ACCELERO-BOTX

The coolest bot race is in town. We at NIT Calicut give you a chance to prove your robotics skills. Control your bot with hand gestures and become the ultimate racing champion!

Exciting cash prizes too!

PROBLEM STATEMENT

Manipulate a wired/wireless robot, majorly created and coded manually ,controlled solely by hand gestures through a challenging course and earn bonus points by dropping balls in holes.

ARENA

The arena would span a total area of 4.5m x 2.5m. The inner width of the track through which the bot has to travel will be 35cm. The whole track will be bounded by boulders. The course will offer a number of hurdles and balls. The holes are along the path. The diameter of ball is 3.788cm.

There will be two paths:

One long, flat path.

A shorter path with a bridge inclined at a maximum angle of 30 degrees.

The participants are free to decide the path to be taken by their bot.

MACHINE SPECIFICATION

The maximum dimension allowed for the bot is 20x20x12 cm. Also, the bot should not be smaller than 6x5x2 cm. The machine should be controlled by a wireless/wired mechanism that uses only wrist movements to manipulate the movement of vehicle.

The machine cannot be made of lego parts or any readymade assembly kits.

Readymade microcontroller boards, readymade sensor kits and accelerometers can be used. Power supply for the system will NOT be provided

EVENT RULES

1. Duration of each match is 10 minutes.

2. The teams are required to finish the path, along with dropping at least 5 balls in the holes.

3. Extra points will be awarded for the remaining balls.

4. If the minimum requirements are not met, negative points will be awarded accordingly.

5. If the ball gets cornered, it will be placed back to the original position. But you can play that ball after playing another ball.

6. During movements red bricks should not be hit.

7. If at any point during the race the vehicle encounters a problem, the participants will be given one minute to fix it.

8. There will two matches for each team from the starting point. The best of two will be

considered.

9. In case of tie, a re-match will be held.

10. The contestants should be ready with the circuit diagrams, algorithms and code listing to give proper answers to any questions by the judges.

11. The event managers reserve the right to change any or all of the above rules as they deem fit. Change in rules, if any, will be highlighted on the website an notified to the registered participants.

TEAM SPECIFICATION

Each team can have a maximum of 3 members. Team members will have to produce valid ID card of their institute.

Cross college teams are permitted.

JUDGING CRITERIA

The judge’s decision shall be final and binding.

SCORE= 50 –[(your best time – event best time)/event best time] \*40 – [(5 – number of balls dropped) \* 10]-(number of red bricks hit).

CONTACTS :

Nishreyas Aruni : 9020957581

Niveditha Suresh : 9495772841