

MUD-RALLY

(Let's see, If the Dirt can Hurt!)

Calling all the powerful and stable bots out there. Design your robots such that it should have the capability of crossing the hurdles. This event gives you the opportunity to test your machine and to vanquish all other opponents. And in the end only strong, stable and snaky machines will survive.

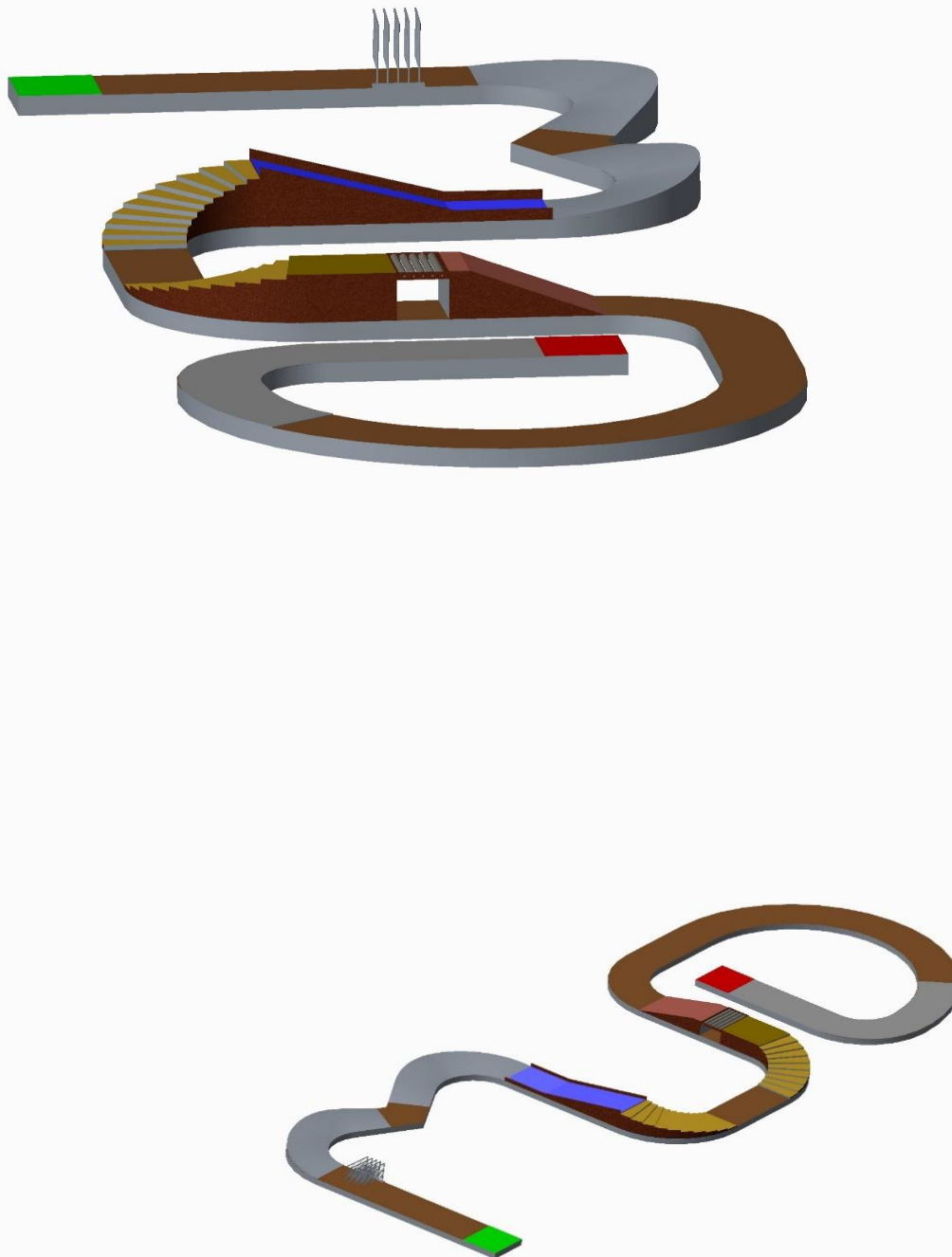
TASK

