

Reducing Screen Addiction Using Health-Tech Solutions

SolveXBio Case Study Competition

Ingenium — IIT Indore

Competition Overview

Excessive screen time and mobile phone addiction contribute to mental health issues, sleep disorders, and reduced cognitive performance. While software tools exist to track usage, effective Health-Tech interventions that actively reduce addiction remain limited.

This competition challenges participants to propose innovative Health-Tech solutions that combine behavioural psychology with biomedical or physiological sensing to detect, monitor, and mitigate screen addiction.

Problem Statement

Teams must propose a Health-Tech solution capable of detecting excessive mobile phone usage and actively influencing user behaviour to reduce screen addiction.

The solution may include wearable devices, bio-feedback systems, or smart applications that utilise physiological or behavioural indicators such as eye strain, stress levels, or posture.

Key Requirements

- **Mechanism of Action:** Clear explanation of how addiction or excessive use is detected
- **Intervention Strategy:** Description of how the system intervenes (e.g., haptic feedback, gamification, locking mechanisms, blue-light modulation)
- **User Centricity:** Non-intrusive yet effective long-term behaviour modification

Deliverables

- Concept note describing the technology stack (software/hardware)
- User workflow detailing interaction with the system
- Impact analysis on mental and physical health

Eligibility & Team Structure

- Open to students from all backgrounds; no prior biology experience required
- Participation is in teams of at least two members
- Teams must register via the circulated Google Form before the deadline

Competition Format

- All teams receive the same real-world problem statement
- **Preparation Phase:** Fixed time to analyse and develop the solution
- **Presentation Phase:** Teams present their solution to the jury
- **Q&A Phase:** Jury evaluates conceptual clarity

Rules & Regulations

Internet Policy

- Internet access is allowed during the Preparation Phase
- Internet access is prohibited during Presentation and Q&A
- Submissions must be finalised within the allotted preparation time
- Plagiarism or unfair means lead to immediate disqualification

Judging & Evaluation (100 Marks)

Problem Understanding	20	Clarity of core issue and constraints
Innovation	25	Novelty and creativity of solution
Feasibility	25	Practical implementability
Presentation	15	Communication and clarity
Teamwork & Q&A	15	Collaboration and defence of ideas

Awards

Best-performing team(s) will be recognised based on jury evaluation.

Rules are subject to change at the discretion of the organisers.
Further instructions will be communicated to registered participants.