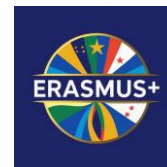




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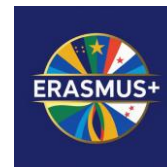
TEACHER GUIDE

16-Hour Hackathon

Artificial Intelligence and the Future of Work

Facilitator's Reference Document

For internal use only — not for distribution to students



1. Purpose of This Guide

This document supports teachers and facilitators running the 16-hour hackathon on Artificial Intelligence and the Future of Work. It provides practical guidance on facilitation, checkpoint management, common student difficulties, and assessment. It is intended as a flexible framework — adapt it as needed to your group size, context, and available resources.



The hackathon is not a programming competition. Its primary goals are critical thinking, interdisciplinary problem analysis, ethical reflection, and team communication. Resist pressure to evaluate outputs by technical sophistication alone.

2. Quick Reference

Duration	16 hours (including preparation, teamwork, and presentations)
Team size	Recommended 3–5 students per team
Programming required?	No — focus is on problem analysis, solution design, and communication
Mandatory outputs	Written summary + 5–7 minute final presentation per team
Checkpoints	3 mandatory check-ins at 14:00, 19:00, and 9:00
Assessment	5 criteria, each scored 1–3 (see Section 7)
Night break	23:00 – 7:00 (students not expected to work)



3. Preparation Before the Event

3.1 Room and Technical Setup

- Arrange tables to allow team clusters — avoid theatre-style seating
- Ensure each team has a visible working area and access to power sockets
- Prepare a shared display (projected or physical) for the timeline and checkpoints
- Test AV equipment to be used for final presentations in advance
- Have printed copies of the student task sheet available as backup

3.2 Materials to Prepare

- Printed or projected: thematic tracks overview, timeline, assessment criteria
- Flip chart or whiteboard for each team — useful for problem mapping
- Sticky notes and markers — helpful during early problem definition
- Peer evaluation forms (optional)

3.3 Co-Facilitator Roles

If more than one teacher is present, divide responsibilities clearly before the event:

- **Lead facilitator:** opening, checkpoints, closing session
- **Support facilitator:** roving team support, monitoring progress, logistics
- **Technical support:** AV, presentation setup, timer management



Brief all co-facilitators on the assessment criteria and checkpoint expectations before the event begins. Inconsistent feedback across teams is a common source of confusion and student frustration.



4. Phase-by-Phase Facilitation Guide

Phase 1 — Introduction and Setup (10:00 – 11:00)

Objectives:

- Teams are formed and the task is clearly understood
- Students know the two required outputs and all five assessment criteria

Facilitator actions:

- Introduce the hackathon goal — emphasise it is not about software development
- Walk through all 7 thematic tracks briefly; invite initial reactions
- Explain the two required outputs: written summary and final presentation
- Clarify the checkpoint system and what is expected at each one
- Announce where support is available and how to request it



Ask teams to introduce themselves and share first reactions to the thematic tracks before selecting one. Five minutes of informal discussion reduces early decision paralysis.

Phase 2 — Problem Selection and Research (11:00 – 14:00)

Objectives:

- Each team selects a thematic track and defines a specific, concrete problem
- The problem is appropriately scoped — not too broad, not trivial

Common difficulties and suggested responses:

Common Difficulty	Suggested Facilitator Response
Team cannot agree on a track	Ask each member to propose a problem in two tracks, then vote on the most specific starting point.
Problem is too broad (e.g. 'AI is biased')	Ask: who specifically is affected, in which context, by which AI system? Push for a concrete scenario.
Problem is too narrow or trivial	Ask: is this a systemic issue or a one-off? Help them zoom out slightly to a broader pattern.
Team jumps to solution before defining problem	Redirect: ask them to describe who is harmed and how before proposing any fix.
Solution is a product that already exists	Challenge: what is different about your version? What gap in the current solution does yours address?



