ZERO ROBOTICS

ISS PROGRAMING CHALLENGE

Intramural Game Mode Tutorial

Goals

- 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 and edit 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”

Sharing projects, continued

- Share by entering name or email address in the “Invite people” field
- Make sure that the sharing option is toggled to “Can edit”
- If desired click “Add message” link to add a message and then Select “Send”
- The “Invited people” will be added to the “Who has access” list in this window and will receive an email message with a link to the project

Sharing projects, continued

- The Invited people should:
  - Check their email
  - Click on the link in their email
  - **Alternate instructions for Students with sandboxed accounts** are provided at the end of this tutorial. See page 12.
- This will open the ZR IDE
- Click on “Open with app” when prompted
- The shared project will open in the IDE
- IMPORTANT: See step on next page

Sharing projects, continued

- IMPORTANT: Shared projects are not saved automatically to your list of projects.
- To save **a copy** of the shared project to your own list of projects:
  - On the File menu select “Save As”
  - Edit the Project name, if desired
  - Click “Save As”
  - Note: after clicking “Save As” it will take several seconds to save the project

Sharing projects, continued- EDIT

- Next time you go to the IDE and select "Open Project" the saved copy of the project will be included in your list of projects
- Use the saved copy for intramural competitions as described on the following slides.
- **Note: Alternate instructions to support Collaborative Editing** are provided at the end of this tutorial. See page 12.

Sharing projects, continued

- 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

Competing against a team member

- 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 the Simulate settings window
  - Your code defaults to Blue satellite
  - Opponents code defaults to Red satellite
- Simulate and View Results

Competing against a team member, continued

- Check the statistics in the scoring box for each SPHERES
  - The color of each team will show up at the top of their own scoring box
  - Review the game manual for scoring details
  - Record Score

- Run additional competitions to determine the winner!

Note: This image is game specific and will vary from year to year

Blue sphere: 5 vs Red Sphere: 7

Review

- 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!

Alternate Instructions for:
"Sand Boxed" Accounts and Collaborative Editing

- Collaborative Editing
  - Is only possible on the original project <u>not on a saved copy</u>
  - Continue to next page

- "Sand Boxed" Accounts
  - Students with sandboxed accounts:
    - Cannot check email but..
    - Can access shared code directly from Goggle drive
  - How to share code with students with "sand boxed" accounts
    - Follow the same steps described on slides 3 and 4 of this document and summarized here:
      - Sign into the ZR website
      - Open the file that you would like to share
      - Share the code to the student's Zero Robotics login email address
    - You will receive an undeliverable email address message but you can **ignore this message**
  - Continue to next page

Alternate Instructions for:
"Sand Boxed" Accounts and Collaborative Editing, cont.

- To access code shared to/for:
  - Students with "sand boxed" accounts
  - Collaborative editing

- Confirm you are signed into the Zero Robotics site

- Open a new tab on the browser

- Go to Google Drive
  - Enter: **https://www.google.com/drive/**

- Select "Go to Google Drive"

Alternate Instructions for:

"Sand Boxed" Accounts and Collaborative Editing, cont.

- The left hand menu will open with "My Drive" highlighted (1)
- Click on "Shared with Me" to see a list of the projects that have been shared (2)

- Intramural Competitions only-
  - Double click on the project to open it in the ZR IDE (3)
  - continue from page 6 (earlier in this tutorial)

- Collaborative Editing – see next page

Alternate Instructions for: Collaborative Editing, continued

- Select the shared file (but don't open the file)

- Move the shared file into your drive by selecting "Add to My Drive"

OR

Alternate Instructions for: Collaborative Editing, continued

- Go to “My Drive”
  - Click on My Drive
- Find the shared project in your list of projects
- Double click on the project to open and view
  - After opening the project first from Google Drive the project will be able to be opened and viewed directly from the ZR IDE in the future
- Individuals viewing and editing the same shared code should see edits propagate almost instantly in their browser