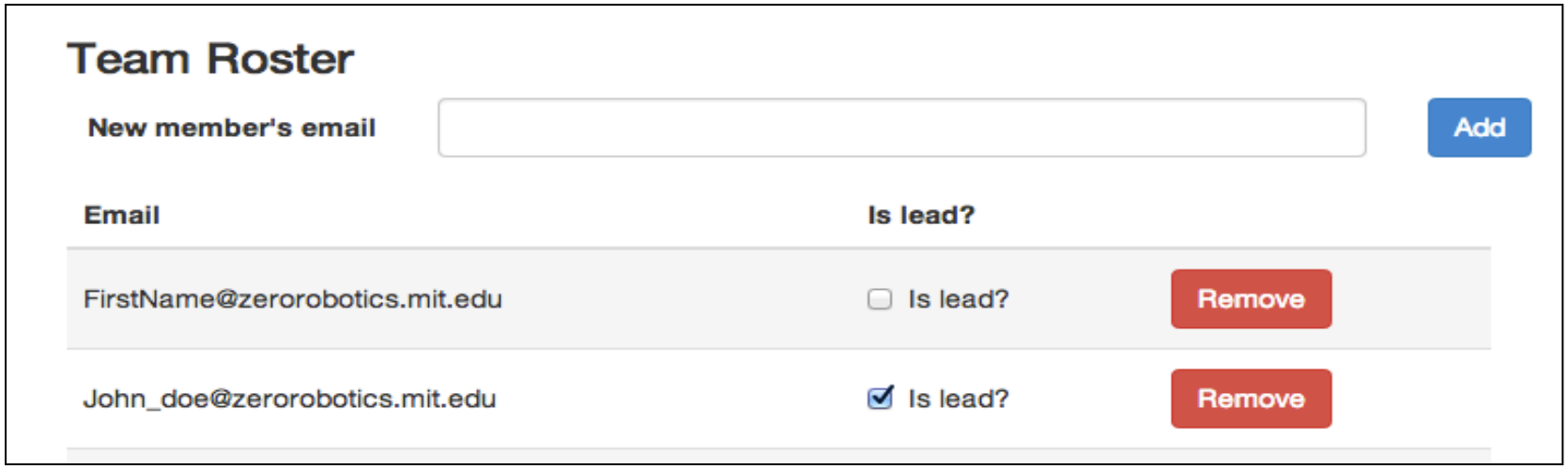


Invite Team Members (cont.)

Only Team Leads can add new Team Members

To add team members:

- Type in the team member's email used on the ZR site and click "Add"
- The team member will appear in the roster below.
- Uncheck the "is lead?" box for members that are not team leads.



Reminder: Each user added as a Team Member must have already created a ZR account

ZR Evaluation

- ***Educator***
  - ***PRE-surveys must be complete before start of program***
  - If you did not participate in a group training and have not completed an educator pre-survey, you must complete this survey asap: http://zrindedpre.questionpro.com
  - ***POST-survey must be completed on the last day of program – link will be sent in wk 4***

- ***Student***
  - ***PRE-surveys must be complete on first day of program***
  - All Students must complete this survey on the first day of the program: http://zrmidstudentpre.questionpro.com
  - ***POST-survey must be completed on the last day of program – link will be sent in wk 4***

ZERO ROBOTICS
ISS PROGRAMING CHALLENGE

MS Program Structure

Schedule	Competition Elements	Curriculum Units
Week 1	Introduction	To Infinity and Beyond!
Week 2	Field Day	Developing a Strategy
Week 3	Intramurals/Practice Regional Competition	Time to Play!
Week 4	Regional Competition	Going the Distance
Week 5	ISS Collaboration	Reach for the Stars
Mid- Aug	ISS Finals!	

Note: Due to ISS availability, the ISS Finals date is not fixed until ~3 weeks before event.

