



IOTA
IoT Applications Club
Jadavpur University



CONNEXION

WHERE TECH MEETS FUTURE

2K25

A Tech-based hackathon where you will be solving real life problems with themes like Smart Campus, Traffic and Disasater management, Women safety and much more !

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Introduction

IoT Applications Club, Jadavpur University presents ConneXion 2025 — an open-to-all hackathon that celebrates creativity, collaboration, and the limitless possibilities of IoT. This platform invites students from every discipline to come together, push boundaries, and craft impactful solutions that bridge technology with real life. More than just a competition, ConneXion 2025 is an opportunity to learn, innovate, and showcase ideas that can transform the future. Build. Connect. Inspire.

02 Overview

Event Timeline >>>>

ENTRY FEE

₹200

Round 1 (ONLINE)

Idea Submission (PPT)

Till Nov 30, 2025

Round 2 (OFFLINE)

Prototype Presentation
(Final offline round)

Jan 11, 2026

Prize Pool >>>>

₹10,000



03

Battlefield (Problem Statements)



1. Smart Campus Management (with Energy Optimisation)

Stark lands on the tower balcony, magnetic rings spin into motion, actuators lock, servos disengage, and the armor detaches seamlessly — the building itself becoming part of his suit.

This statement dares you to imagine a campus where infrastructure is not passive but alive: classrooms that sense occupancy, lights and systems that respond in real-time, and energy flows that shift intelligently.

2. Ambulance Green Corridor System

In a blur of motion, Quicksilver cuts through the chaos, cars frozen mid-honk, dust hanging still in the air, while he clears a path in the blink of an eye.

This statement dares you to bring that speed to real life: designing an IoT system where ambulances broadcast their approach, traffic lights shift instantly, and a green corridor opens to clear the way when every second counts.



3. Remote Patient Monitoring & Emergency Detection

Dr. Stephen Strange stands in the operating room of Metro-General Hospital, his skill unmatched but his vision limited — without the Eye of Agamotto, he cannot foresee every outcome. So help him with a system that monitors patients in real-time, detects emergencies the instant they begin, and sends alerts while there is still time to act.

4. Crowd Safety & Stampede Risk Management

Spider-Man's "Spider-Sense" alerts him to danger before it strikes. Inspired by this foresight, create a system that continuously monitors crowd movement and density in real time, identifies zones where surges could escalate into stampedes, and provides early warnings with actionable preventive measures. The goal is to predict risks before they become crises, ensuring safety in large gatherings.

