The Open Hardware Design

OBJECTIVE:

Participants are required to design and demonstrate an innovative, functional hardware-based project. The competition encourages creativity, problem-solving, and real-world application of embedded systems, robotics, automation, IoT, or electronics.

TEAM:

- Each team must consist of 2-4 players.

- All players must be students of the same or affiliated institute.

- A Participant cannot be a member of more than one team.

- One team member must act as captain and will be the only point of contact with organizers.

PROJECT GUIDELINES:

1. Projects must include a working physical prototype within the dimension of 50 cm x 50 cm x 50 cm.
2. Allowed domains:
   - Robotics / Automation
   - IoT / Embedded Systems
   - Consumer Electronics
   - Renewable Energy Devices
   - Assistive Technology / Biomedical Devices
   - Open-source hardware platforms (Arduino, ESP32, etc.)
3. Projects must be the team's original work
4. Reuse of online open-source ideas is allowed but must include customization/improvement
5. Plagiarism or presenting bought kits as original will lead to disqualification

TECHNICAL REQUIREMENTS:

- Use of platforms like Arduino, Raspberry Pi, STM32, etc. allowed
- Wireless modules, sensors, motors, relays, and displays permitted
- Projects must be safe to operate (no open flames, toxic chemicals, high-voltage exposure)
- Power supply must be safe and self-contained (preferably battery-powered)

JUDGING CRITERIA:

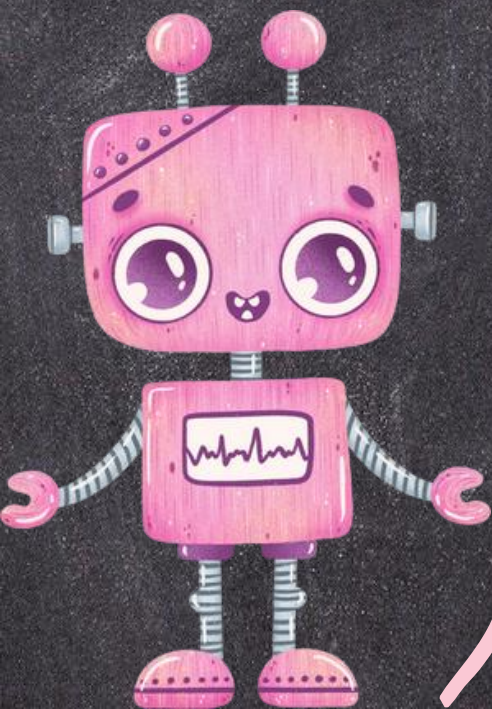| Criteria	Points
Innovation & Creativity	40
Functionality & Working Demo	40
Explanation	20

Total: 100 Points

EVENT DAY RULES:
- Setup time: 15–20 minutes before judging
- Each team will get:
  - 5 minutes to present
  - 2 minutes for Q&A
- Project must be ready and working before their turn
- Reprogramming or major hardware change is not allowed during evaluation

DISQUALIFICATION CRITERIA:
- Use of unsafe or hazardous components
- Misconduct or arguing with judges/organizers

GENERAL INSTRUCTIONS:
- Bring your own hardware, cables, laptop, and tools
- Power sources and tables will be provided
- Teams must be present 30 minutes before the event
- Organizers and judges' decisions are final and binding

WINNING CRITERIA:

- Winners selected based on total scores
- In case of a tie:
  Higher score in "Innovation" wins.

VENUE: LIBRARY

For any queries contact:

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