

BLUE WHALE CHALLENGE

Problem Statement: To be uploaded soon.

Challenge/Task: Design a manually controlled bot which can perform tasks like picking the item, dragging the items and complete the run in minimum possible time.

Bot Specifications:

Size: At the start of a match the robot must fit into a square box of dimension 30 cm* 30cm * 30cm. The design to stretch a robot's body or its parts shall be allowed after a match has started, but must remain a single centralized robot.

Weight: The robot must weigh 5 KG (excluding the controls/wires) or less.

Robot Classes: Remote Controlled or Manual (Wired Control).

Power Specifications: The robot must be self-powered, i.e., power supply must be on-board. AC power supply will not be provided, except for charging your batteries (in the breaks only). No limit for power supply.

Track: Will be disclosed on the day of event.

Game Play:

1. The bot has to start from the starting point and complete the tasks.
2. Skipping of any task is not allowed.
3. During the run you have to pick boxes of dimension 10cm*10cm*10cm.
4. Maximum inclination at any point on track will not exceed 30 degrees.

Game Rules:

1. A maximum of 15 minutes will be given to each team.
2. After the bot starts team can take a maximum of two pauses of 1 minute and will have to start from the previous checkpoint.
3. Team will be eliminated if it can't complete the tasks in given time.
4. The game will start at the count of 3 given by referee followed by whistle. In case a team starts its robot before the whistle, the game will be restarted and a team making this mistake for more than 2 times will be disqualified

Checkpoints:

There are 5 checkpoints, clearing each will reward you 50 points.

Judging:

1. 50 points will be awarded for crossing each checkpoint.
2. 100 points will be awarded for completing each task.
3. 25 points will be deducted for each pause/break.
4. 50 points will be deducted for any damage to track or boxes.

Scoring:

1. $A = 50 * (\text{Number of checkpoints covered during the track})$.
2. $B = 100 * (\text{Number of tasks completed})$
3. $C = 300 - \text{Total time taken in seconds to complete the tasks}$.
4. $D = 50$ points for completing last task.
5. $E = \text{Total deductions}$.
6. $\text{Total} = (60\% \text{ of } A+B+C+D-E) + (40\% \text{ of time i.e } 40\% \text{ of time in seconds} * 10)$

Team Specifications:

There can be a maximum of 4 participants in each team.

Code of Conduct**Fair Play**

- Robots that cause deliberate interference with other robots or damage to the field will be disqualified.
- Humans that cause deliberate interference with robots or damage to the field will be disqualified.
- It is expected that the aim of all teams is to play a fair and clean game.

Behaviour

- Participants who misbehave may be asked to leave the competition area and risk being disqualified from the contest.
- The rules will be enforced at the discretion of the referees, officials, and local law enforcement authorities.

Organizers

- Organizing Committee is robotics society of jiiit.
- All decisions about scoring, game play and timing are made by robotics society of jiiit. Teams should completely respect their vote and decisions.
- Sponsors & Technical supporters
- The competition is sponsored by some international and domestic companies by providing financial aid and technical support.