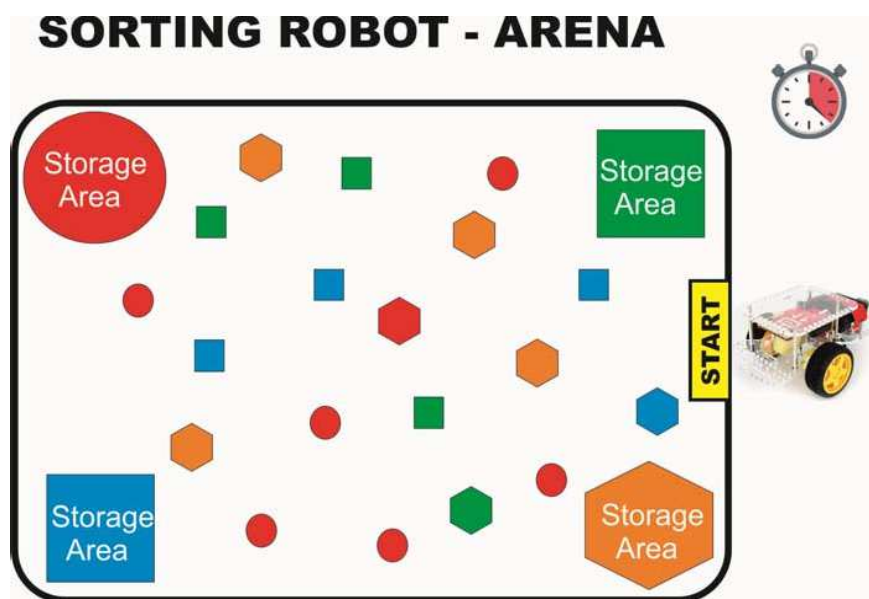


SORTING ROBOT

The game is designed to replicate the storage management system used in realtime industries like Amazon, TATA, etc., These industrial Robots are either automated or manually operated in industries for organization of goods and materials. We would like to make the students to understand the utility of Robots in real time, thus the game.



1. The challenge of the competition is to assemble certain objects in their respective colored storage area.
2. Size of the Robot should not be more than (length x width x height) 25cm X 20cm X 20cm
3. Team size can vary between 1 to 3 members per team. Only one team will be allowed from one school.
4. The Robot can be wired or wireless.
5. Using your Robot, you have to sort the models in their respective places.
6. The winners will be finalized based on the number of models they have sorted in the given time.
7. A robot may have to compete with the other robot at the same time. (One on One battle).
- 8.

CATEGORY II: GRADE 8&9

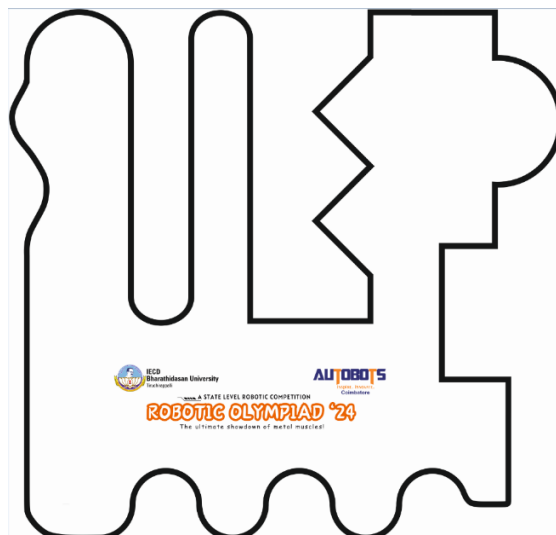
LINEFOLLOWER ROBOT

The Robot will have to autonomously navigate the course (follow the line) and overcome certain challenges on the way using Arduino programming. The challenges are designed to carefully test each aspect of the Robot such as strength, speed, precision and logic. Let the game begin.

Rules:

1. The challenge of the competition is to make a robot that can move on black lines on a white background and reach the finishing line as soon as possible.
2. Size of the Robot should not be more than **20cmX20cmX20cm**. (No LEGO kits will be allowed).
3. Team size can vary between 1 to 3 members per team. Only one team will be allowed from one school.
4. For every time that the robot goes out of the line there will be a deduction points.
5. Fastest team completing the track will be a winner.
6. Width of the track will be around 23mm.

