



9^{RC}VP 2022 April Season

Chimney Challenge

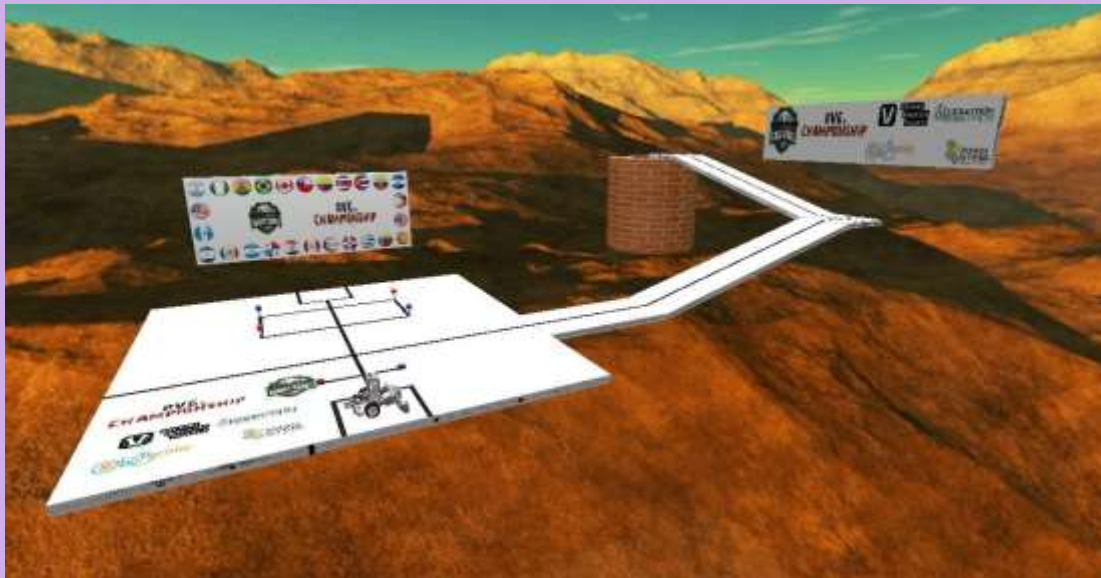




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General Rules

1. Virtual Playoffs is not a team sport, hence all tasks must be completed individually.
2. The competitor must never be older than the age group (18 years).
3. Participants have 720 hours (30 days) to update and submit their best robot runs as many times as possible before the final day (simulation day).

On the final day, participants will connect virtually and run their program before all in attendance, including the judges. The results will be called based on the following criteria: (Points at the end of the league + Points on the final day) / 2 = final score The participants with the highest final scores win the league for that season.

4. **It is not allowed to make changes in the environment before, after and during the simulation.**
5. When the simulation starts, the competitor can only use the camera's tools and the scoreboard button.
6. All the tasks need to be solved only by using the code created by the participant for the robot.
7. In case of any unforeseen circumstances in which the rules have to be altered, the judges will have the final say in the results.
8. The judges have the utmost authority to amend the rules and regulations.
9. The judges have the utmost authority to disqualify a result if:
 - a. Participants pause and resume the simulator in between the code.
 - b. Participants create any other situations which judges deem unacceptable.



- Registered participants are allowed to create a personalised profile using the link: <https://getdp.co/9jarobocon> and be proud to share with their friends on various social platforms



Virtual Playoffs Personalised Profile Sample

- Record a video of your best run and upload on Google Drive and ensure we have access to the drive. You can do this by sharing your video with competition@stemprofs.com

How to create your video?

You need to record computer screen using Windows 10 Function, QuickTime player, OBS or other option to record screen.

Screen record Windows 10

https://youtu.be/mVJsm_000c0

Screen record Mac

<https://youtu.be/s9xnsj6ditM>

Screen record OBS

<https://youtu.be/QKmrDUJFRkM>

Install OBS:



<https://obsproject.com/>

The participant must upload the video on Google Drive.

If you sent a Google Drive link please confirm we can have access to the video. You can do this by sharing your video with competition@stemprofs.com

Record Details

-On the video, the participant has to show the robot solving all the challenge. If the video starts after the robot begins solving the challenge or cuts the video before the robot finishes the task, the video will not be valid.



-The robot and the scoreboard must be visible all the time.

-On the video the participant must use "Top Camera" and "Tether" tracking type.

Top Camera and Tether tracking type 1)

Need to open Advanced Mode.

