Transform X: Where Machines Collide

Venue : Lovely Professional University

Objective

The primary objective of this competition is to encourage participants to design and construct controlled robots that can effectively compete in a controlled arena. Participants will apply engineering principles, creativity, and teamwork to develop their robots.

Guidelines

Theme: Robot Fight Competition
Platform: LEGO Robotics Kit /Any Robotic Kit
Event Mode: Onsite
Category: Senior (For students in Class VIII to XII)
Team Composition: Individual/ Team of 3 students

Rules

Robot Specifications

1. **Design and Construction:**
    - Each participating team must pre-design and construct their LEGO bot/Bot with robotics Kit.
    - Bots must adhere to the following specifications:
        - **Height:** Maximum 30 cm
        - **Length:** Maximum 30 cm
        - **Breadth:** Maximum 30 cm
        - **Weight:** Maximum 2 kg

Arena Specifications

- **Dimensions:** A circular arena with a diameter of 4 feet.
- **Design:** The arena will have a black base color with a 1-inch white border.

Match Format

1. **Rounds:**
    - Each match will consist of 2 rounds, with each round lasting for 2 minutes.
    - If neither robot pushes the other out of the arena within the allotted time, the match may be decided based on criteria such as:
        - Proximity to the center of the arena.
        - Amount of time spent in the opponent's territory.
    - All robots will undergo a pre-match inspection to ensure they meet the specifications and safety regulations.

- Winners will be determined based on the number of rounds won and overall performance.

Safety Regulations

1. **Design Features:**
    - Bots must not include any sharp or hazardous components.
    - Robots should be designed with safety features to prevent injury to participants or spectators.
2. **Conduct:**
    - Teams must ensure that their robots operate safely within the arena, avoiding any dangerous behaviour.

Parameters for Judgement

1. **Performance(20)**
2. **Design(20)**
3. **Safety(10)**

Reference Video: https://www.youtube.com/watch?v=La-zTFcv1Tk

Event Coordinator

RC-Xtreme: Drag It To The Last Limit

Venue : Lovely Professional University

Objective

The RC Xtreme Challenge invites students to design and build their own robots—either wired or wireless—with the goal of achieving maximum speed to navigate a track and reach the finish line in the shortest time possible. This event encourages creativity, engineering skills, and teamwork. To foster interest in robotics and engineering among students. To encourage problem-solving and innovation in robot design. To provide a competitive platform for students to showcase their creations.

Guidelines

Platform: LEGO Mindstorms or any other suitable robotics kits.
Event Mode: Onsite
Category: Senior (For students in Class VIII to XII)
Team Composition: Individually or in teams of up to four members
Time Limit: 7 Minutes (Round 1)

Rules

1. **Structure**

- **Round 1**:
    - All participants will compete on a single track.
    - Robots must clear all checkpoints and obstacles to reach the finish line quickly.
    - Timing will be calculated for all participants, with the fastest advancing to the next round.
- **Round 2**:
    - Teams that qualify from Round 1 will participate in a surprise arena, revealed on the day of the event.

2. **Robot Design**:
    - Each team must design and build their robot for the RC Xtreme competition.
    - Robots can be constructed using **LEGO Mindstorms** or any other suitable robotics kits.
    - Use of sensors, motors, and other components is encouraged to enhance functionality.

3. **Specifications**:
    - **Maximum dimensions**: 25 cm (L) x 25 cm (B) x 25 cm (H).
    - **Maximum weight**: 3 kg.
    - **Wireless robots**: Must use a dual-frequency control system; frequency must not exceed 2.4 GHz. Only digital values should be transmitted.
    - **Wired robots**: Wire length must be between 3 meters and 5 meters.
    - **Power Supply**:
        - Must not exceed 12V, 7.2A DC, powered only by batteries (5% tolerance allowed).

- No external power supply will be provided during the event.

4. Event Day Requirements:

- Participants must bring a **fully functional and assembled robot** to the venue.