We are attaching the sample track for the line follower. (Note: we do not guarantee any resemblance of this track for this competition)

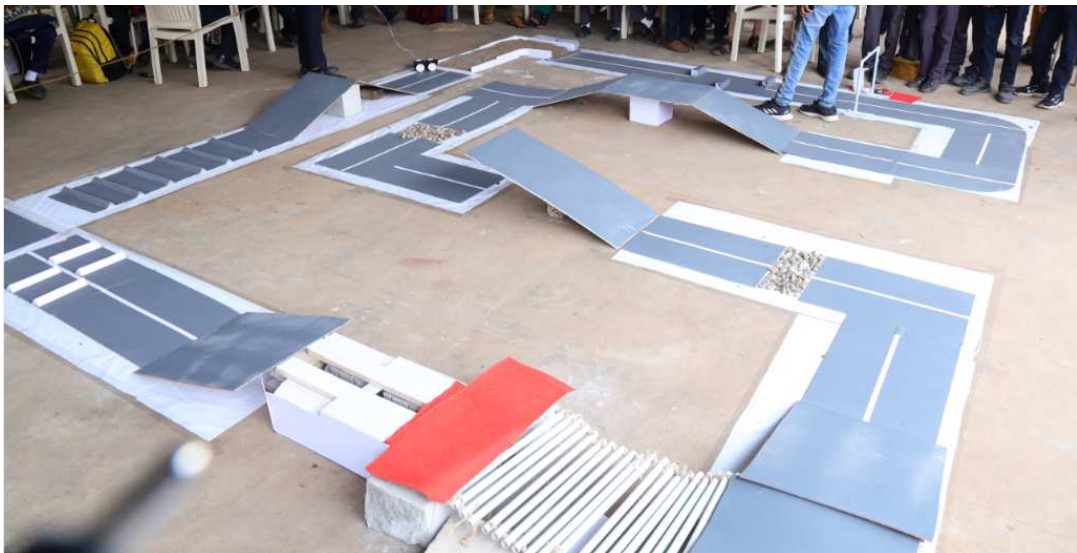


ROBOT RACE

Rules:

1. The Challenge of the competition is to overcome all the obstacles and rough surfaces on the road lane.
2. Size of the Robot should not be more than (length x width x height) 26cm X 22cm X 20cm
3. Team size can vary between 1 to 3 members per team. Only one team will be allowed from one school.
4. The Robot should be wireless and should be completely built by yourself.
5. A robot may have to compete with the other robot at the same time. (One on One battle).
6. The fastest Robot wins the Race.

We are attaching the sample track for RC Race. (Note: we do not guarantee any resemblance of this track for this competition)



ROBOT SOCCER:

A robot can push or hit the ball. It cannot grab the ball. Human interference (e.g. touching the robot) during the game is not allowed. Robots must be able to fit inside a box of (length x width x height) 26 cm x 22 cm x 22 cm, weigh no more than 4 kg, and be self-powered with a supply of no more than 12 V.

Rules:

- **Team size:** Teams can have up to three members, and only one person can control the robot.
- **Game time:** The game time is limited to three minutes.
- **Scoring:** Robots score points by hitting the ball into the opponent's goal.
- **Communication:** Robots should be wireless. Advised to use Bluetooth communication. **Wired communication will not be allowed.**
- **Coin toss:** At the start of the first half, the referee tosses a coin to decide which team kicks off first and which end they kick towards.

We are attaching the sample arena and model robot (Note: we do not guarantee any resemblance of this arena for this competition)



My Innovation Challenge:

Rules:

1. Team may consists of 1 to 3 members.
2. You have to submit the project abstract in the given link on or before 20-12-2023.
3. The project idea should solve at least one of the society problems which we are facing nowadays.
4. Category 2 students should use IoT or AI concepts to make their projects.
5. The sort listed projects will be informed after the deadline date.
6. The sort listed project will be given the Team ID and will be allowed to present their project in the final event.
7. A school can submit Two Innovation project from each category.
8. Project selection criteria's – **Innovative Idea, Project Presentation, Project working**
9. Prizes and Rewards will be given for the best projects on the valediction ceremony on the same day

- **The robot must satisfy all the conditions mentioned here. Robots that violate or fail to meet these rules will not be allowed to participate.**
 - **Lego Kits are strictly not allowed.**