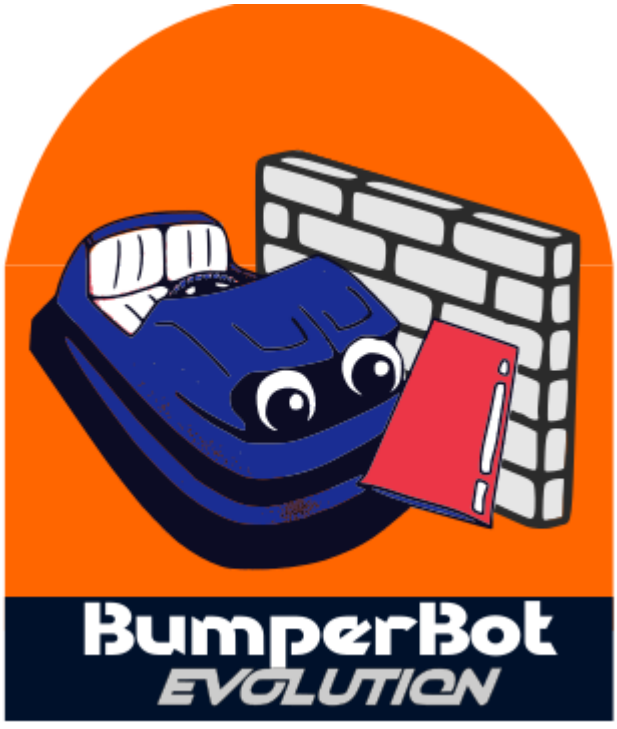
ROBO JAM

by Mr Roboto



RULES

1. Summary

The main objective in BUMPERBOT EVOLUTION is to create and / or program a robot that removes a series of 10 obstacles from a track, in 120 seconds, without leaving the track while doing so.

All teams will solve the challenge live on the day of the event. There will be qualifying rounds, which amount may vary depending on the number of robots registered in the challenge, and the classifying mode, as well as if the event is virtual or in-person.

Each obstacle removed has a value of 10 points, and one point will be assigned for each unused second, if all 10 obstacles are removed before 120 seconds of the round.

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 and paying the registration fee, 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

Allied events that use RoboJam challenges may have differences in the application of our challenge rules and competition format, with prior authorization from the organization.

4. Challenge Setup

The team is responsible to get and organize all the elements necessary to participate.

For virtual events, It is strongly recommended to check the internet access and bandwidth ahead of time, along with all the devices (laptop, tablet, Cell phone, etc.) the team will use to stream the challenge.

5. Robot

a) Any type of platform or kit can be used. The design of the robot is free.
b) The maximum size of the robot is 20 cm long x 20 cm wide (7.8 x 7.8 inches), without height restriction. Any element that detaches from it, can be consider an extension of the robot. The robot must not exceed these measurements at any time.
c) The team must demonstrate that the robot is autonomous and capable of performing on the track no matter where it starts.The robot must be completely autonomous. It must demonstrate that it is capable of navigating the track regardless of where it starts, using a single program. It is not allowed to change the program to adapt to the starting position.
d) Cannot Use any type of external help from participants (Gestures or movement,RC, light guidance, etc)
e) The use of sensors is mandatory, to stay within the track and maneuver around the inner walls
f) Since the idea is that the obstacles simulate a possible opponent, physical contact is necessary and the use of projectiles, fans, water cannons or other elements considered similar is not permitted.
g) Since the obstacles simulate an opponent, there must be physical contact with the object. The use of fans, bullets, water cannons, or other similar elements, are not allowed.
h) It must have a non remote switch to turn the robot on and off .
i) The use of programming devices (computers, tablets, cell phones, etc.) or remote start devices during official rounds (classification or finals) is not allowed.

j) 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) In virtual events, the team is required to attend the captains' meeting scheduled one hour before the competition, in order to approve the tracks and the robot. Failure to connect to the meeting prior to the start of the challenge may result in a penalty.

b) In Virtual events, All teams will have at least one qualifying round. In in-person events, all teams will have the opportunity to carry out 3 qualifying rounds, which they must do in a maximum time of 2 hours. If they fail to do them, they lose that opportunity, and only the rounds completed are counted

c) Rounds will have a maximum of 2 minutes.

d) The robot must remove a series of 10 obstacles from a track, in 120 seconds, without leaving the track, through physical contact with the robot or other obstacle, in a maximum time of 120 seconds.

e) Each obstacle removed has a value of 10 points, and one point will be assigned for each second not used, in case the 10 obstacles are removed. Obstacle must leave the track completely. In case of getting out and coming back in, it is considered still inside. The only exception will be the last obstacle.

f) Team members cannot touch the obstacles or the robot, even if they are outside of the track, once the round starts. In case of doing it, the round will end

g) The robot must start in the position and direction indicated by the judges. Time ends once the robot takes all the obstacles out or after 120 seconds. In case of getting out of the track, the round ends, but the points gotten up to that point Will be counted, but no bonus points will be given.

h) In virtual events, the best 10 teams (10 highest scores) in the first round will qualify to the second round. The best 5 teams (5 highest scores) in the second round will qualify for the final round. If there are 10 or fewer participating teams, the teams will do the 3 rounds and the best score from the 3 rounds will be taken.

