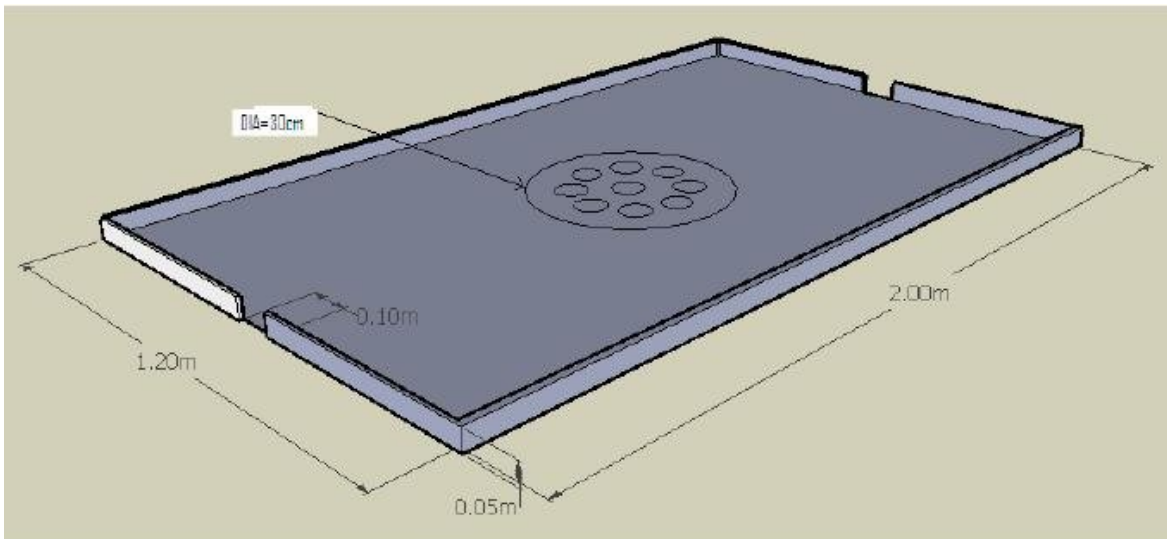


ROBOMANIA

Problem Statement:

The carom men are placed at the center of the arena symmetrically as in the carom the game. The robots have to pick carom men and put them in the opponent's goal such that the carom men did not touch the arena outside the circle.



Eligibility:

Only 1st year (Engineering) students and school students of 11th and 12th classes.

Description of war zone:

1. The arena is a rectangle with size 200cm*120cm with two goal posts on two breadths.
2. A robot should fit inside a box of size 30*30*30 cm cube at the starting time, but it can expand during the game.
3. Length of goal post is 10 cm.
4. A circle of diameter 30cm is marked at centre of the arena where wooden carom men are kept.
5. Carom men made of wood are placed symmetrically on the circumference of the circle with radius 10 cm in a circle of diameter 30 cm at the centre of the arena, one on other just like in the carom game.

6. The dimensions and weight of the carom men are same as that used in original carom game.
7. There are a total of 17 identical carom men of which 8 are black, 8 white and one red in color.

Rules of Match:

1. The teams would be first short listed on the basis of solo performance (Rules of Solo set are given below).
2. The teams (not more than **3 members** per team) at a time will play the match.
3. Duration of each match will be **10 minutes**.
4. A team would be either black or white team. The carom men of that color (black/white) are to be put in opponent's goal.
5. The carom men are to be lifted up from the center circle and dropped in the goal without touching the arena.
6. The carom men should not touch the arena anywhere outside the center circle otherwise a penalty of **-10 points** will be imposed.
7. Each correct goal will earn **10 points** for white/black carom men and **50 points** for queen (red) for that team.
8. A team can take one break of 2 minutes duration during the match but a penalty of 20 points would be imposed.

Conditions for winning a match:

A team wins the match in any one of the following cases:

1. A team has higher no of points at the end of the time allocated for the match.
2. If a team has removed all the carom men of the color specified to that team and the queen is also not present on the arena.
3. If their opponent is disqualified.

Rules of solo set:

1. Only black carom men and red queen will be present in the arena.
2. The carom men are to be put in one goal (specified) out of the two goals.
3. Each match would be of **5 minutes** duration.
4. Each correct goal will earn **10 points** for white/black carom men and **50 points** for queen (red).
5. The teams would be short listed on the basis of their points in solo matches.
6. Only the short listed teams are allowed to participate in (double) matches.

General Rules:

1. Participants can use toy cars etc. to make their robots but the **lifting/holding mechanism has to be indigenous**.
2. Any sort of ready made or assembled robots will face disqualification.

Website: <http://www.sdslabs.org/srishti08/robomania.php>

Email: srishti08@sdslabs.org

3. The robots can use dc or ac electric motors or their vato power their robots. The use of mini patrol engines, pressurized gas is strictly prohibited.
4. The robots may or may not have an onboard power supply.
5. The use of power supplies above 25V (DC or RMS) is not allowed.
6. External DC supplies up to 15V can be provided by the electronic section at the time of the match on request to both teams. Otherwise a standard 230V/50Hz AC power point would be available.
7. The robot should not expand it self into two or more independent parts.
8. A team should not try to harm the other robot otherwise a disqualification will be made resulting in opponents victory.
9. A person can be part of one team only.
10. The participants must bring their I-cards with them.
11. In case of any discrepancy the decision of Robomaina organizing team would be final.
12. The event coordinators can add or modify any of the above rules without prior notice to the participants. As soon as any changes are made they will be uploaded on the website.

Schedule:

1 st March	3:00PM	Solo Round
2 nd March	10:00AM	Final Matches

Venue: Hobbies Club, IIT Roorkee

Event Coordinator:

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