

# ZERO ROBOTICS

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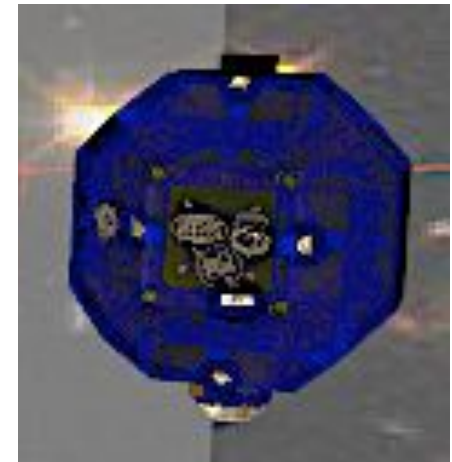
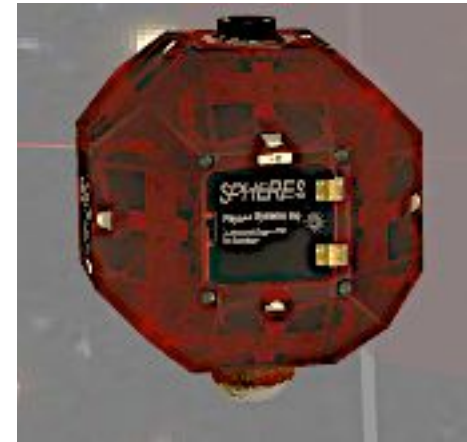
## ISS PROGRAMING CHALLENGE

# Intramural Game Mode Tutorial





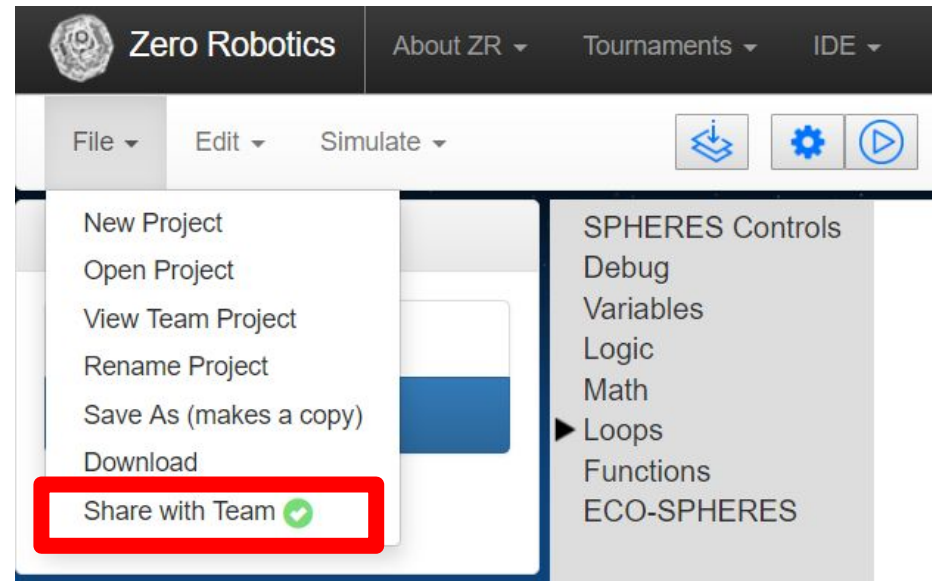
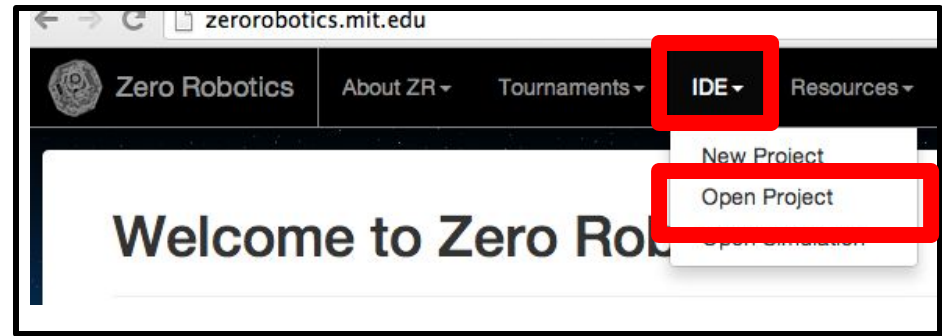
- In this tutorial you will learn:
  - How to share your program on the Zero Robotics website with your team
    - You need to complete this step before you can compete against a teammate
  - How to compete against a team mate



# Sharing projects



- Sharing projects with your team allows:
  - Teammates to save your project with a new name and develop it further
  - Teams to hold Intramural Competitions
  - Teammates to view projects collaboratively
- Click on the IDE menu on the top ribbon and Select “Open Project”
- Find the project you would like to share and click to select the project.
- Go to the File menu on the top ribbon and select “Share with Team”



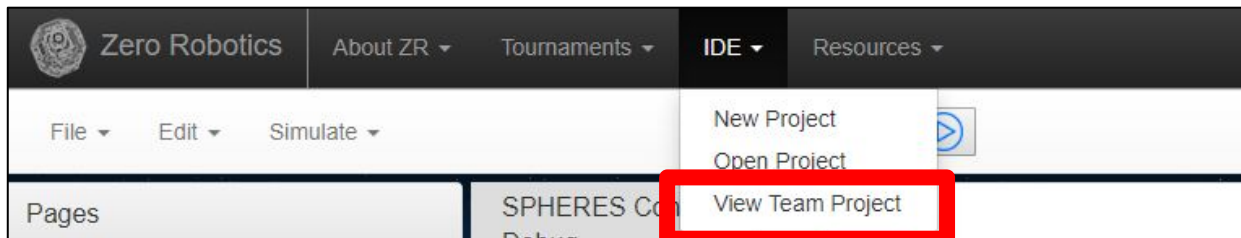
# Sharing projects



- Look for the word “Shared” adjacent the name of your project to confirm that it is shared.



