RULE BOOK

12. Hard Wired

TASK:

A **24-hour hardware hackathon** is an exciting event where participants build functional prototypes within a limited timeframe. The tasks will encourage innovation, problem-solving, and teamwork, focusing on designing and implementing hardware-based solutions to real-world problems. Here's how to structure and plan tasks for such an event:

GENERAL GUIDELINES:

1. **Hackathon Duration**

   - The hackathon will run continuously for 24 hours.

   - All projects must be submitted before the deadline. Late submissions will not be accepted.

2. **Theme & Domains**

   ● The hackathon is focused on projects aligned with the United Nations Sustainable Development Goals (SDGs).

   a. Smart Agriculture & Food Security (SDG 2: Zero Hunger)

   b. Health & Wearable Technologies (SDG 3: Good Health & Well-Being)

   c. Water Conservation & Sanitation (SDG 6: Clean Water & Sanitation)

   d. Renewable Energy & Smart Power Management (SDG 7: Affordable & Clean Energy)

   e. Smart Infrastructure & Industrial Automation (SDG 9: Industry, Innovation & Infrastructure)

   f. Sustainable Cities & Environmental Monitoring (SDG 11: Sustainable Cities & Communities)

   g. Climate Action & Wildlife Protection (SDG 13 & SDG 15: Climate Action & Life on Land)

3. **Use of Pre-Built Components**
   - Participants may use off-the-shelf hardware (e.g., Arduino, Raspberry Pi, sensors).
   - All projects must be developed from scratch during the hackathon.
   - Pre-written code, pre-assembled hardware, or pre-made designs are not allowed and will lead to disqualification.

4. **Hardware & Software Rules**

A. **Hardware Requirements**

   - Teams must bring their own hardware components.

   - The organizers will not provide additional components. However, a basic prototyping kit (breadboards, wires, etc.) may be available in limited quantities.

B. **Software Development**

- Teams may use open-source libraries and tools.
- Any usage of pre-built templates must be disclosed during the final presentation.

5. Power & Connectivity

- The organizers will provide power outlets and basic internet access.
- Teams are responsible for ensuring their devices are charged and operational throughout the event.

6. Safety Guidelines

- Participants must follow safety protocols while working with hardware.
- Projects that pose safety risks (e.g., flammable components, hazardous wiring) will be disqualified.

7. Project Development Rules

- Teams must strictly follow the assigned domain and present a working prototype.
- All team members must be actively involved throughout the hackathon.
- Teams must document their project, including:
  - ○ Problem statement
  - ○ Approach and technologies used
  - ○ Challenges faced and how they were overcome

8. Submission Guidelines

Final submissions must include:

- ☑ A working prototype
- ☑ A 2–3 minute video demonstration of the project
- ☑ A short presentation (PowerPoint or PDF) explaining the project
- ☑ Submission on the designated platform (e.g., GitHub, Google Drive link, etc.)

❖ Judging Criteria

Projects will be evaluated based on the following criteria:

Criteria	Weightage
Innovation & Creativity	25%
Technical Complexity	25%
Practicality & Real-World Impact	25%
Functionality & Working Prototype	20%
Presentation & Demonstration	5%

- The judging panel will assess projects based on these criteria to determine the winners.