5. The maximum time allowed to complete the track is **7 minutes**.

6.If a robot fails to finish the course within this time, the number of **checkpoints** covered will be counted for scoring.

7.A penalty of **+5 seconds** will be added to the total time for any instance where the robot slips out of the arena or touches the boundary.

8.Each touch of the robot by the participants to reposition it will also incur a **5-second penalty** (maximum of 5 touches allowed).

9.The total time for each team will be calculated as the time taken to reach the finish line plus any penalties incurred during the run.

<u>Gameplay for RC Xtreme</u>

- **Inspection**: Dimensional and weight limits will be strictly enforced. Robots must pass inspection before competing.
- **Team Members**: Only **two team members** are allowed around the arena (one controlling and one assisting). Teams can only compete with **one robot**.
- **Timing**:
  - Time is measured from when the robot crosses the starting line to when it crosses the finish line.
  - A robot is deemed to have crossed the finish line when its forward-most part contacts or crosses the line.
- **Handling the Robot**:
  - If the robot loses track, participants may touch and reposition it. Each touch incurs a **5-second penalty**, with a maximum of **5 touches** allowed.
  - If the robot stops due to technical issues, modifications are allowed **twice per round** without stopping the timer.
- **Race Conditions**:
  - The entire course must be completed within **7 minutes**.
  - There are **five checkpoints** on the track. If a robot fails to complete the course within the time limit, the number of completed checkpoints will be counted for scoring.
- **Final Decisions**: The jury's decision is final and binding.

Event Coordinator

InnoTank 2025: Minds in Motion

Venue : Lovely Professional University

Objective:

This event aims to ignite curiosity, foster scientific thinking, and encourage innovation by allowing students to demonstrate their understanding and application of scientific concepts. To present and demonstrate a prototype or project related to STEM, focusing on one of the specified themes, and to engage in hands-on exploration and learning.

Guidelines

Event Mode: Onsite (Exhibition)
Category: Senior (For students in Class VIII to XII)
Team Composition: Individually or in teams of up to four members
Time Limit: 7 Minutes
Themes:

- Technology and Toys
- Agriculture and Rural Development
- Advancement in Information and Communication Technology
- Eco-Friendly Materials
- Health and Cleanliness
- Transport and Innovation
- Environmental Concerns
- Historical Development with Current Innovation
- Mathematics for Us
- Clean Water and Sanitation
- ICT, Cyber-Physical Systems, Blockchain, Cognitive Computing, Cloud Computing, AI & ML
- IoT-Based Technology
- Renewable and Affordable Energy
- Robotics and Drones
- Smart Cities
- Software - Mobile App Development
- Software - Web App Development
- Waste Management/Waste to Wealth Creation

Rules:

Physical Exhibit and Presentation

- **Requirements:**
    - **Physical Prototype:** A working model or prototype of the project.
    - **Poster:** A poster (1 meter x 1 meter) displaying key information about the project. A sample poster layout will be provided to eligible participants.
    - **Presentation:** A 5-minute presentation of the project to a panel of judges, followed by a Q & A session.

Parameters of Judgement

1. **Creativity (10)**
2. **Utilization of Resources (5)**
3. **Design & Eco-Friendliness (5)**
4. **Utility of the Product (10)**
5. **Scientific Thought & Engineering Goals (10)**
6. **Completion of Purpose (5)**
7. **Presentation & Clarity (5)**

Event Coordinator

Idea Ignite

Venue: Delhi Public School , Jalandhar

Objective

The Idea Pitch Contest provides with an opportunity to present and develop their innovative ideas in a live, offline setting. Participants will showcase their creative concepts for products, services, or projects, highlighting their potential impact, feasibility, and originality. This competition aims to inspire young minds and recognize the most compelling ideas.

Guidelines

Event Mode: Onsite
Category: Senior (For students in Class VIII to XII)
Team Composition: Individuals or teams of up to 4 students
Time Limit: Each team will have 5 minutes to present their idea, followed by 5 minutes for Q & A with the judges.