To access "Advanced Mode", all you have to do is press "F12" on your keyboard. Could be:

-F12

-Ctrl+F12

-Fn+F12

-Alt+F12

-Cmd+F12

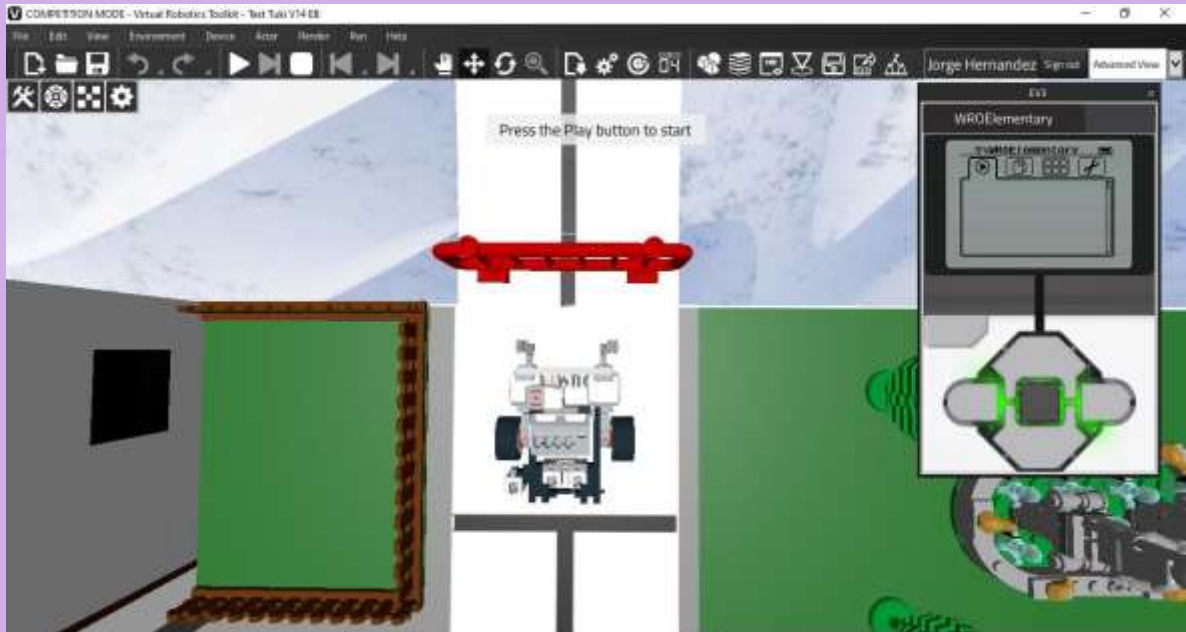
Simple Mode



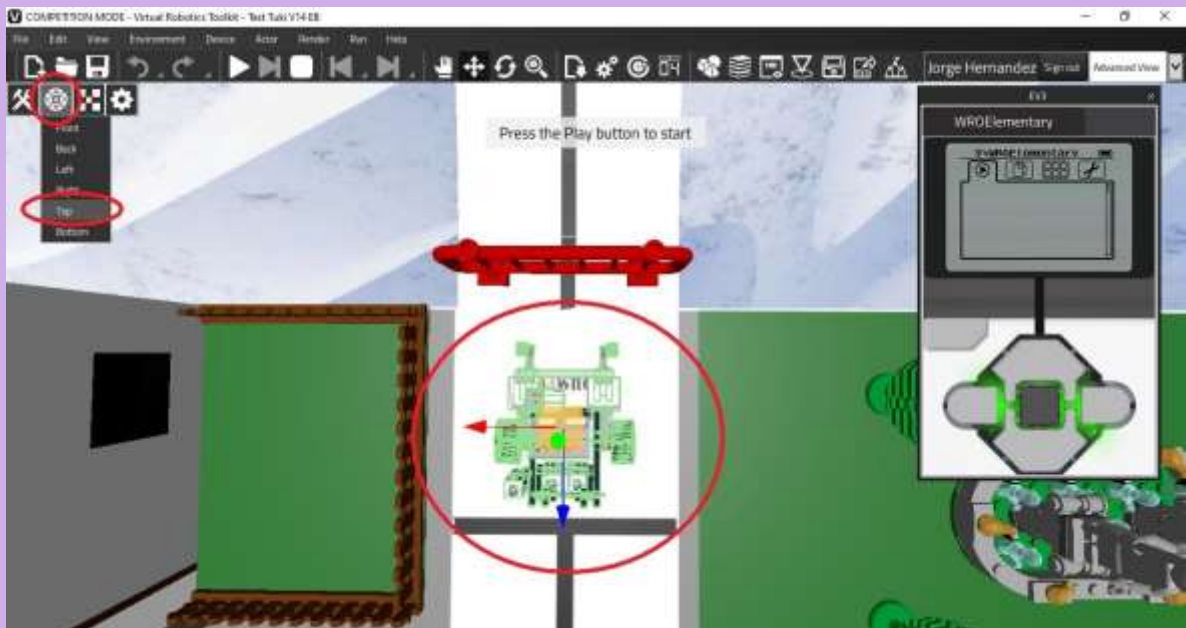
Advanced Mode



2) Move the Virtual EV3 Brick.



