JIGSAW SOLVER

INTRODUCTION

Wouldn't you like to solve a puzzle just like the ‘Chuzzle’ with a robot?

Here is "Jigsaw Solver" to test and challenge your bot making and controlling abilities. This is a robotic competition where the manually controlled robot is used to arrange the messed up pieces to solve the puzzle.

So get set for this amazing robotic gaming to make the bigger picture come to reality!

PROBLEM STATEMENT

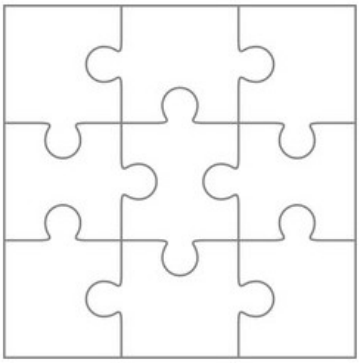
To build a manually controlled robot, within the given specifications which can solve the jigsaw puzzle.

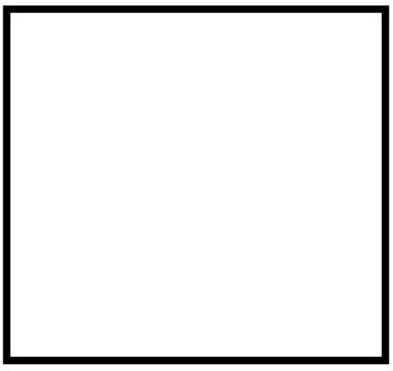
QUALIFYING ROUND

1. A 3*3 jigsaw puzzle will be provided, with all the pieces shattered.

2. Each piece will have a handle on it, for it to be picked with.

3. A box will be drawn on to the right side of the shattered pieces. The puzzle shall be completed in this box only.





destination box

4. The manual bot shall be maneuvered to pick each piece using the handle and place it at its right position.

5. If any piece is dropped before reaching the box, it will be put back at its original place by the organizers.

6. Dragging a piece is not allowed.

7. The judging criteria will be announced on the day of the event.

NOTE: Subsequent rounds will be disclosed at the time of the event.

BOT SPECIFICATIONS

1. Readymade hand/grippers are not allowed.

2. The maximum dimensions of the robot is 30cm x 30cm x 30cm (l*b*h).

3. Robots can be wired, wireless, or autonomous.

4. The potential difference between any two points should not exceed 12V.

5. Power supply can be ON/OFF board.

6. There is no weight limit for robots.

7. Tolerance of 5% on dimensions and power supply will be allowed.

RULES

1. The bot can only transform to its size at the beginning. It cannot divide into multiple separate parts.
2. Dragging a piece is not allowed under any circumstances. The pieces shall only be picked and lifted into air with the help of the handle.
3. A team can consist of a maximum of 4 members.
4. Members of different institutions can form a team and must carry your respective college ID cards.
5. Only 2 members of a team are allowed to stay around the arena (for controlling and assisting).

6. Only undergraduates are allowed to participate in the event.
7. No technical assistance will be provided by the coordinators during the time of the event.
8. No practice runs will be provided.
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. Participants with wired robots are strictly advised to get wires of length 3m or more. The wires should be given slack throughout the gameplay.
13. Member participated from a team cannot participate in another team for the same event.
14. A robot is allowed to participate only once in that particular event.
15. The organisers are not responsible for any kind of damage to your robot.
16. 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- Kindly stay updated with the ROBOVANZA website to know the changes.

CERTIFICATE POLICY

1. A certificate of participation will be awarded to all participating teams except for the disqualified teams.

2. A certificate of appreciation (or excellence) would be awarded to the winners.