EXODIA'17

PRESENTS

HURDLERUSH

COORDINATORS

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Task

Each team has to make a battery powered wireless racing car that will beat the other cars on the track. The goal will be to finish the race by crossing all the hurdles in the race in minimum time or quicker than the opponent (based on the rounds).

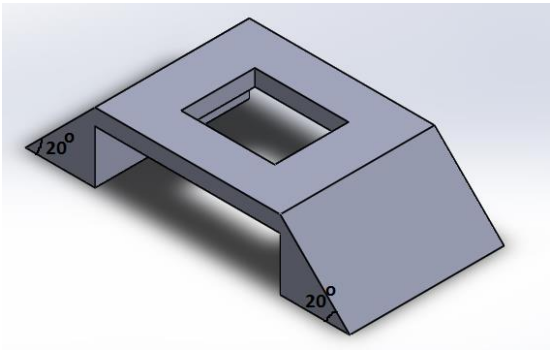
Team Specifications and Eligibility

1. A team may consist of a maximum of 4 participants.
2. Students from different educational institutes can form a team.
3. All students with a valid identity card of their respective educational institutes are eligible to participate.

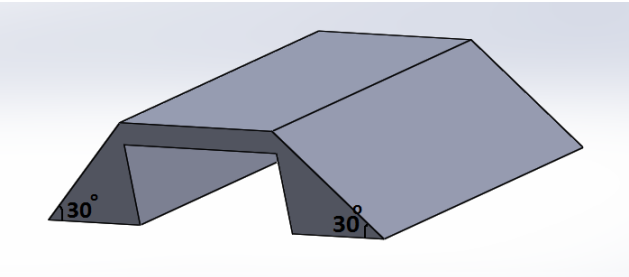
Bot Specification

1. The size of the bot must be within 25 X 25 X 25 cm. (Robot with error greator than 4% will not be allowed to participate.)
2. Bot must have on board power supply.
3. The Power supply is the responsibility of the team.
4. Bot must be started individually by only one switch.
5. Potential difference between any two points on the bot should not exceed 24V.
6. The bot must be made on your own. No readymade bots and LEGO kits are allowed.
7. Controls should be wireless.

Huddles in the track:



The width of the slit is 15cm.



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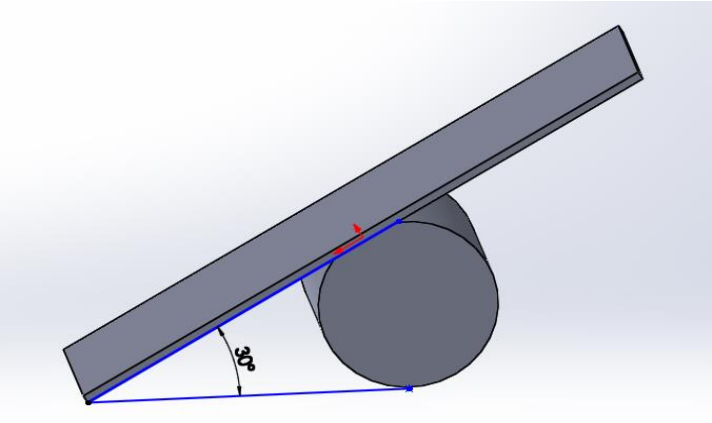
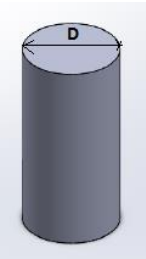
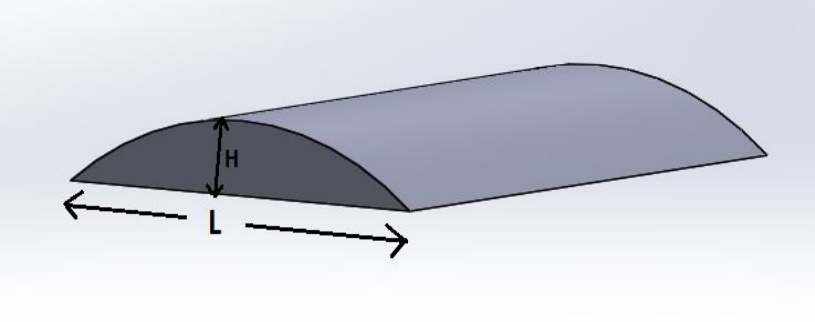


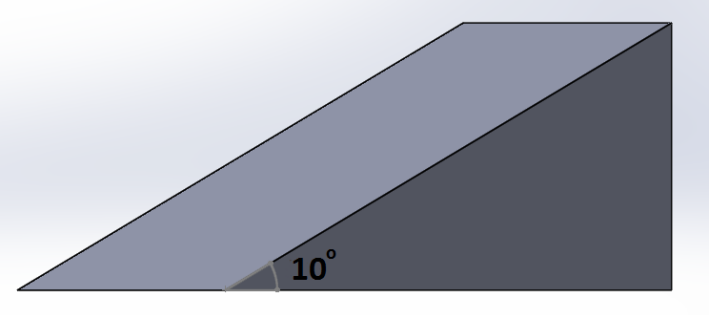
The diameter of the cylinder will be between 10 - 20 cm