Theme:

1. **Technology Innovations:** New technology or tech applications.
2. **Social Impact:** Solutions that address social issues or benefit communities.
3. **Sustainability:** Environmental protection or sustainable practices.
4. **Creative Arts and Media:** Ideas related to arts, media, entertainment, or design.

Rules

- **Presentation:** Prepare a pitch presentation (maximum 10 slides) outlining the idea, including problem, solution, market potential, and implementation strategy.
- **Physical Materials:** If applicable, bring any physical prototypes or models that support your pitch.
- **Original Work**: All pitches must be original and created specifically for this contest. Plagiarism or use of existing ideas without proper attribution will lead to disqualification.
- **Collaboration**: Teams must work collaboratively and ensure that all members contribute to the pitch.
- **Code of Conduct**: Participants must adhere to high ethical standards and professionalism. Any misconduct or unethical behaviour will result in disqualification
- **Sub headers of Slides in PPT**:
  - ✔ Cover Slide
  - ✔ Objective of the Idea
  - ✔ Problem Statement
  - ✔ Description of the Idea
  - ✔ Technology Stack
  - ✔ Feasibility
  - ✔ Innovation (how your product is different from the crowd)

Parameters for Judgement

- Innovation and Originality (15)
- Impact and Relevance (15)
- Feasibility and Implementation (10)
- Presentation and Communication (10**)**

Event Coordinator

Catwalk Chronicles : A Curative Fashion Show to Promote Sustainability

Venue : Lovely Professional University

Objective

Welcome to **Design Chronicles** , an innovative fashion show dedicated to showcasing the creativity of young minds while promoting sustainability. Participants will design eco-friendly outfits that celebrate originality and innovation in fashion. This event aims to inspire the next generation to champion sustainable practices and rethink the impact of fashion on our planet.

Guidelines

Theme: Be bold for Change
Event Mode: Onsite
Category: Senior (For students in Class VIII to XII)
Team Composition: Individuals or teams of up to 4 students

Rules

1. **Time Limit**: Each team has a total of **7 minutes** for setup and performance. Exceeding this limit will result in **negative marking**.
2. **Music Submission**: All audio tracks will be provided by the event organizer.
3. **Dress Code**: Outfits must be knee-length. Tube tops, single strip tops, and backless designs are **not allowed**.
4. **Original Designs**: Costumes must be designed using **eco-friendly materials**. Professionally made, rented, or purchased costumes are **prohibited**.
5. **Theme Representation**: Each team must create a **tagline** that aligns with their design and the event theme, **"Be Bold for Change."**
6. **Material Provision**: No materials will be provided by the organizer. Participants must bring their own material.
7. **Conduct**: Vulgarity and any form of obscenity will lead to immediate **disqualification** from the contest.

Parameters of Judgement

- **Costumes**(10)
- **Theme Alignment**(10)
- **Walking Stance**(10)
- **Originality**(10)
- **Overall Impact**(10)

Event Coordinator

Rocket Splashdown

Venue : Lovely Professional University

Objective:

Participants will design and build a water rocket to achieve the highest altitude and maximum air time in the first round, and the greatest horizontal distance when launched at a 45-degree angle in the second round. Rockets must be constructed with safety in mind and adhere to the guidelines specified below.

Guidelines

Event Mode: Onsite
Category: Senior (For students in Class VIII to XII)
Team Composition: Individuals or teams of up to 4 students

Rules:

Rocket Specifications:

1. **Height:** The total height of the rocket must not exceed 76.0 cm.
2. **Materials:** The rocket must be made from lightweight materials such as paper, plastic, duct tape, and glue. Commercial kits and pre-made components are not allowed.
3. **Water-Fuel Tank:** Must use a plastic soda bottle or similar with a maximum capacity of 2.5 litres. The bottle must be capable of withstanding the pressure of the launch.
4. **Launch Pad:** Must be custom-built. It should be sturdy and capable of ensuring a controlled and predictable launch. Optionally, a blast shield can be used to manage exhaust and debris.