ZERO ROBOTICS
ISS PROGRAMING CHALLENGE

Schedule 1 Code Submittal dates

Week	Day	Time	Submit Code for:
1			
2			
3	Friday, June 26	5 PM	Practice Regional Competition
4	Friday, July 3	5 PM	Regional Competition
5	Thursday, July 9	5 PM	ISS Competition
ISS Finals Event			

Resources

- zerorobotics@mit.edu
- ZR Forum
  - (ZR website → Resources → Forum)
- MIT undergraduate researchers
- Your SAN Lead

- Show Intro video
- Review location of materials
- Update on new materials
  - Game CoronaSPHERE_MS_2D

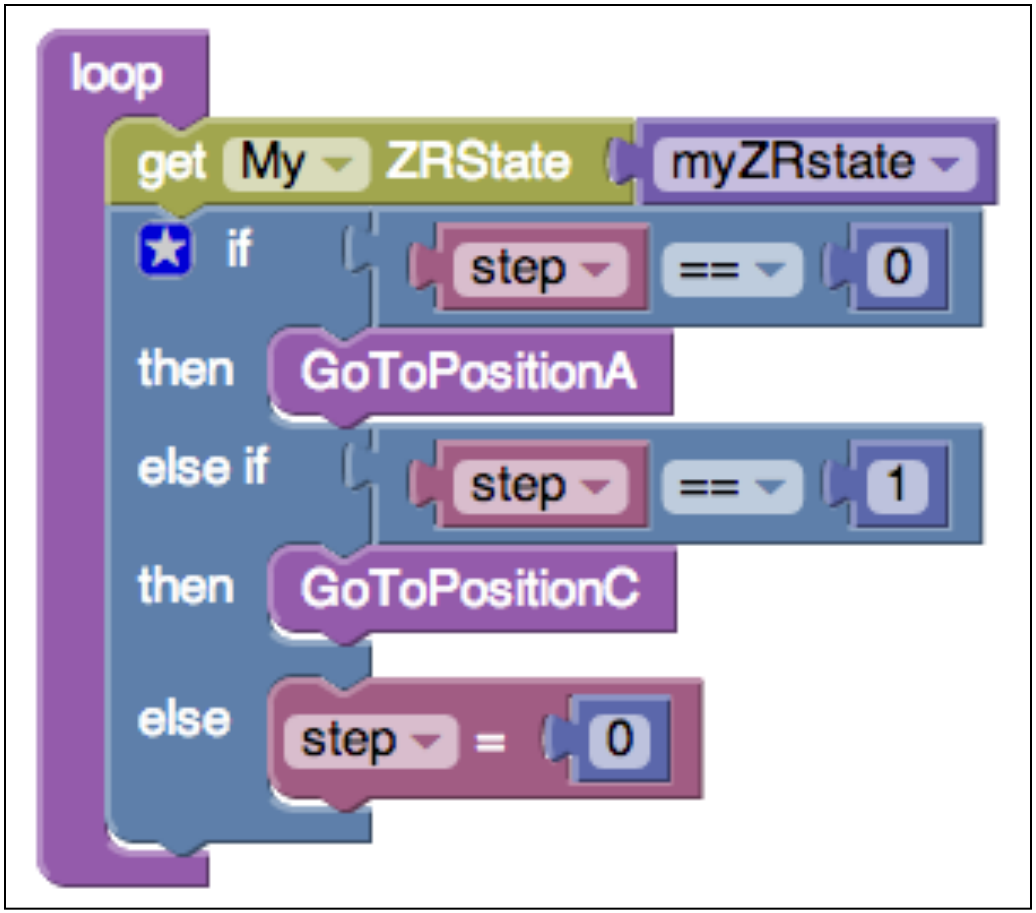
Questions?

getMyZRState

"getMyZRState" retrieves ZR state information (position, velocity, pointing vector, rates) for current satellite

My_ZR_State			
Position	X: 0.0	Y: 0.0	Z: 0.0
Velocity	Vx: 0.0	Vy: 0.0	Vz: 0.0
Pointing vector	Nx: 0.0	Ny: 0.0	Nz: 0.0
Rotation rates	ωx: 0.0	ωy: 0.0	ωz: 0.0

[0] [1] [2]
[3] [4] [5]
[6] [7] [8]
[9] [10] [11]

myZRstate[0] = x-coordinate
myZRstate[1] = y-coordinate
myZRstate[2] = z-coordinate

Procedural Functions