ROBO CHALLENGE XTREME

Virtual Tournament Requirements

The Virtual Tournament is a unique competition. Who are you competing against? Who is judging you? How can the RCX Program provide a fair and equal competition for everyone to participate? Well we believe we have answered these questions. Follow the steps below and everyone should be able to participate equally. We know going in to this we all will make mistakes, so bare with us to perfect this competition.

Teachers/ Coaches
You have done a great job preparing your kids for the Virtual Challenge. The Team Members should do all the work for this video. Including taking the video, editing, and speaking. The kids may include the coach in the video at the introduction, but now is time for the kids to own their efforts and show what they have learned, and can do with their robot.

1. Teams will need to download the Annual Challenge Rules and Missions document for this year's RCX Challenge. Additional documents and videos will be listed at the RCX website.

2. Teams will be able to design, construct and program a robot to fit the challenge. The deadline to submit your team's video will be posted on RCX website.

3. Things you need to do:
   a. Make sure to follow the General Rules.
   b. Follow the Challenge Rules and Mission for the RCX Challenge.
   c. You will need to provide a clock showing the time remaining during the Match.
   d. You may retake your video as many times as you want.
   e. You may submit only one (1) video.
   f. Your school may sponsor multiple teams.

4. The Virtual Tournament will try to incorporate Team activities to include Public Speaking and Teamwork, along with the design, construction and programming of the robot.
   All activities in this video should be done by the students, including the speaking and editing of the video, plus the design, construction and programming of the robot.

5. Video layout
   a. Length, no more than 5 minutes long
   b. Introduction (30 to 45 seconds in length), must include:
   1. School Name
   2. School District Name
   3. Team Division: Elementary, Middle or High School
   4. Team Name
   5. All student names
   6. MUST INCLUDE THE OBJECT LISTED ON THE RCX WEBSITE.
      Object will be posted 2 weeks before the Virtual tournament window opens.

   c.   Robot Run (No more than 4 minutes), includes the 3 minute Match, plus panning of mat for scoring.

This portion of the video can NOT be edited.

1. The robot pre-staged in the Safe Zone, right before the Match starts.
2. All robot runs during the Match.
3. Scoring: Without stopping the camera, slowly pan over the surface of the mat.
   Make sure to keep the entire mat in your camera frame.
   Follow additional information listed at "Taking the video of the Match" below.
4. To help the referee, you may verbally communicate your scoring of the mat.
   The referee will review your comments for accuracy. Your score may be different than the referee's.

Remember, this portion of the video can NOT be edited.

   d. Conclusion
- Make of it what you like.
- Have fun, show excitement throughout the video.
- **Length of the entire video, no more than 5 minutes long.**

6. Taking the video of the Match
   - The intent is for you to 1st video the entire activity of the robot during the Match, 2nd quickly pan over the mat for location of mission objects, then 3rd provide a close-up view for the referee to score.
   - A Team Member should take the video. A Team Member should speak during the video and especially when panning at the end of the Match.

   a.   Camera: Teams may use any kind of video camera available. Including cell phones.
- A tripod is recommended, but not required.

   b.   Placement: The camera should be placed such that:
- The camera should be in a fixed position at this time.
- It is recommended to place the camera along the North Wall, facing diagonally across the mat with the Safe Zone closest.
- Treat the area along the North Wall as "Out of Bounds" so that Team Members do not accidentally affect the camera.
- If you can position the camera directly above the entire mat, that is acceptable as well. The ability to move the camera when you pan the mat for scoring may be tricky.
1. The entire mat is visible in the camera frame at ALL times during the Match.
2. The lines of the Safe Zone are visible to the referee to assess Touch Penalties.
3. A clock, counting down should be visible, especially toward the end of the Match.
4. Activity of the Team Member's should NOT obstruct the action of the robot, or any area of the mat during the Match as much as possible.

   c.   Panning: At the completion of the Match, the camera should pan over the mat to allow the referee the ability to see all scoring objects.
- The camera can be moved at this time.
- Remember, the referee only sees what the camera has in its frame. As you pan over the mat, make sure to keep the entire mat in the camera view. Meaning if a mission object leaves the view of the camera before you pan over that area of the mat, it may leave some doubt as to whether to award a score for that mission object.
1. Pan over the entire mat, as if the referee is looking from the North Wall. Make sure to pan from the East Wall toward the West Wall. This will give the referee a view of all the mission objects on the mat.
2. Now pan from the West Wall back to the East Wall providing a close-up of each Mission Object. This will allow the referee the ability to score each object. Make sure no team member moves any mission objects by hand. If caught cheating, your team will not be scored.
3. Verbally communicate the location of scoring objects as you pan.

7. Submitting your video.
    - Teams may attempt the Match as many times as they wish in the practice room.
    - Teams may submit ONLY 1 video for the challenge theme attempted.
    - Videos must follow the "Video Layout" listed above.
    - **Teachers, coaches, you may have to complete this step for the Team.**
    a. You must "Share" your video with RCX. Share to Virtual.rcx@gmail.com
       The video should be shared the same way as if we were "collaborating" together with a Google Document.

8. Scoring the Video
    a. **Editing, No editing of the video from the time the Match starts through the end of panning the mat after the Match is completed.**
       If the referee perceives the video has been edited during this time, you will not receive a score.
    b. The referee will score the video the same way as if this was an in-person tournament. Touch Penalties will be accessed, mission objects will be scored, and time left on the clock will be considered.
        - If during the videoing of the Match, you believe the referee will assess a Touch Penalty, simply verbally say "Touch Penalty", pickup your robot and restart from the Safe Zone.
    c. While not a score, your Team will receive consideration for following the "Video Layout" as outlined above.

9. Credit
    - If by chance your team wishes to include a musical background, your Team must provide credit in the video to the appropriate artists.