Phase 3 — Solution Design (14:00 – 19:00)

Objectives:

- Team has a concrete, designed solution — not just an idea or a wish
- At least one mechanism, tool, process, or intervention is described

Key facilitation moves:

- Ask 'How does it work?' rather than 'What does it do?' — this pushes toward mechanism
- Ask 'Who does what, and when?' to help teams operationalise abstract ideas
- Challenge feasibility gently: 'What would this require in order to actually exist?'
- Encourage teams to name who benefits — not just 'everyone' or 'society'



Teams often describe a vision rather than a design. A useful test: could someone build a prototype based on what they have described? If not, the solution needs more specificity before moving on.

Phase 4 — Ethical and Social Analysis (19:00 – 23:00)

Objectives:

- Team identifies specific ethical dimensions relevant to their solution
- Team proposes at least one concrete risk-reduction measure

Guiding questions to prompt deeper reflection:

- Which groups might be disadvantaged by this solution, even unintentionally?
- Who controls the system — and who has no voice in it?
- What happens if the AI makes a mistake? Who is accountable?
- Is the system explainable to the people affected by it?
- What data does this require, and are there privacy concerns?



Encourage teams to move beyond 'it could be biased' as a standalone observation. Ask: biased against whom, in what way, and what in your specific design would reduce that bias?

Phase 5 — Output Preparation (7:00 – 10:00)

Objectives:

- Written summary completed and submitted by 10:00
- Presentation prepared and timed within the 5–7 minute limit

Facilitator actions:

- Conduct final mentoring check-in at 9:00 for teams that request it
- Remind teams of the submission deadline and format requirements



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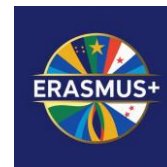


- Encourage rehearsal during the 9:00–10:00 optional slot
- Ensure all teams know the presentation order before 11:00



REMIND

Visual support (slides, diagrams, posters) is recommended but not obligatory. Teams should not read from slides. The presentation should be a spoken explanation with visual support, not a visual display with spoken narration.

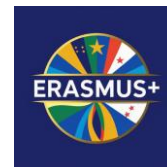


5. Checkpoint Guide

Three checkpoints are built into the timeline. Each is a brief teacher–team conversation (5–10 minutes), not a formal review. The goal is to confirm progress, catch problems early, and redirect teams who are off track.

Time	Checkpoint	Teacher Action
14:00 Checkpoint 1	Chosen track + 2–3 sentence problem statement	Verify: is the problem specific and connected to AI? Redirect if too broad or still undecided.
19:00 Checkpoint 2	Short description of solution + one key implementation risk	Verify: is there a concrete mechanism? Is the risk named specifically? Prompt deeper thinking if needed.
9:00 Checkpoint 3	Final mentoring (optional) — written summary near complete	Check: does the written output address all four elements? Is the presentation within time? Flag structural gaps.

 CHECKPOINT QUESTION	A useful opening for any checkpoint: 'Tell me your problem in one sentence and your solution in two.' If a team cannot do this, they need to refocus before continuing.
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6. Written Summary — What to Look For

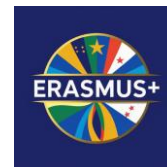
The written summary must address four elements. Use the table below to quickly evaluate whether each element is present and sufficient.

Element	Sufficient	Insufficient — follow up
Problem description	Named stakeholders, AI involvement specified, importance justified	Vague or general; no specific problem or affected group identified
Proposed solution	Mechanism described; role of AI stated; beneficiaries identified	Only a concept or wish; no description of how it would function in practice
Innovation and impact	Original angle; realistic impact; implementation risks acknowledged	Generic solution; risks absent or limited to 'it might not work'
Ethical considerations	Specific ethical dimensions named; risk reduction proposed	Only general moral statements; no concrete risk reduction measures



NOTE

There is no set word count for the written summary. One to two pages is typically sufficient to cover all four elements well. Quality and specificity matter more than length.



7. Assessment Rubric

Each criterion is scored on a 1–3 scale. All five criteria carry equal weight. As a general benchmark: a combined score of 13–15 indicates strong performance; 9–12 is adequate; below 9 warrants a feedback conversation.