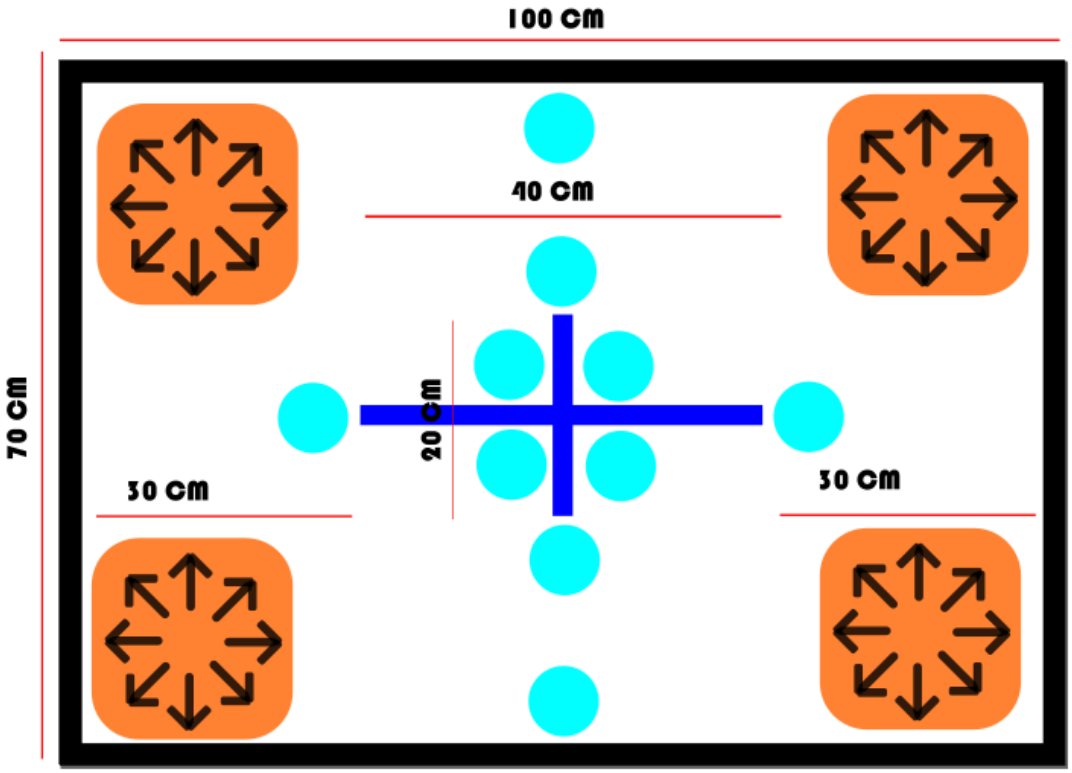
i) In in-person events, the best score from the qualifying rounds carried out by the team, will be chosen. In the event of a tie for the last qualifying position, the rounds of the teams involved will be averaged to determine who passes. The best 8 teams will go to direct elimination by brackets {1-8, 3-6} & {2-7,4-5}, until the

podium winners are reached. If there are less than 8 teams registered, the 4 teams with the best points will go directly to the semifinals.

j) In virtual events, in the event of a tie in the final round, a single additional tiebreaker round will be held between the teams in question. For in-person events, this will be done for eventual ties in final rounds. The judges and/or the organizer will determine under what conditions it will be done, right at that moment.

k) If a team is called and does not show up, they will be given until the end of the round to show up and make their attempt. Otherwise the round will be declared void. In face-to-face events, if the team in final instances is not yet ready, it will continue with the next key (giving a minimum time of 2 minutes for the team to organize), and it will be called again at the end. If you are not ready when called in the second instance, the round is given to the other team..

7. Track



The blue circles represent the obstacles and the orange box represents the robot's exit point and possible orientations. The blue lines represent the internal walls.

a) The track has a length of 100 cm with a width of 70 cm, with a white background.
b) There are 2 walls of 10 cm high, 1 of 20 cm in the center of the track vertically and 1 of 40 cm horizontally .(See the figure). The thickness of the walls will be half an inch (1.2 cm) with a tolerance of +- 2mm. The walls will be white with a 2 cm black frame with a tolerance of +- 2mm.
c) The thickness of the BLACK border line is about 2 cm (0.8 inches). You can use black electrical tape, or any other element to mark it.
d) The track will be made of wood or similar material, which allows rigidity when raised from the floor by at least 5 cm. This must be cut flush with the perimeter measurements.
e) 10 obstacles of 7 cm in diameter will be used (with a tolerance of +- 2mm.). The height may change. In Virtual Challenges, 10 plastic cups with these specifications will be used as obstacles, however the height must be the original of the cups without modifications. They will be located on the track as indicated in the image (See the figure – blue circles. The position of objects is based on the figure and is approximate). The objects MUST be a color that contrasts with the track (you can use paint, colored tape, etc.), to facilitate visibility. White or transparent are not allowed.
f) he judges will indicate where the robot starts at the beginning of each round for each robot and what direction it should be facing.

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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- ***Info.RoboJam@gmail.com***

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