Rounds:

Round 1: Maximum Air Time

- **Objective:** Achieve the highest air time within a defined area.
- **Attempts:** Teams will have three attempts to launch their rocket. The highest air time from these attempts will be recorded.
- **Measurement:** Air time will be measured from launch to when the rocket first touches the ground.
- **Field Setup:** A designated launch area with a fixed launch pad spot and a defined measurement radius will be provided.

Round 2: Maximum Distance

- **Objective:** Achieve the maximum horizontal distance when launched at a 45-degree angle.
- **Attempts:** Each team will have one attempt to launch their rocket.
- **Measurement:** The distance will be measured from the launch pad to the point where the rocket first touches the ground.
- **Field Setup:** The field will be marked with a fixed launch pad spot and a distance measurement line.

Preparation and Launch:

- Teams must set up their rockets and launch pads in the designated area before the start of their allotted time.

- Teams have 5 minutes to prepare and launch their rocket. Exceeding this time limit will result in disqualification.

Penalties:

- **Round 1:** Rockets landing outside the defined area will incur a 5-second deduction from the recorded air time.
- **Round 2:** Rockets landing outside the designated field area will be disqualified from the distance measurement.

Safety and Compliance:

- Safety is paramount. Rockets and launch pads must be designed to ensure the safety of participants and spectators.
- The use of commercial kits or pre-made components is prohibited.
- All design elements must be inspected and approved by the launch inspector before the competition.

Parameters for Judgement

- **Round 1:** The rocket with the longest air time will be the winner for this round.
- **Round 2:** The rocket with the longest distance travelled at a 45-degree angle will be the winner for this round.
- **Overall Winner:** The team with the highest combined performance across both rounds will be declared the overall winner.
- **Referee Decisions:** All decisions made by the referee are final and binding. No appeals will be entertained.

Reference Video: https://www.youtube.com/shorts/J35SBeXnPy4

Event Coordinator

Clan Clash – BGMI: Battlegrounds Showdown

Venue: Lovely Professional University

Objective

The *Speed X BGMI Competition - Battlegrounds Showdown* is an exhilarating e-sports event where players can showcase their skills on various maps. Participants will compete in squads, engaging in intense matches that test strategy, coordination, and reflexes.

The goals are to:

- Provide a competitive platform for BGMI players to demonstrate their gaming abilities.
- Foster teamwork, strategy, and sportsmanship among participants.
- Create an entertaining experience for both players and spectators.

Guidelines

Platform: BGMI (Battlegrounds Mobile India)
Event Mode: Onsite
Team Composition: Team of 4 students
Time Limit: Each match lasts up to 30 minutes

Eligibility

- Open to all students of Class XI to XII (Age Group 16+).
- Players must have a registered BGMI account and access to the game during the competition.

Structure

Team Formation:

- Participants can compete in squads of four.
- Players without a team will be assigned to form balanced squads**.**

Competition Format:

- Teams will compete in multiple rounds based on performance.
- The best-performing teams will advance to the next stage.
- The finals will feature a special format focusing on advanced strategies and teamwork.

Rules

Organizers' Oversight:

- The tournament organizers will oversee the event to ensure adherence to all rules.

Fair Play:

- Hacking, cheating, or using any unauthorized software will result in immediate disqualification.

Equipment:

- Players must bring their own devices, chargers, and necessary accessories.
- No external power supply or additional components will be provided during the event.

Gameplay

- Teams will compete on designated maps, with each match lasting up to 30 minutes.
- Teams earn points for:
    - Eliminating opponents.
    - Achieving specific in-game objectives.
- The team with the highest total score wins the match.
- In case of a tie, sudden-death rounds or other tiebreakers will be employed.
- The championship will follow a tournament-style format, with teams advancing based on their performance in each match.

