

GENERAL RULES- Creativity Lab Robotics Challenge

1. Introduction

Creativity Lab Robotics Challenge is a robotics challenge initiated by Creativity Lab to involve, engage and provide students with the opportunity to become Tech-Innovators and problem solvers using robotics. The Creativity Lab Robotics Challenge encourages students to apply what they learn in their classroom to develop Technology related projects of their choice. ***The #1 Edition of the challenge is focusing on SDG 3 by finding solutions of problems in health Sector connected to the UN Sustainable Development Goals. We expect to have more than 1000 students from over 300 primary schools participating across the country.***

This is the scenario of the challenge:

We all know that germs are the leading cause of diseases from one person to another and since they are invisible with our naked eyes, we cannot see them yet they are everywhere. As a programming student, how safe are the public surfaces you touch on a daily basis? What are the most common surfaces, objects, equipment we come into contact with on a daily basis? Avoid touching these surfaces in public places to stay healthy.

Make your own research to know where germs are most likely to hide and help our community be healthy by making a technology that reduces human contact with public surfaces.

2. What are the challenge outcomes?

- I. **Technical Competencies Development:** Within the multidisciplinary robotics projects of heavy technical focus, students will learn more effectively and develop deeper understanding of concepts that are normally taught in class like coding, mechanics, electronics and AI.
- II. **Research Competencies Development:** Aside from hands-on robotics skills, the challenge will encourage students to go through more rigorous academic research process and develop theoretical Algorithm.
- III. **Soft skills development:** Students will pick up on very important soft skills such as teamwork, communication skills, project planning and interpersonal skills coupled with presentation skills.

3. Who is eligible to participate?

This #1 Edition Challenge involves **primary school students** or **individual children** in age range of **8 – 11 years old**. For group, the **maximum number is 3 participants per group**. During the Creativity Lab Robotics Challenge period participants will work with their teachers/coaches to revise what they have learned in the classroom and put them together to build and code a robot based on the theme mentioned above. Visit <https://creativity.rw/cmpetitions> to register.

The construction and coding of the solution must be done only by the participant (student or team of children). The task of the coach or teacher is to accompany them, help them with organizational and logistical matters and support the team in the case of questions or problems.

The coach or teacher cannot be involved in the construction and programming of the robot. This applies to both the day of the competition and the preparation.

If any of the rules of eligibility and responsibilities mentioned above in this document are broken or violated, the judges can decide on one or more of the following consequences. Before a decision is reached, a team or individual team members may be interviewed to find out more about the possible violation of the rules. The interview can include questions about the solution construction process, the program and other general questions.

- A team may get up to a 50% reduced score for one or more judging rounds.
- A team may not qualify for the national final.
- A team may be disqualified completely from the competition immediately.

4. Presentation & Judging

First round of presentation and judging

All participants are required to share a link of a 5 minutes video explaining:

- How the solution is addressing the problem
- Processes and steps used to make the solution
- Uniqueness and innovative idea
- How skills learnt in classroom were used to make the solution

The deadline to share the video is 29th November 2024 and 20 selected solutions to participate in national final will be communicated on 13th December 2024.

Note: The video will cover the project / solution only (Not the face or any part of the child/student). The participant has to start presentation by introducing her/his name, name of team members, age and district.

To 20 selected solutions will be given a time to refine their projects and prepare them for final presentation.

National final presentation and award-winning ceremony

The final presentation, award-winning ceremony are scheduled on 14th February 2025 and all participants will present their solutions physically in front of judges.

At the Final a 1st, 2nd and 3rd place solution will be awarded as winners of the Creativity Lab Robotics challenge #1 Edition. In addition, there will be several specific awards that will be presented to teams and individuals at the national final. These will be awarded based on the assessment of the judges and partners of the challenge.

5. SCORING SHEETS

Name of team members:

1: | **Age:**

2: | **Age:**

3: | **Age:**

Name of the Solution:

District:

SCHORE

Criteria	Score	Max point
How the solution is addressing the problem		30
Processes and steps used to make the solution		30
Uniqueness and innovative idea		30
How skills learnt in classroom were used to make the solution		10
Total score		100

Comment:

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Judge Name: