Cross the Bridge

INTRODUCTION:

Crossing bridges is always fun...why not make your bot do it this time? 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 on the bridge.

3. The end of the bridge will be the finish point.

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

5. The height of the bridge will be at least 10 centimetres. There will **not** be any inclined path.

6. There will be a few checkpoints on the bridge. If the robot falls or deviates due to any error, the coordinators will placed it at the recently completed checkpoint but with penalty points.

7. The bridge will remain in the limits 30-35 cm wide at any point.

8. The bridge could be straight or may have turns (maximum 90 degrees).

9. 2 attempts will be given to each team, and best of 2 will be considered.

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 with penalties added (if any).

ROBOT SPECIFICATIONS:

1. The maximum dimensions of the robot are 40cm x 40cm x 40cm (l*b*h).
2. Robots should be autonomous.
3. Power supply to the robots should not exceed 12V. Power supply should be ON board.
4. The weight limit for the robot is 3kgs.
5. Tolerance of 5% on dimensions, weight and power supply will be allowed.

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 institute ID cards.
3. Only 2 members of a team are allowed to stay around the arena (to place the robot at the start point and pick it up after end point; and for technical assistance during technical time out, if any).
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.

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. The same robot cann**ot** be used by more than one team.

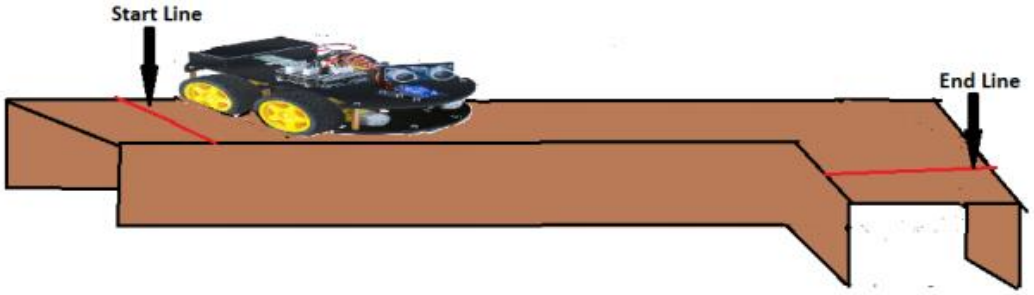
14. The teams should bring their own tool kits.

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.

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

ROBOVANZA

SAMPLE ARENA:



CERTIFICATE POLICY:

1. A certificate of participation will be awarded to all participating teams except for the disqualified team.
2. A certificate of merit would be awarded to the winners along with prize:
   1st Prize -Rs 4000
   2nd Prize -Rs 3000

CONTACT:

Vidhyadhar : 6303511644.

Date: 11-08-2019