ROBO JAM
by Mr Roboto

RULES
STACK.IN

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1.   Summary

The objective of STACK.IN is to create and/or program a robot that takes objects to certain areas of the track, in a time of 120 seconds, without the robot or the objects leaving the track while doing so.

All teams will solve the challenge live on the day of the event. All teams will solve the challenge live on the day of the event. This challenge will only take place in face-to-face events. All teams will do 3 qualifying rounds.

Each object can have a score between 1 and 20 points, depending on the drop zone and whether it is touching the track or not. In this challenge there is NO time bonus. Objects outside the track will have a negative score.

The competition is open to participants of any age. Each registered team can have a maximum of 3 members and a mentor. If all the 3 members are under the age of 18, the mentor must be 18 y/o or older and must act as the adult responsible for the team.

2.   Registration
All the information regarding registration can be found in http://robojam.live/

3.   Rules Clarification
All those circumstances not foreseen in this set of rules, will be up to the judges and/or the tournament staff to solve. They will have the final decision on it and cannot be appealed.

By registering the team, the team understands and accepts all the rules presented here.

In case of being disqualified, or not showing up to the event, there will be no reimbursement of any kind for the team.

Rules could be modified until the registration due date. However, if there is any need to clarify one of the rules before the event, the teams will be notified

4.   Challenge Setup
The team is responsible for organizing and obtaining all the necessary items to participate.

It is recommended to review internet access and bandwidth in advance, as well as the devices (Computer, Tablet, Cell Phone, Remote Controls, etc.) that will be used during the challenge.

5.   Robot
a)   Any type of platform can be used. The design of the robot can have any design.
b)   The maximum dimensions of the robot are 30 cm long x 30 cm wide, with no height restriction. Anything detached from the robot is considered an extension of it. The robot must not exceed these measurements at any time.
c)   The robot must be Radio Controlled. Any type of signal can be used. (Infrared, wifi, bluetooth, etc.). Sensors cannot be used to guide the robot.
d)   The robot can manipulate the object in any way, either by pushing it or holding it with any element that restricts its movement.
e)   It must have a switch, to turn the robot on and off.

f)   We want to clarify, these requirements are mandatory in order for the robot to participate. In case a team starts competing without complying with any of them the round will be considered null and the team can even be disqualified.

6. Competition

a) The team is needs to attend the captains' meeting scheduled before the competition, in order to approve the tracks and the robot. Not being in the meeting prior to the start of the challenge may have a penalty.

b) All teams will have 3 qualifying rounds.

c) Each round will have a maximum of 2 minutes (120 seconds).

d) For classification purposes, the round with the best score of the 3 is counted.

e) The robot must take the objects to the unloading zones (marked with their respective score). The number of objects that can be in each area is limited by the size of the area, but there is no limit as such.

f) Each object that is inside the track at the end of time, that is not in the blue unloading areas, will have a score of 1 point.

g) The objects placed in the open blue zones (not contained), will have a score of 5 points if they are touching the track or 10 points if they are inside the zone on top of another object. The obstacle is considered inside the open unloading area, as long as it is touching the area at least partially.

h) Objects placed inside the contained unloading zones will have a score of 10 points if they are touching the track or 20 points if they are inside the zone on top of another object.

i) The robot cannot be touching any of the objects in the unloading zones when the time ends. If that is the case, those objects won´t be counted for the final score.
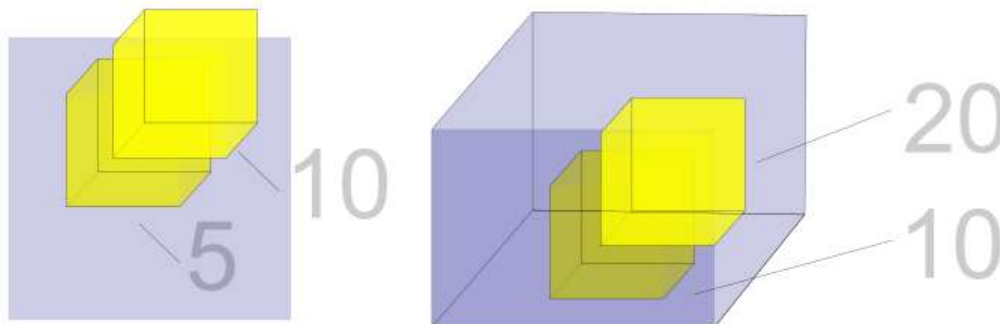
Example of scoring in open unloading zone (left) y contained unloading zone (right).

i) If an object goes completely off the track, it will have a score of -1, which will be subtracted from the final score of the round.

j) At no time can participants touch any of the objects or the robot, once the round begins. If they do, the round is over.

k) The robot must be paced in the assigned center zone on the track. The time ends at the end of 120 seconds. If the robot leaves the track, its round ends, but the points it had so far are added.

l)   The best 8 teams (8 highest scores) after finishing the qualifying rounds time, will qualify for the final rounds. In case there are less than 8 teams registered, the best 4 will directly qualify for the semifinal.

m)   In the event of a tie in a position that gives classification, the teams involved will have to make a tiebreaker. If it persists, the sum of the qualifying scores will be taken into account to make a decision. As a last resort, a raffle will be held.

n)   For In person competitions, the classified teams will make brackets and then go to direct confrontations until they have the podium winners.

o)   In the event of a tie within the first 3 places, there will be tie-breaking rounds between the teams in question.

7.   Track

Yellow squares represent the starting position for the objects. The robot will start in the middle of the field.

a)   The track has a size of 100 x 70 cm. The track must be raised, with a height of at least 5 cm from the floor.

b)   There are 6 blue unloading zones on the track: 4 contained zones with a size of 20 x 14 cm and 2 open zones with a size of 20 x 20 cm.

c)   Contained unloading areas will have an exterior wall 10 cm high and a maximum of 1 cm thick.

d)   10 cubes of 5 x 5 x 5 cm (+- 2mm) will be used as objects with a maximum weight of 150 gr each. These will be located at the beginning of each round in the marked position on the track.

8.   Penalties

Teams may receive a time penalty for not complying with any of these regulations. The points penalties are -50 points for each foul.

The judges and / or the staff can disqualify any team, at any time, for any fault that in their opinion is serious and is against the respect, ethics and education that is sought in the event. This includes, but is not limited to, any of the following situations:

a) Fraud in the information shared with the organization or in the competition
b) Dishonesty in the challenge, deliberately breaking the rules.
c) Disrespect to judges or participants, during the competition or in the comments during the live streaming.

9.   Claims

a)   The captains can file a claim in front of the judges, in case of having any disagreement.
b)   The final decision on any claim is at the discretion of the judges and / or the organizer, who are considered the last instance in the resolution of this situation and their decision is final, cannot be appealed.

10.   Prizes

The first 3 places will be awarded with credentials for a ROBOJAM event. All other teams can request participation certificates.

Other additional prizes, such as cash prizes or sponsor gifts, will be assigned and communicated by the organizer at his own discretion, after the registration due date, but before the competition date.

Any question, please send us a message to
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