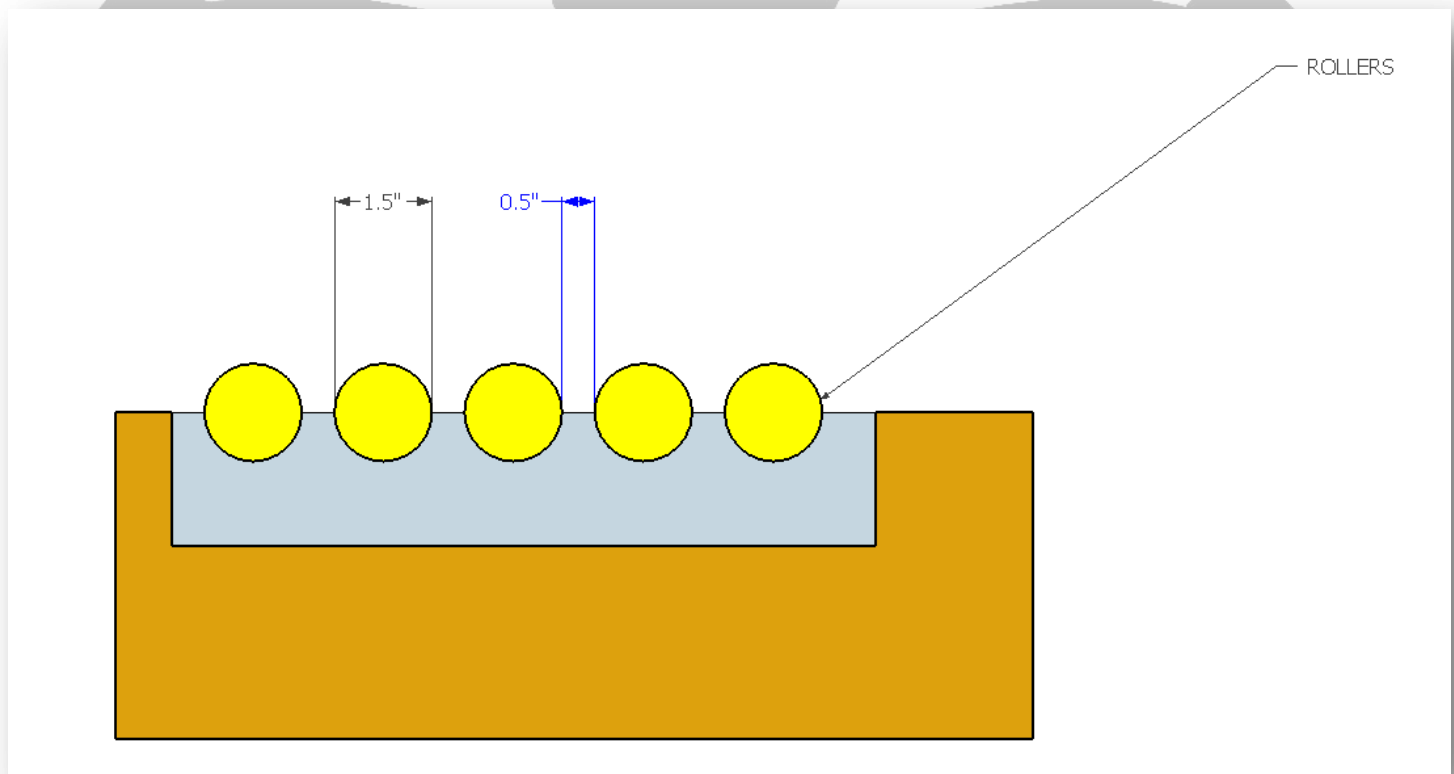
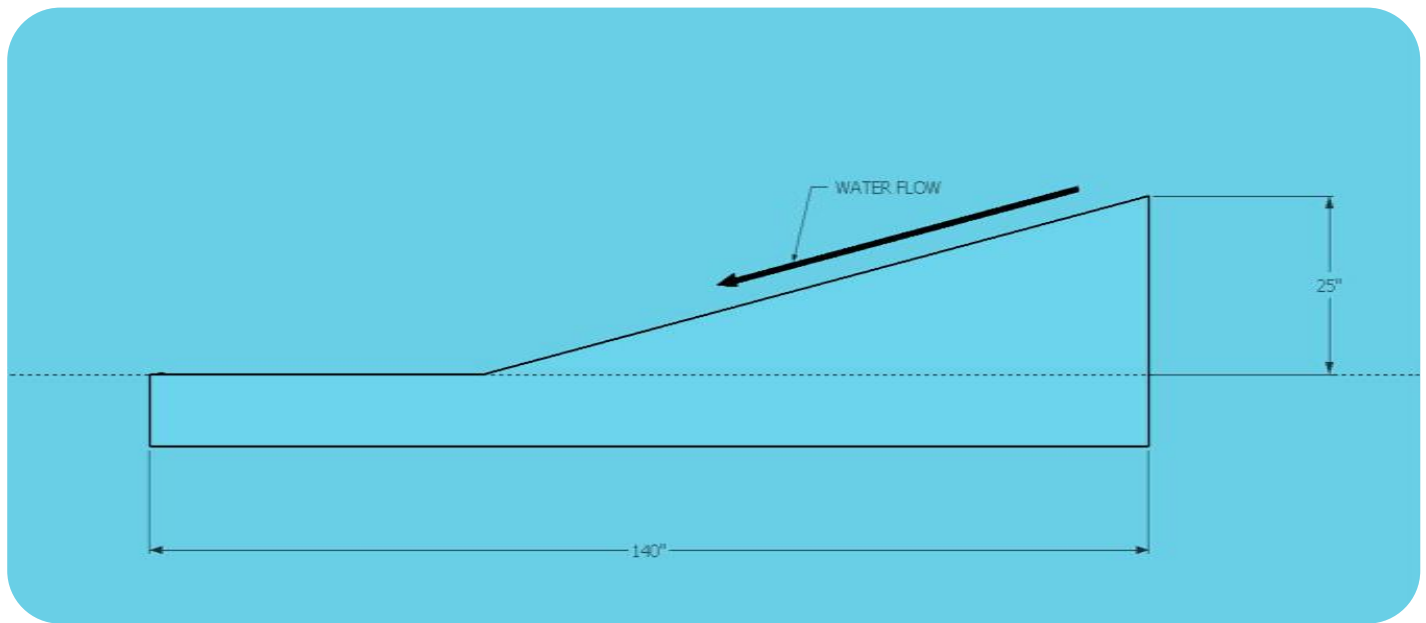
Design and built a manually controlled wired or wireless robot which is capable of completing rally successfully in minimum time.