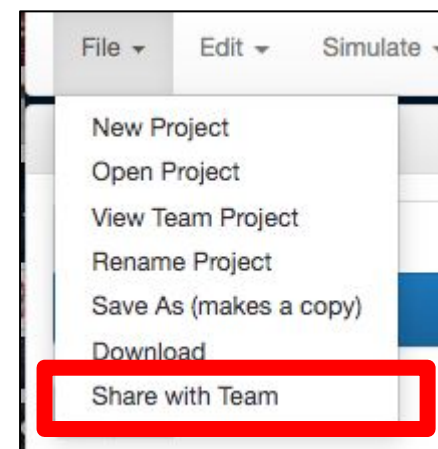
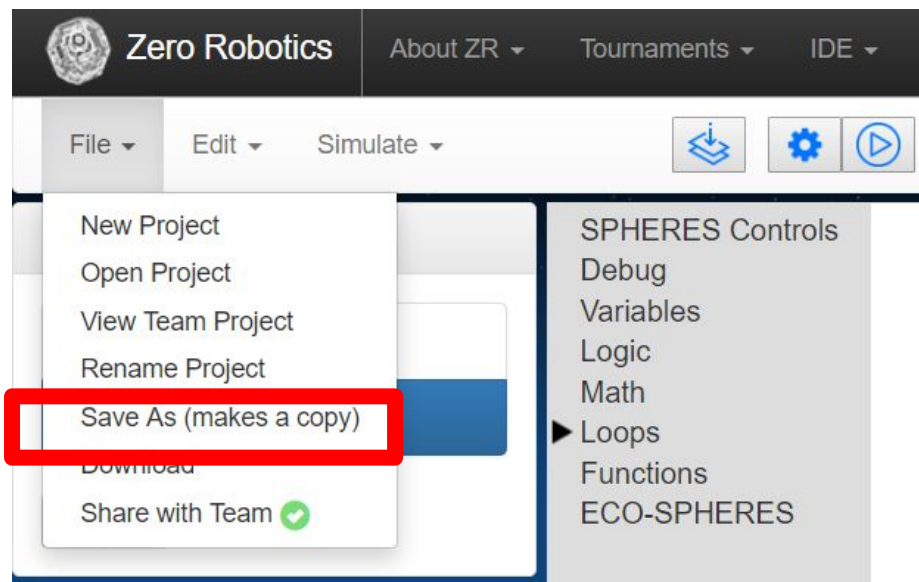
- Team Members can see Shared project by clicking on the IDE menu on the top ribbon and Selecting “View Team Project”



# Sharing projects



- Shared projects are Read Only. However, you can save and edit a copy of the project.
- To copy the shared project click on the File Menu and then select “Save As”.
- Copies are automatically shared.
- To un-share:
  - Click on the File Menu and then click on “Share with Team”.
  - The green check mark will be removed indicating that it is no longer shared



# Single Player Games



- Single Player games include:  
ECO-SPHERES
- Have each person competing in the intramural competition share their project with their team long enough for the Teacher to make a copy.
- Run each student code 10 times, record the scores and compare the average scores.
  - This method takes into account the random elements in the Zero Robotics games
  - Identifies the code that is most effective for a variety of conditions

<u>Team 1's scores</u>	
score 1	14.107
score 2	-0.089
score 3	13.584
score 4	2.848
score 5	18.711
score 6	13.953
score 7	18.945
score 8	3.949
score 9	15.218
score 10	17.692
Team 1's Average Score	11.8918

# 2-player game: Competing against a team member

**THIS FEATURE IS CURRENTLY NOT AVAILABLE**



- Have each person competing in the intramural competition share their project with the group or their teacher.
- Create a plan for the order for the competition
  - Each team should play each other team at least once.
  - See example (shown) for a competition between 3 teams

<b>Round 1</b>	
A	2 team 2
	3 team 3
<b>Round 2</b>	
B	3 team 3
	1 team 1
<b>Round 3</b>	
C	1 team 1
	2 team 2



# 2-player game: Competing against a team member

**THIS FEATURE IS CURRENTLY NOT AVAILABLE**



- Open a project in the IDE
- Select Simulate
- From the Graphical Editor select “Simulate” from the top ribbon menu
  - Leave everything else “as-is” except opponent
  - Click “Select Opponent”
    - In the project window look for the shared project that you would like to compete against
    - Click the check box
    - Click on Select
- The Opponents name will appear on Simulate settings window
  - Your code defaults to Blue satellite
  - Opponents code defaults to Red satellite
- Simulate and View Results

**Simulate**

Simulate As ☒ Satellite 1 (Blue) ☐ Satellite 2 (Red)

Opponent No Opponent Select

Maximum Time (s) 210

Initial Position	X	Y	Z
Satellite 1	0	-0.65	0.2
Satellite 2	0	-0.65	-0.2

Reset All

Simulate As ☒ Satellite 1 (Blue) ☐ Satellite 2 (Red)

Opponent TeamABC1 - CosmoSPHERES MS Select



- Congratulations!
  - You have learned how to:
    - Share your programs with your team
    - Compete your code against a other teammates code
- Have fun in the Intramural Competition!