Judging Criteria

- Participants will be judged based on overall gameplay performance.
- The top team from each match will qualify for the next round.
- Judging will consider individual and team scores, including eliminations and objectives completed**.**

Event Coordinator

Ad-Venture: Ad Making Poster Presentation

Venue: Delhi Public School , Jalandhar

Objective

Ad-Venture is a creative advertising challenge where participants will reimagine and recreate promotional posters for well-known companies. By blending innovation, visual storytelling, and marketing insight, the event encourages students to think critically about branding and communication.

Guidelines

- **Event Mode**: Onsite
- **Category**: Senior (For students in Class VIII to XII)
- **Team Composition**: Individually or in teams of up to 3 students

Rules

1. **Theme & Challenge**:
    - Each team will be randomly assigned one of 40 well-known companies.
    - The challenge is to redesign an advertisement poster for the assigned brand, reflecting its core values in a fresh, imaginative way.
    - Posters must aim to **redefine the company's image**, product, or campaign in a creative and socially engaging manner.
    - Each Poster must have a Tagline for rebranding the Company
2. **Poster Specifications**:
    - Size: A2 (420mm x 594mm)
    - Medium: Digital (printed on A2)
    - Branding: Original logos may be used but must not be copied directly. Students are encouraged to recreate or stylize them.
3. **Presentation**:
    - Each team will get **3 minutes to present** their poster to the judges.
    - The presentation must explain the concept, thought process, and how it aligns with or redefines the company's original branding.
4. **Time Allocation**:
    - Total time: 1.5 hours (including poster creation and setup)
5. **Originality**:
    - All work must be original and created on the spot.
    - Pre-made posters or copied designs will lead to disqualification.
6. **Conduct**:
    - Any offensive, inappropriate, or misleading content will result in disqualification.
    - All participants must maintain decorum and work in the designated space only.

Parameters for Judgement

- **Creativity & Originality** (10)
- **Visual Appeal** (10)
- **Brand Message Reinterpretation** (10)
- **Presentation Clarity** (10)

Event Coordinator

Rope Ranger: Rope-Crawling Robot Challenge

Venue: Lovely Professional University

Objective

The Rope Ranger Challenge encourages participants to design and demonstrate a pre-built robot capable of autonomously crawling along a suspended rope. The competition promotes hands-on learning, design thinking, and engineering problem-solving skills with a strong emphasis on balance, precision, and innovation.

Guidelines

- **Event Mode**: Onsite
- **Category**: Senior (For students in Class VIII to XII)
- **Team Composition**: Individually or in teams of up to 3 students

Rules

1. **Robot Design**:
    - Participants are free to use any robotic kit, components, or self-fabricated parts to construct their robot.
    - The robot must be pre-assembled and fully functional at the time of the event.
    - The robot should not require any manual assistance or intervention once placed on the rope.
2. **Rope Specifications**:
    - Length: 10 feet
    - Height from Ground: 5 feet
    - Type: PVC-coated metal rope, tightly suspended and horizontal
3. **Functionality**:
    - The robot must autonomously crawl from one end of the rope to the other.
    - Any robot that falls off the rope or requires manual support will be disqualified from the Challenge Round.
4. **Safety**:
    - The robot must not have any sharp or hazardous components.
    - Designs must ensure spectator and participant safety.

Competition Format

- **Practice Round**:
    - Each team will be given one non-scoring trial run to test their robot on the actual rope.
    - This round is for calibration and familiarization only.
- **Challenge Round**:
    - The robot must crawl the full length of the rope in a single uninterrupted run.
    - Points will be awarded based on performance in speed, stability, and design innovation.

Parameters for Judgement

- **Speed** – *40 Points*: Time taken to crawl the full 10 feet
- **Stability** – *30 Points*: Ability to maintain consistent balance throughout the run
- **Design Innovation** – *30 Points*: Creativity, originality, and effectiveness of design

Reference Youtube Link: https://www.youtube.com/watch?v=ITJvy-HNXKY

Event Coordinator