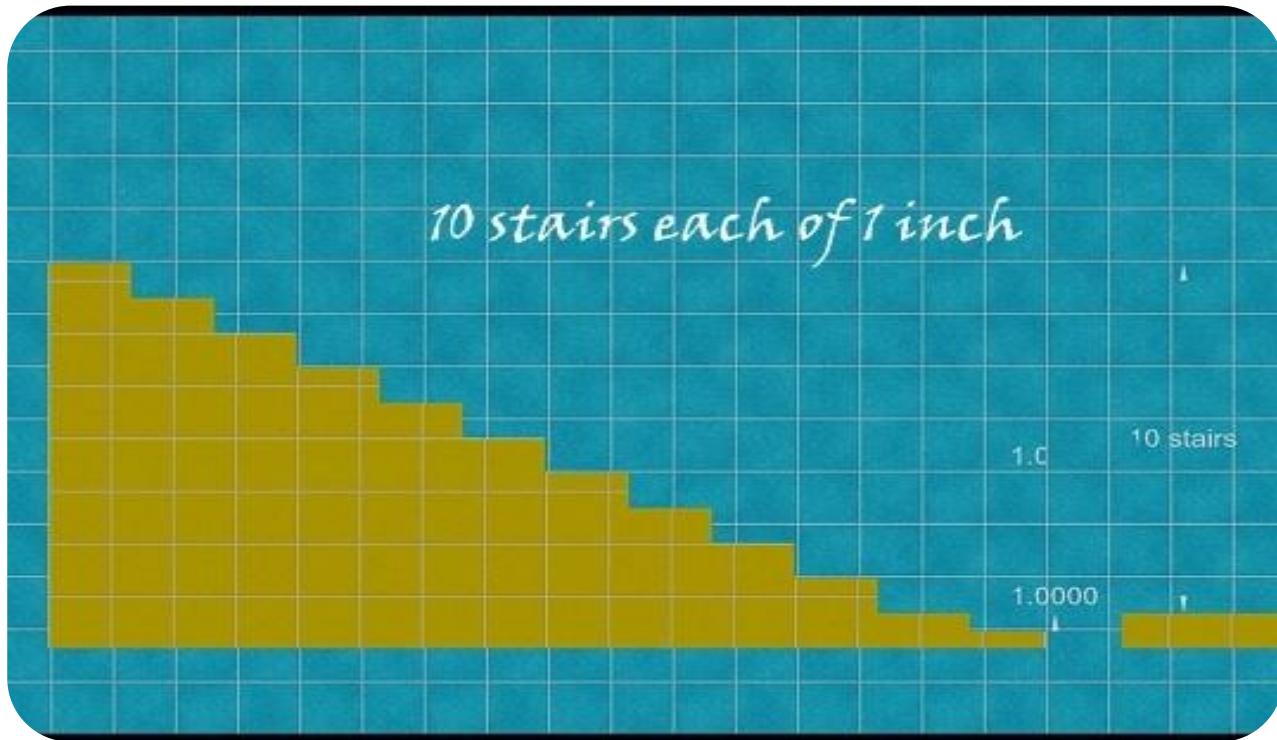
SPECIFICATION

- ✓ The dimension of robot should not exceed $25 \times 25 \times 25 \text{ cm}^3$ (L*B*H), however a tolerance of 5% can be considered in dimension.
- ✓ Net weight of the robot should not exceed 3k.g. (on the track)
- ✓ The potential difference between any two points on robot must not exceed 24 Volts (no current limit).
- ✓ Both wired & wireless robots are allowed.
- ✓ The bots can have either onboard or off board batteries or AC adaptors.

BASIC TRACK DETAILS







ELIGIBILITY

All regular students with a valid identity card of their respective educational institutes are eligible to participate in the event. Participants from different institutes can make a single team.

WINNING CRITERIA

Team which will take the least time to complete the track will be the winning team. In case of any tie, participant committing less **omit** or **restart** will be declared as winner. (In case of any further tie, **coordinator's decision will be final**)

RULES :

Penalty, Checkpoints, Restart and Omits

1. If your robot goes off track by any reason, it has to restart from the previous check points with penalty.

2. Readjusting the position of the robot during race will consider as restart, the robot has to start the race from previous checkpoint with penalty.

3. **Only 5 restart** will be given to each robot.

4. Restart from any checkpoint will cost 20 sec penalty.

5. Omitting Checkpoint **A** will cost 3 min.

Omitting Checkpoint **B** and **C** will cost 2 min.

Omitting Checkpoint **D** and **E** will cost 2 min 30 sec.

Omitting Checkpoint **F** and **G** will cost 2 min.

Omitting Checkpoint **H** will cost 3 min.

***** Only 2 omits are allowed*****

6. You cannot omit any checkpoint without trying atleast twice.

7. **Maximum 8 min.** will be given to each robot to complete the track.

GENERAL RULES

1. The team should not consist of more than 4 members.

2. Only AC power source will be provided during the race.

3. The given specification of the robot must be strictly followed or the team will be disqualified.

4. Use of LEGO kits is strictly prohibited and using this will lead to disqualification.

5. Terminals for charging the battery will not be provided in the college.

6. No practice run will be provided on the main arena.

7. Participants with wired robots are strictly advised to get wire of length 5 m or more and the wire should remain slack under all circumstances during the competition

8. Decision of the event coordinator will be treated as final.

9. The structure of the robot should not be changed during the competition.

10. Arena may subject to change before the commencement of any round.

CONTACT:

SHANTAM KANUNGO - 9407462235

PRANJAL JAIN - 9806374295

ISHAN SINGH - 8602244940