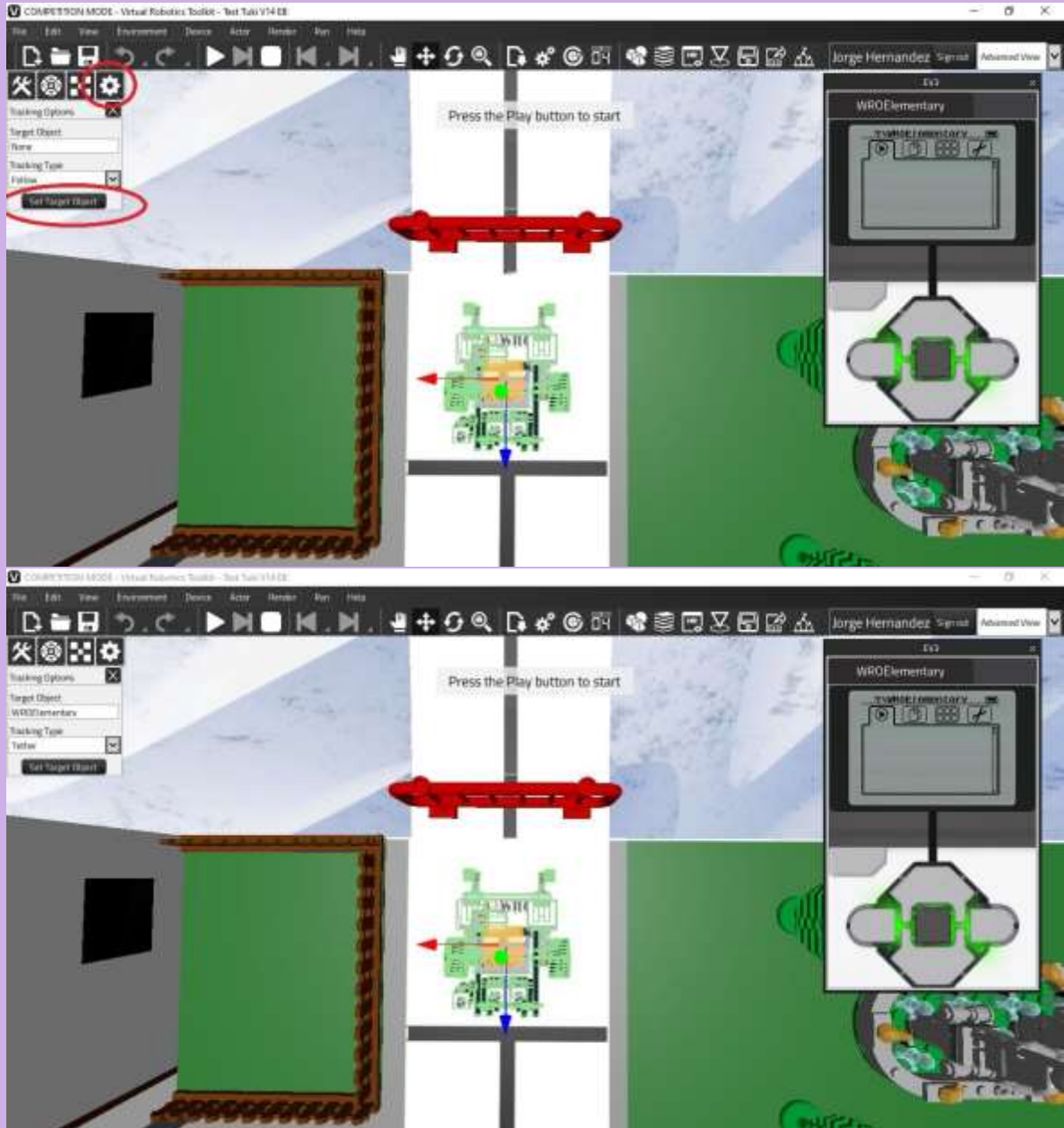
3) Select the robot and use Top Camera.





4) Use "Tether" Tracking type. The robot must be selected and then click on "Set Target object".

Change Tracking type to "Tether".



