



EDGE17
THINK. DREAM. LIVE.
7th-9th APRIL



DRAG-ON

“Invincibility lies in the defense, the possibility of victory in the attack. Show your skills in proceeding your bot for an extended period of time.”

Event Category: Manual Robotics

Problem Statement:

Design a manually controlled robot capable of pushing blocks along with scoring maximum number of goals against other robots avoiding different obstacles.

General Rules:

- A minimum of 3 members and a maximum of 4 members are allowed per team.
- The members must bring IDENTITY CARDS of the college.
- No person should be a member of two teams.
- No bot can be shared by two teams.
- The participants will be provided with 220 Volts, 50 Hz standard AC supply.
- Participants will have to themselves arrange for any other power supply required for their robot.
- Teams cannot tinker with their bots during the play offs.
- LEGO kits or its spare parts or pre-made mechanical parts are not allowed.
- Any kind of damage to the arena by the robot will lead to direct disqualification.
- No attack on the opponent bot is allowed.
- Any act of misbehavior or misconduct will lead to immediate disqualification of the team.
- The decision of the coordinators will be final and binding.

****The rules are subject to change.**

Robot Specifications:

- The robot should have a maximum size of 25cm (l)*25cm (b)*25cm (h) with a tolerance of 10%.
- The bot with external mechanism must be fitted in the cubical box of given dimension.
- The maximum allowable weight of the robot is 2.5 KG without any tolerance.
- The robot can be powered on-board or off-board.
- The potential difference between any two electrical points on the robot must not exceed 20 volts throughout the run.



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- External weights on bot are not allowed.
- The robot should not grab/hold the ball at any point of time during the match.

Event rules:

First Round: -

- The game will be of maximum of 3 minutes.
- The bot has to place maximum number of balls and blocks in a given time.
- Balls and blocks must be placed on their specified places.
- The bot has to place the blocks first then after they would have kick of the balls.
- While moving, the bots have to avoid obstacles placed at different positions in arena.
- Two timeouts of 2 minutes each will be provided in case of any mechanical fault in the bot with negative points awarded for the second timeout.
- The teams with highest score will be selected for further rounds.
- Balls kicked from specified place awarded bonus point (jackpot).

Scoring:

SCORE = 100*[Number of blocks placed] +150*[Number of goals]
+200*[Number of jackpots] -20*[Number of obstacles touched] -50*[Number of times ball touches blocks] -100*[Second timeout taken] + [time left]

Qualifiers: -

- The game will be of maximum of 5 minutes.
- This round will be a knockout round.
- The team scoring the maximum goal wins.
- Winner team will be selected for further rounds.

Scoring:

Whoever scores the maximum number of goals, wins the competition.

Semi Finals: -

- This will be a knockout round.
- The game will be of maximum of 5 minutes in two halves of 2.5 minutes each.
- The bot has to score maximum number of goals against their opponents in given time.
- A maximum of 10 seconds will be allowed to hold the ball.
- The winner team will be selected for further rounds.

Scoring:

Whoever scores the maximum number of goals, wins the competition.

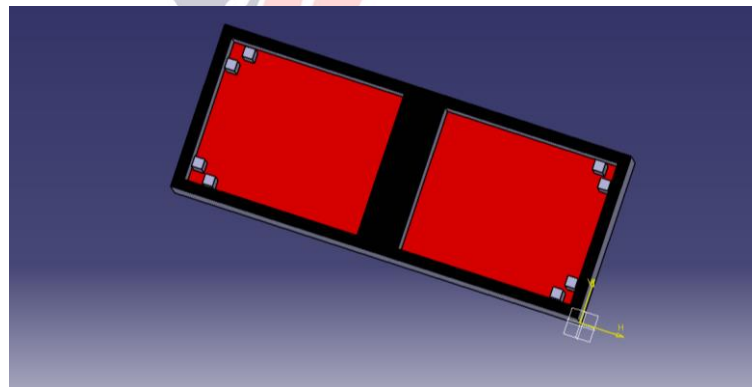
The Final Blow: -

- The rules will be same as that of semifinals.

Scoring:

Whoever scores the maximum number of goals, wins the competition.

Arena Specifications:



Event Coordinator:

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