D = 5cm. Colliding with these obstacles will increase the total time taken



The ratio of L:H will be 5:1



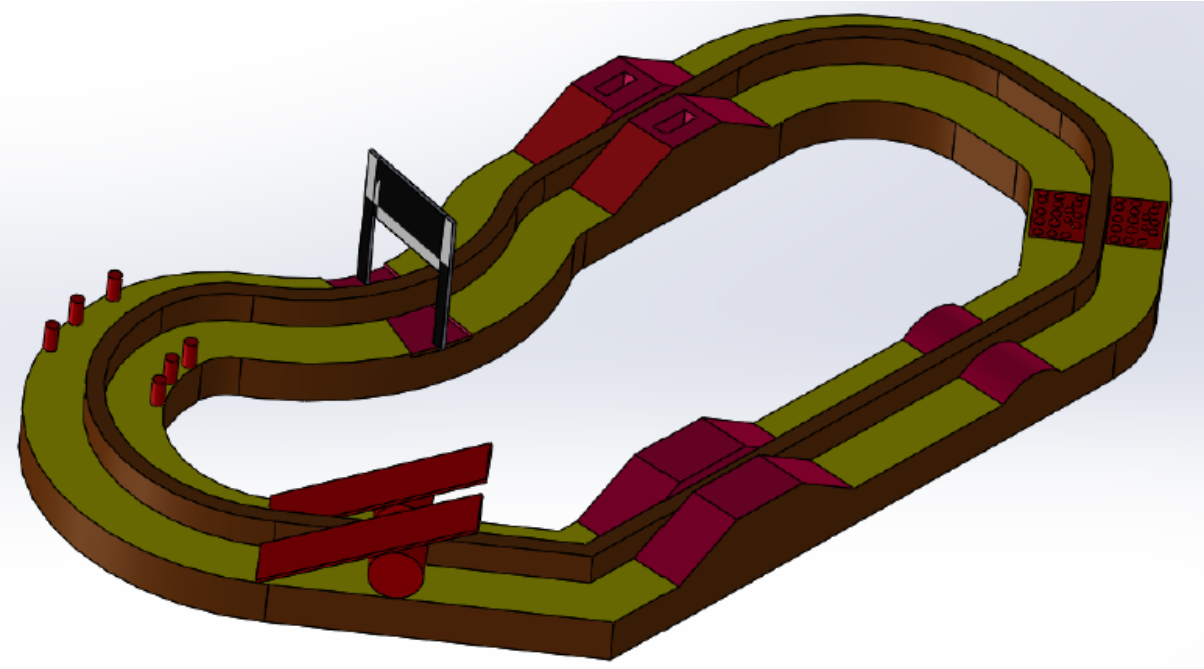
The highest point of the incline will be 2.5cm high

The track will also contain a portion consisting of stones/marbles/sand, etc.

Note: The hurdle dimensions can have a variation of up to 10%. If any major change is made in the hurdles all the teams will be informed beforehand.

Race Track:

There will be checkpoints marked in the track. In case the robot is unable to move due to collision it will have to be placed at the previous checkpoint.



The given track is a sample and the original track will be different.

Game Rules and Event Structure:

1. The competition will consist of a qualification round followed by knockout rounds.
2. In the qualification round the total time taken by each team to complete a round of the race track will serve as the criteria for its selection into the knockout rounds. 8 teams (can be changed based on the number of participants) will be selected for the knockout tournament.
3. The total time is the sum of the time taken to complete the race plus the penalty time added in case the cylindrical obstacles are hit.

   Total time = Time taken to complete the race +
   15 * (no of obstacles collided with)

4. The selected teams will be seeded for the knockout rounds based on their performance in the qualification round and knockout fixtures will be made on the basis of the seeding's of the qualified teams
5. The knockout rounds will have races of 2 laps.
6. In case both the robots fail to complete the race, the robot that moved the farthest wins.
7. Only one robot is allowed per team.

General Rules:

1. Only one member of the team is allowed to handle the bot.
2. Participants are not allowed to put anything inside the arena other than the bot.
3. The participants are not allowed to go inside the arena or touch their bot during a race without the consent of the organisers.
4. Only the time recorded by the organizers shall be considered and their decision shall be final and binding in case of any disputes.
5. In case of any disputes/discrepancies the organizers decision will be final and binding.
6. The organizers reserve the rights to change any or all of the above rules as they deem fit, however any change shall be communicated to the respective teams.

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