Top Camera & Tether Tracking type tutorial:

<https://youtu.be/hNvJNMnV9dM>



Fill the form?

The participant needs to click on the link and fill the form.

Please be aware of your email, because in case there's a problem with your video or your results, we will contact you. <https://bit.ly/3uCekD6>

Important Information

Open Ceremony is April 1 at 18:00 hrs GMT+1 on STEM Professionals social media.

The start time to **submit results** is April 1 at **00:01 hrs. GMT+1.**

The end time to **submit results** is April 30 at **22:59 hrs. GMT+1.**

The end time to **fill the form** is April 30 at **23:59 hrs. GMT-5**



Closing Ceremony is May 1 at 19:00 hrs GMT+1 on STEM Professionals social media.

If a top 10 participant doesn't fill the form will not receive the special certificate and any prize.

Recommendation:

If you think your result will be among the top 10 you can fill out the form before April 30.



Tie Result

18	 Participant 1	2020-11-05	5	100	00:55.955
18	 Participant 2	2020-11-05	3	100	00:55.955

If participants have the same result on the leaderboard the judging team will review the next highest results of the participants.

When the judging team knows who gets the better result, will take out 0.001 seconds to the time on the leaderboard of the participant winner to tiebreaker the result. In the example "Participant 2" get a second better high score, it means we will take 0.001 seconds of the participant time result.

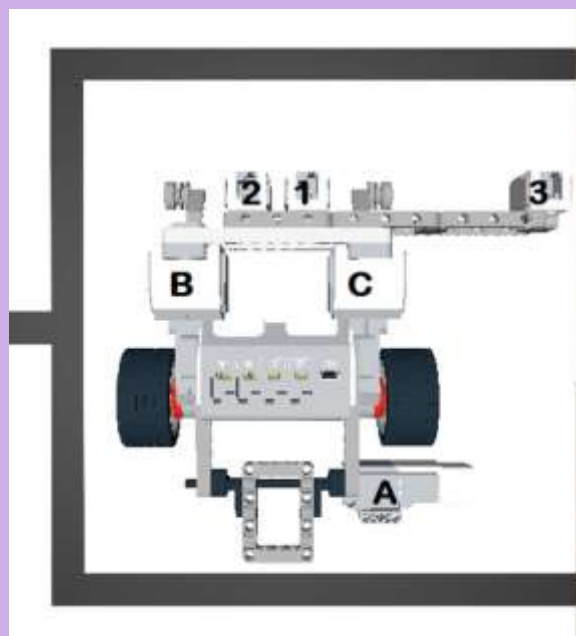


18	 Participant 2	2020-11-05	3	100	00:55.954
19	 Participant 1	2020-11-05	5	100	00:55.955

If one of the participants only have 1 submitted round(robot run) the other participants will be the winner of the tiebreaker.

Robot Ports

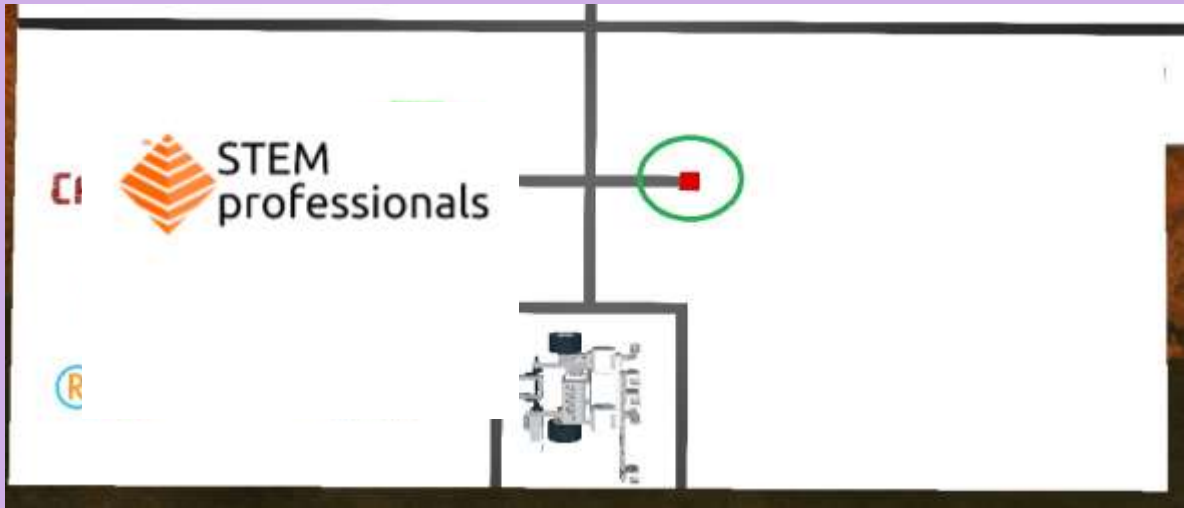
***Remember, it is not allowed to import a new robot.**





Robot Missions

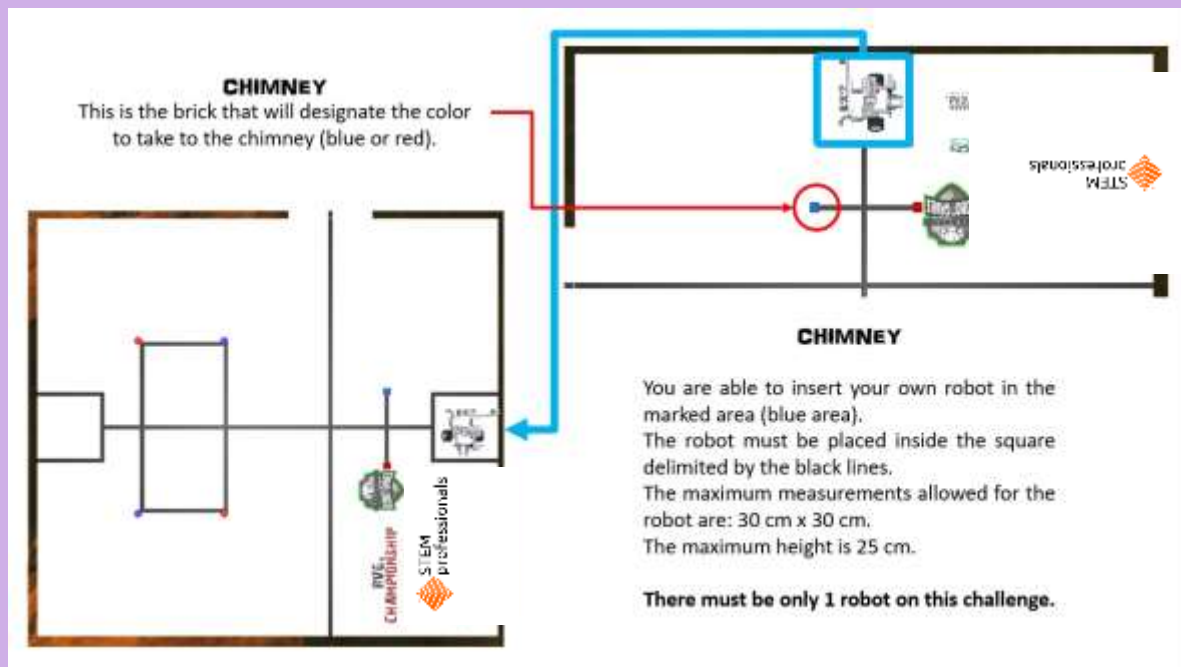
The robot must move the balls of the colour of the cube to the chimney.



On the track you will find a cube that will designate the color to take to the chimney (blue or red).

For more understanding you can see the next sample video:

https://youtu.be/Tqp_y8Ct7cl



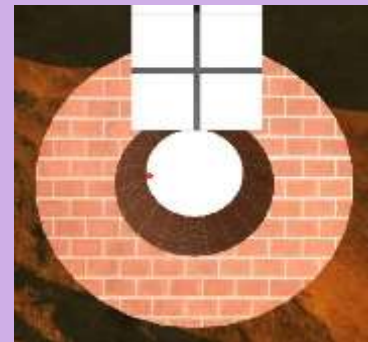


Score

Chimney Challenge	Each	Total
Correct balls on the Chimney		
Each ball will give you points if it is equal to the color indicated by the cube.	40	80
Incorrect balls on the Chimney		
Each ball will take you points if it is not equal to the color indicated by the cube.	-5	-10
Park the robot		
Robot stops on Finish Area and simulation stops. (only if other points are assigned)	20	20
Maximum Score		100

Scoring Interpretation

The ball of the correct colour must be inside the Chimney.



Awards Table

Position	Certifications	Recognition at 9jaRoboCon Event	Free Internship with any of our partner brands (1 month)	VRT license (1year)	Medal
1 st	✓	✓	✓	✓	Gold
2 nd	✓	✓	✓	✓	Silver
3 rd	✓	✓	✓	✓	Bronze
4 th	✓	✓	✓	✓	
5 th	✓	✓	✓		
6 th	✓	✓	✓		
7 th	✓	✓	✓		
8 th	✓	✓			
9 th	✓	✓			
10 th	✓	✓			