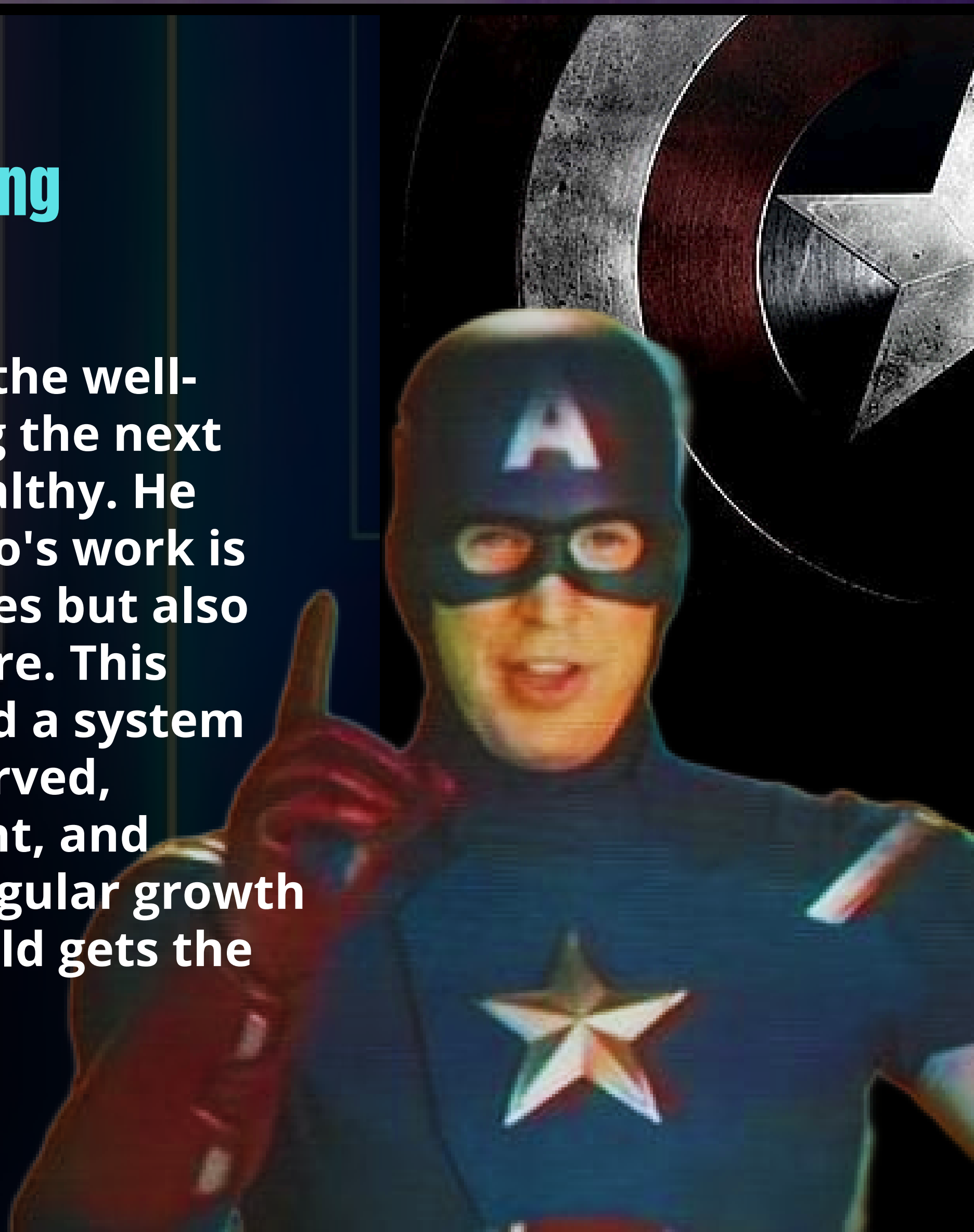


5. Wildlife Conservation & Anti-Poaching System

T'Challa stands in the heart of Wakanda, a silent sentinel watching over his kingdom. He is connected to every corner of his nation through a vast, invisible network, a pipeline of data that alerts him to any intrusion. This statement dares you to build that network in a forest: processing camera and drone footage to detect anomalies like human presence or vehicles, logging these events, and displaying them on a monitoring dashboard for forest officials.

6. Child Nutrition Monitoring in schools

Captain America stands for the well-being of the young, ensuring the next generation is strong and healthy. He understands that a true hero's work is not just about fighting battles but also about building a better future. This statement dares you to build a system that logs details of meals served, monitors student BMI/weight, and activity levels, and flags irregular growth patterns to ensure every child gets the attention they deserve.

