

Hackathon Goals

- Build interactive experiences (art/minigame/vertical slice) controlled by physiological signals.
- Integrate EMG/gyro signals for controlling the experience, and EEG/ECG signals to support or promote a positive mental state such as relaxation, focus, or stress reduction.
- Demonstrate creative, enjoyable, and meaningful use of physiological inputs.

Hackathon Tasks

- Clearly utilize EMG (and potentially gyroscope on top) for primary interaction control.
- Integrate EEG and/or ECG to measure and respond to mental or physiological states.
- Prepare a concise 5-minutes pitch clearly demonstrating the idea, functionality, and user experience, ideally with a short demonstration video.

Hackathon Evaluation

All questions 0–5, plus 50 points scaled popular vote, max 100 points

Interaction Design

- How effectively do the controls map to the intended actions?
- How intuitive is the use of physiological input?

Promoting Positive States

- How clearly does the application support a positive mental state (focus/relaxation/well-being)?
- How understandable is the feedback provided to the user?

Innovation & Creativity

- How unique or novel is the concept?
- How engaging or compelling is the final prototype?

Artistic Expression

- How appealing is the visual design?
- How appealing is the sound design?

Technical Execution

- How stable/bug-free is the prototype?

Overall Rating

- How much did you like the prototype?

Popular Vote (0–10)

- How much would you like to experience or play this prototype?

Guided Ideation

Individual rapid ideation round for max three ideas per person

- 10 min

Idea presentations to the team, quick feedback, no discussions

- 20 min

Condensation of own ideas into one refined idea per person

- 5 min

Refined idea presentation and scoring with 2 points per person

- 5 min

Synthesis of all individual refined ideas into one final team idea

- 10 min

Concept Refinement

EMG/Gyro controls refinement focus

- 10 min

EEG/ECG integration focus

- 10 min

Visual/audio design focus

- 10 min