



Module 9

AI-ML Fellowship Hackathon 2 - Kickoff



Icebreaker

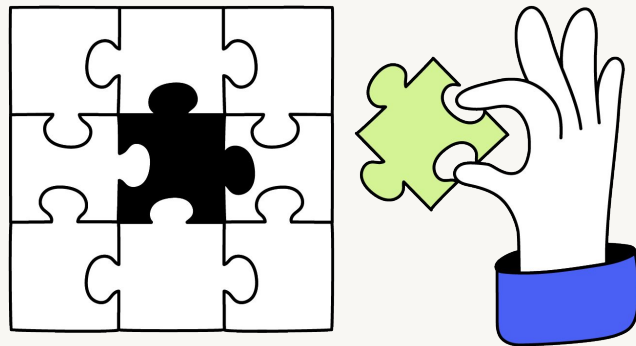
Go to My Multiverse, Module 9
Kickoff Workshop



Train your AI roommate

Imagine you built an AI roommate assistant

In the chat, **drop one thing it would absolutely need to learn not to do?**



Your Safety & Support at Multiverse

Safeguarding is:

- Protecting you and everyone around you from harm, neglect, or abuse.
- Ensuring everyone has the best chance to learn and succeed.

Prevent is:

- ...a part of safeguarding: Stopping people from being drawn into extremism.

To report anything to the Safeguarding team, contact them at safeguarding@multiverse.io
In an emergency, always call 999.



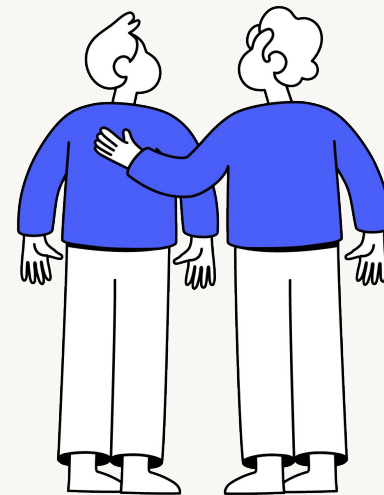
Workshop Norms

- 1 **Participation:** Questions and contributions enrich our discussions!
- 2 **Respect:** Listen to each other and acknowledge different viewpoints.
- 3 **Technical norms**

Feel free to use the chat box and raise your hand.

Please mute yourselves while not speaking.

If you are able to, please have your video on.





Before we start...

- Make sure you are comfortable
- Have water and a coffee or tea handy
- Have Module 5 on my.multiverse.io open
- If you need a break - take it!
- If you need a stretch – please go ahead!
- Please mute yourselves if you are not talking
- If you're able to, have your video on





Agenda

- Hackathon goals
- Applying Phase 2 skills
- Preparation activity
- Q&A & next steps

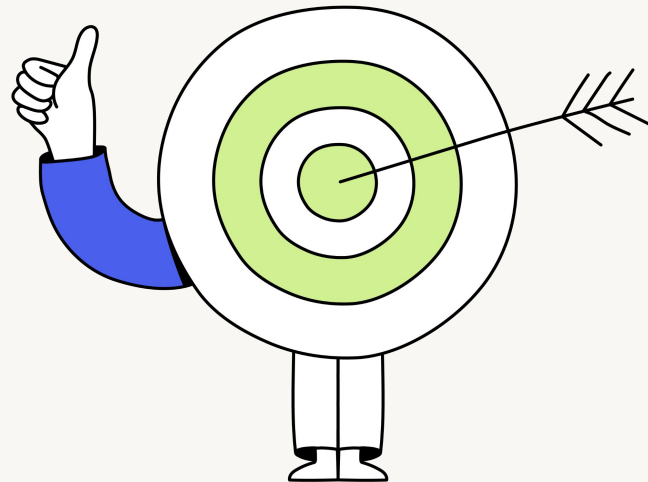


Hackathon overview



Hackathon goals

- Implement and test a working AI/ML model aligned to your chosen scenario.
- Train, evaluate, and improve models using real datasets and iterative experimentation.
- Compare approaches and justify decisions using performance metrics and business context.
- Interpret model behaviour, identify limitations, and consider practical risks and safeguards.
- Communicate results and recommendations clearly to stakeholders.





Your hackathon journey

Kickoff



Context, objectives, and demonstrating how proposed AI/ML solutions can be translated into practical ML workflows

Sprint 1: Build, test, and explore



Implement, test, and evaluate an initial ML solution

Sprint 2: Improve, compare, and justify



Refine, compare, and justify your ML approach

Presentations



Present your implementation journey, key experiments, evaluation results, and final recommendations

Takeaways



Reflections, feedback, and next steps



Hackathon skills: From learning to application

Model development and training: Implement ML models using Python and structured datasets, applying preprocessing, feature selection, and baseline modelling approaches.



Apply this skill by building and training a working ML model, selecting useful features, preparing data appropriately, and testing an initial implementation against the chosen business problem.

Model evaluation and performance improvement: Evaluate model performance using appropriate metrics, compare approaches, and improve results through iterative experimentation and refinement.



Apply this skill by testing different models, features, or preprocessing decisions, comparing evaluation results, and using evidence from experimentation to improve model performance.

Interpreting model behaviour and limitations: Analyse predictions, errors, and model behaviour to understand where models perform well or struggle, linking outcomes to business impact.



Apply this skill by interpreting model outputs, identifying patterns or limitations, and considering how prediction quality could affect operational or editorial decisions in practice.

Practical risk and governance awareness: Identify practical risks and limitations based on model outputs, considering the implications of incorrect predictions and proposing safeguards and monitoring approaches.



Apply this skill by reflecting on where human oversight may still be needed, recognising risks and limitations in the solution, and recommending safeguards before real-world implementation.



Group discussion

Share your thoughts in the chat:

What makes a machine learning model “good enough” to use in practice?

If two models perform differently, what factors besides accuracy might influence which one you choose?

Why can testing and improving a model iteratively be more valuable than trying to get everything right the first time?





Hackathon preparation activity

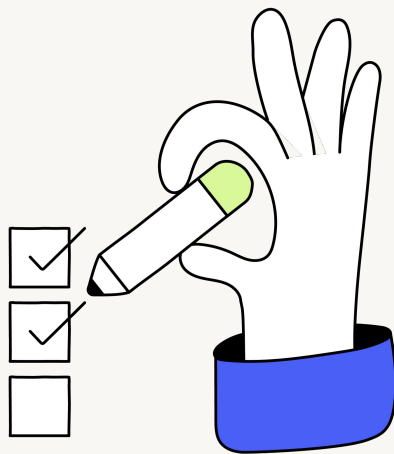
Purpose: Show how proposed AI/ML solutions can be translated into practical ML workflows using practical scenarios and datasets.

What we'll do

- Revisit the two scenarios from Hackathon 1.
- Walk through sample AI/ML solutions for each scenario.

How to work

- Follow the instructions on the My Multiverse Hackathon preparation activity page.
- Use observations from the walkthroughs to support your implementation work later in the hackathon.





Questions?



What's next?

- **Next:** Hackathon Workshop 1
- Have questions?
 - Chat with Atlas
- Log your OTJ hours
- **Take the Workshop Survey** on My Multiverse



Thank you for your time
and attention.

multiverse