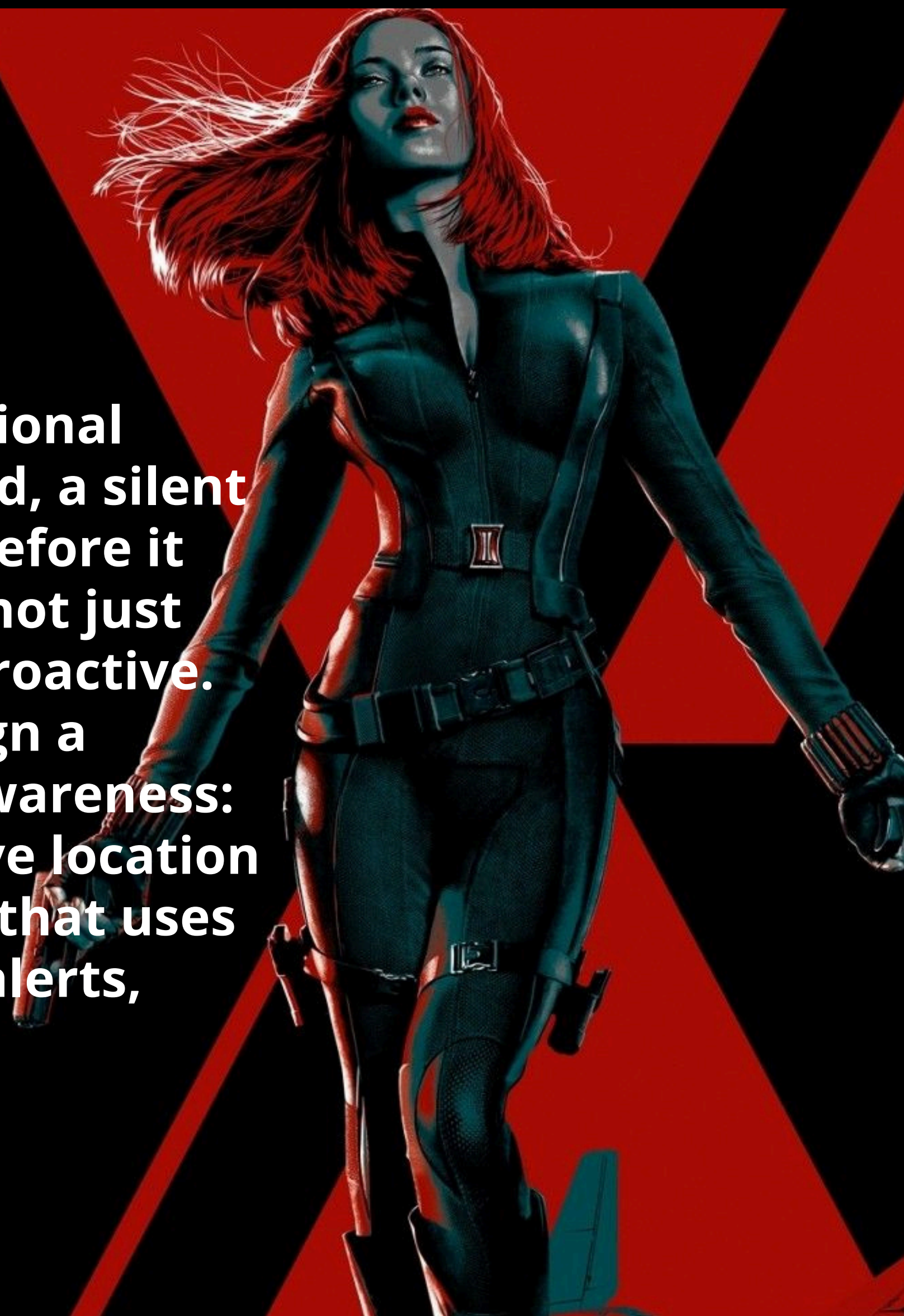


7. Disaster Response & Post-Disaster Assessment

Nick Fury commands the bridge of the Helicarrier, his agents on the ground and his satellites in the sky providing a complete overview of a global crisis. He knows that in a disaster, chaos is the enemy. This statement dares you to create his digital command center: a platform that integrates data from drones and satellites to map affected zones, log damage reports, and assist relief teams in prioritizing high-risk areas.

8. Women Safety System

Black Widow is a master of situational awareness, always one step ahead, a silent observer who can sense danger before it strikes. She knows that safety is not just about reacting but about being proactive. This statement dares you to design a system with that same level of awareness: a quick SOS trigger that shares live location and, more importantly, a system that uses context to automatically trigger alerts, even without manual input.



9. Ferry Service Safety

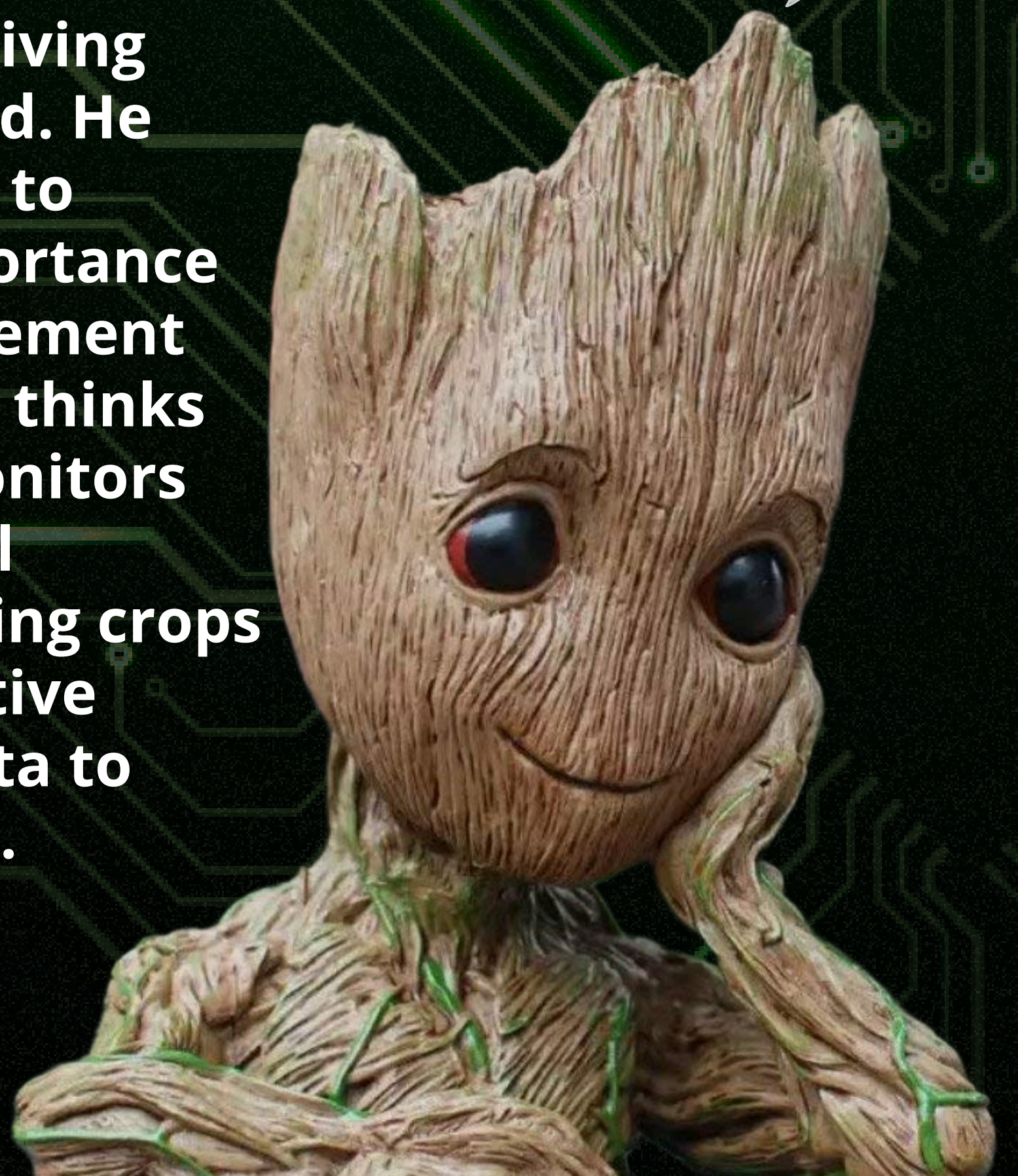
Thor strikes his enemies with thunder, the skies roar and storms rage — his power shields us, yet the side effects can turn waterways into danger zones.