Criterion	1 – Needs Development	2 – Developing	3 – Accomplished
Clarity and relevance of the problem	Vague or not connected to AI	Defined but could be more specific or better linked to AI	Clearly and relevantly defined; well connected to AI and real-world context
Quality and feasibility of solution	Too abstract or does not address the problem	Addresses the problem but feasibility is underdeveloped	Realistic, clearly designed, and directly addresses the problem
Creativity and innovation	Generic or closely replicates existing approaches	Some original elements; solid but not distinctive	Strong original thinking; fresh angle, combination, or application
Ethical and social awareness	Absent or limited to general moral statements	Some awareness; engagement is partial or surface-level	Specific ethical dimensions named; risk reduction measures proposed
Presentation and teamwork	Unclear or one-sided; uneven team involvement	Adequate; most points communicated; some unevenness	Clear, structured, well-communicated; team is cohesive and fields questions confidently



CALIBRATION

If more than one teacher is assessing, score independently before comparing. Significant divergence on a criterion is a useful signal — discuss what evidence each assessor drew on, then agree a final score.



8. Frequently Asked Questions

Can we choose a problem not listed under our track?

Yes — the examples in the task sheet are illustrative, not exhaustive. The problem must clearly belong within the chosen track.

Does our solution have to involve AI?

Not necessarily. A legal framework, education programme, or governance mechanism is equally valid. What matters is that the solution credibly addresses a problem caused or shaped by AI.

How long should the written summary be?

There is no set word count, but one to two pages typically covers all four elements well. Encourage quality and specificity over length.

Can we use AI tools to help research or write?

This is at the facilitator's discretion. If permitted, students should still demonstrate their own reasoning — AI-generated text that replaces rather than supports thinking does not meet the assessment criteria.

What if the team cannot agree?

Team disagreement is part of the experience. Encourage structured discussion: each member states their preference and reasons; the team votes if needed. Facilitate only if the conflict is blocking all progress.

What counts as a 'realistic' solution?

A solution does not need to exist yet, but it must be plausible — grounded in real institutions, technologies, or processes. 'A global AI regulator fixes everything' is not realistic; 'a sector-specific audit requirement enforced by an existing body' is.

Can more than one team choose the same thematic track?

Yes — this is not a problem. Different teams will likely identify different specific problems within the same track, and comparing approaches in the final session can be valuable.



9. General Facilitation Notes

9.1 Maintaining Energy and Focus

- Walk the room regularly — visible facilitator presence reduces drift and off-task behaviour
- Make brief all-team announcements around 17:00 and 21:00 to maintain collective momentum
- Announce the night break clearly at 22:30 and enforce it — exhausted teams produce weak presentations

9.2 Handling Uneven Team Dynamics

- If one student dominates: redirect checkpoint questions specifically to quieter members
- If a team member disengages: acknowledge it privately and assign a specific, bounded role
- If a team is significantly ahead: challenge them to deepen their ethical analysis or stress-test feasibility with harder scenarios

9.3 Managing the Presentation Session (11:00 – 12:00)

- Keep strict time — use a visible countdown timer projected for all to see
- 2–3 minutes of Q&A per team should include at least one teacher question
- Encourage peer questions but moderate if a discussion extends beyond time
- Do not share assessment scores publicly — provide written feedback individually after the event



Remind students before presentations begin that the Q&A is part of the assessment. Teams should be prepared to explain and defend their choices, not just describe them.



Appendix: Facilitation Prompts by Phase

The following questions can be used during team visits or checkpoints to deepen thinking without giving answers.

Problem Definition

- 'Who specifically is harmed, and how often does this happen?'
- 'What would this situation look like without AI — and what has AI changed?'
- 'Why hasn't this problem been solved already?'

Solution Design

- 'Walk me through what happens step by step when someone uses your solution.'
- 'Who has to do what for this to work? Does that seem realistic?'
- 'What resources, institutions, or technologies does this depend on?'

Ethical Analysis

- 'Who might oppose this solution, and why might they have a point?'
- 'If your solution fails, what is the worst-case outcome?'
- 'How would you know if the solution was working fairly?'

Presentation Preparation

- 'Explain your solution to me as if I know nothing about AI.'
- 'What is the single most important thing you want the audience to remember?'
- 'What question are you most worried about being asked?'