ROBOVANZA

Cross the Bridge

INTRODUCTION:

The bridge is surrounded by pits and various other challenging paths on either side of the bridge. Remember 'Falling is the first step to your success' doesn't work here. So, is your robot ready to face such an adventure?

PROBLEM STATEMENT:

Build autonomous robot skilled enough to cross the bridge with least possible time. The robot should be capable enough to cross the bridge of any irregular shape (any kind of turnings) it comes across in its path. Each round might have a different bridge.

QUALIFYING ROUND:

1. The bridge (plank) has pits on either side. The shape of the bridge will be revealed during the event.

2. The robot will be placed at start point.

3. There will be an ending or finish point indicating end of the bridge.

4. The time it takes for a bot to cross the bridge will be the recorded time. Based on recorded time participants shall be qualified for the next rounds.

5. The height of the bridge will be at least 10 centimetres.

6. There will be a few checkpoints on the bridge. Suppose a robot fails to complete the track and stops or deviates due to any error it can restart from the recent completed checkpoint but penalty will be included with extra time added.

7. There track on the bridge could be of any shape (turnings).

Note: Arena for the qualifying round and the other rounds will be displayed on the day of the event.

JUDGING CRITERIA:

The least time recorded to cross the bridge by the robot (in any round).

ROBOT SPECIFICATIONS:

1. The maximum dimensions of the robot are 30cm x 35cm x 30cm (l*b*h).

2. Robots should be autonomous.

3. Power supply to the robots should not exceed 12V.

4. Power supply should be ON board.

5. The weight limit for the robot is 3kgs.

6. Tolerance of 5% on dimensions, weight and power supply will be allowed.

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RULES AND REGULATIONS:

1. A team can consist of a maximum of 4 members.

2. Members of different institutions can form a team and must carry your respective college ID cards.

3. Only 2 members of a team are allowed to stay around the arena (for controlling [at the start and end points] and assisting).

4. Any kind of damage to the arena will not be entertained, and if done, the robot will be immediately disqualified.

5. If the robot falls down while crossing the bridge we are not responsible to the damage occurred to robot and which might lead to damage of arena causing immediate disqualification of the team.

6. No technical assistance will be provided by the coordinators during the time of the event.

7. No practice runs will be provided.

8. Use of an IC engine in any form is not allowed.

9. Human interference (e.g. touching the robot, stepping into the arena) during the game is not allowed.

10. No external power supply will be provided at the time of event.

11. A robot with the base of a toy car and its gearbox as a machine part will be disqualified. Also, LEGO kits are strictly prohibited.

12. Member participated from a team cannot participate in another team for the same event.

13. A robot is allowed to participate only once in that particular event.

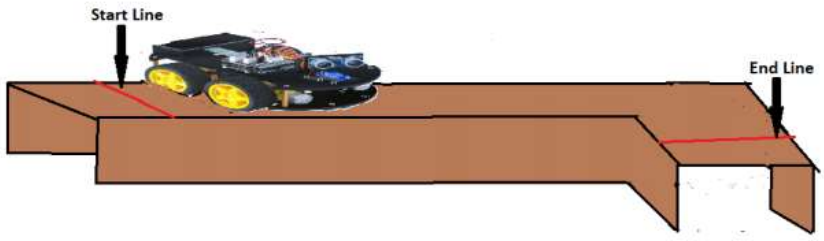
14. The organizers are not responsible for any kind of damage to your robot.

15. In case of any discrepancies, the decision of the coordinator and the event head shall be final, and no further arguments shall be entertained.

16. The teams should bring their own tool kits.

NOTE: Please check the problem statement frequently to know the changes made if any.

SAMPLE ARENA:



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