This statement dares you to design a system that ensures ferry safety: making sure every passenger is protected and collisions are prevented when the storm clouds gather.

10. Smart irrigation and farming

Groot is a protector of all life, a living embodiment of the natural world. He knows exactly what plants need to thrive and understands the importance of every drop of water. This statement dares you to build a system that thinks like him: an IoT solution that monitors soil moisture and environmental conditions, automatically watering crops only when needed, and a predictive layer that analyzes historical data to optimize water use even further.

I am Groot!



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General Guidelines

1. Team Composition

- Team Size: Minimum 3 and maximum 5 members per team.
- Eligibility: Open to all students and participants interested in innovative solutions, creativity, and problem-solving.

2. Flexibility & Creativity

- A probable solution guide has been provided, but following it is optional. Participants may adopt, adapt, or we are open to all new ideas. Participants are encouraged to explore freely and follow their own line of thought, even beyond our suggested solutions.
- Completion of the full problem statement is not mandatory though recommended. Participants may solve some stages or partial stages as per their capacity. Every meaningful, well explored attempt will be considered.



3. Presentation (PPT) Guidelines

1. Visual Appeal:

- Ensure slides are clean, professional, and visually engaging.
- Use readable fonts, relevant graphics, icons, and consistent color schemes.
- Avoid overcrowding slides; focus on clarity and simplicity.

2. Content Structure: The PPT should comprehensively cover:

- Problem Statement: Clearly define the challenge or problem you are addressing.
- Proposed Solution / Approach: Explain your idea, methodology, or model in detail. Highlight **innovation**, practicality, and uniqueness.
- Future Scalability & Potential: Describe how your solution can expand, adapt, or be implemented on a larger scale. Include potential societal, technological, or business impact.
- Implementation & Resources (Optional): Briefly mention tools, technologies, or methods used.
- Visual Representation: Include diagrams, flowcharts, or graphics wherever applicable to make your solution easily understandable.



3. Evaluation Criteria for PPT

- **Clarity of Solution:** The problem must be well-defined, and the solution should be logically explained.
- **Innovation & Creativity:** Originality of the idea, creativity in approach, and uniqueness of the solution.
- **Feasibility & Scalability:** The solution should be practically implementable and capable of being scaled or adapted to larger applications.
- **Presentation Quality:** Flow, readability, visual appeal, and overall professionalism of the slides.

5. Offline Presentation (For Shortlisted Teams)

Creativity & Engagement: Shortlisted teams must present their ideas in front of judges. Creativity and originality in delivery are key. Teams may use:

- Storytelling to convey ideas effectively
- Demonstrations, models, or prototypes
- Visual aids, graphics, or interactive elements
- **Judging Focus:** Judges will assess:
 - How clearly the team explains their solution
 - Originality and innovation in approach
 - Presentation skills, confidence, and engagement with the audience
- Ability to answer questions or provide clarifications

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General Rules

The event encourages creativity, innovation, and practical thinking—teams are expected to demonstrate these throughout their PPT and offline presentation.

Teams must ensure all work, ideas, and content are original; plagiarism will result in disqualification.

Judges' decisions are final and binding.

Participants should focus on both technical quality and presentation aesthetics.



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