



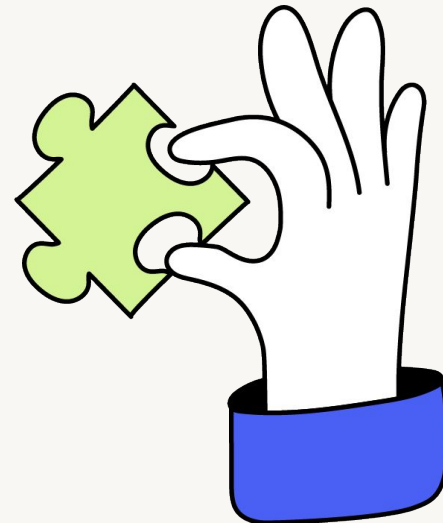
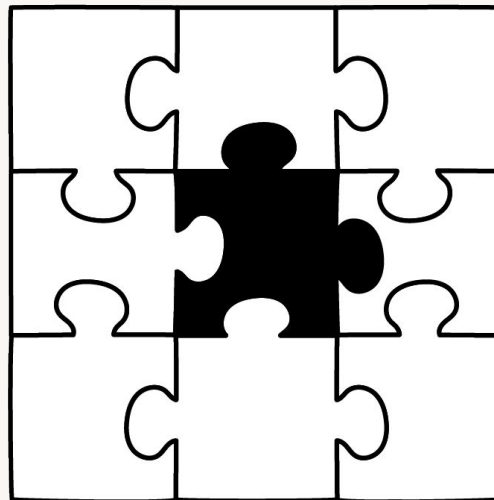
Module 4

Wrap-up Workshop



Icebreaker- Word scramble

1. **AETRUEF ERGNINEENGE**
2. **EPCTSIORGNIRESES DTAE**
3. **TUFRAE STINOCELDENI**
4. **ATDA NLPIGCERNAE**





Module 4

Wrap-up Workshop



Agenda

- **Key takeaways**
- **Finding opportunities and generating impact**
- **Project check-in**
- **Q&A**
- **Wrapping up and next steps**
- **Next up:** Phase 1 Hackathon



Module 4

key takeaways

Key takeaways

1

Feature engineering techniques transform raw data into powerful features, driving high-performing ML models and enhancing their effectiveness.

2

Analyzing and optimizing variables, along with implementing robust data preprocessing workflows, ensures data quality and consistency, improving ML pipeline efficiency.

3

Developing skills in feature extraction and preprocessing empowers you to handle complex datasets, increasing the accuracy and reliability of ML solutions and providing meaningful insights for your organization.



What key takeaway do you think will have the biggest impact on your work?



Applying key takeaways



1 How could improved feature engineering techniques help uncover hidden patterns or opportunities in the data your team currently collects or works with?

2 What challenges around data quality or consistency have you observed in your workplace, and how could more structured preprocessing workflows improve your team's ML outcomes or decision-making?

3 In what ways could mastering feature extraction and preprocessing enable you to generate more actionable insights or deliver higher-impact results in your specific role or domain?

Share your plan to apply Module 4 skills

Go to My Multiverse, Module 4
Wrap-up Workshop



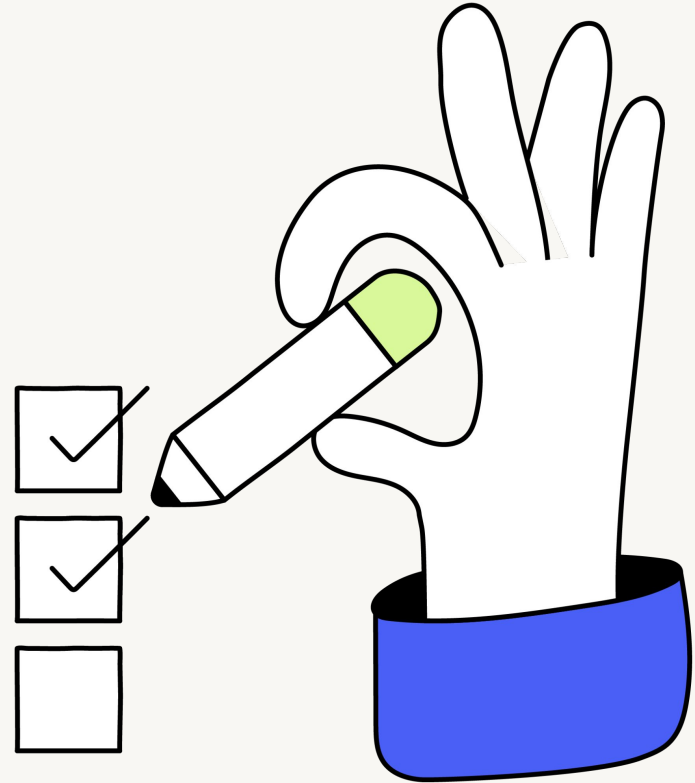
On page "Applying your skills", find the
discussion activity



Take 5 minutes to share how you will
apply this skill in your role



Take time this week to read what
others have written and get new ideas!





Phase 1 project

Module 4 milestone

Access Phase 1 Project Milestone

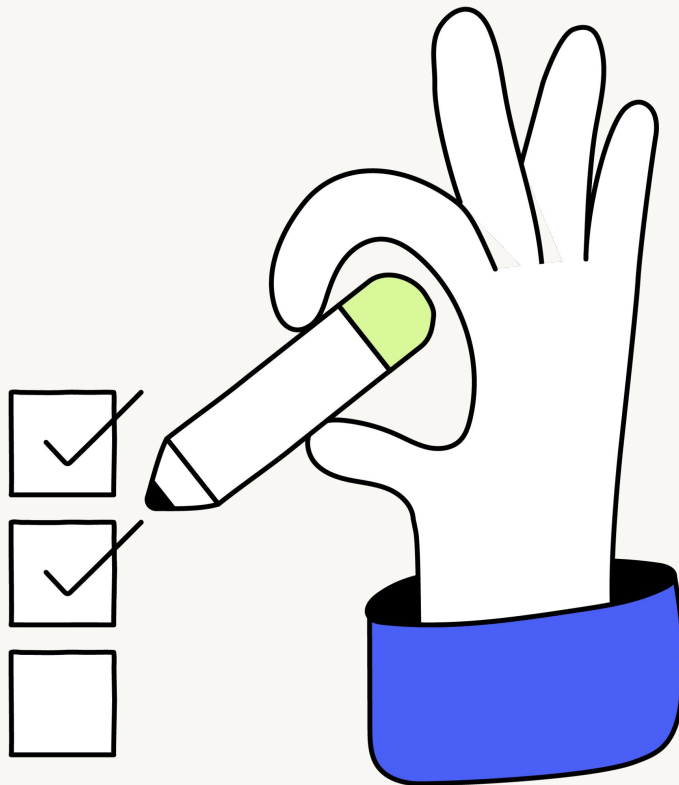
Go to My Multiverse, Projects



Find "AIMLF Phase 1 Project: Milestone 4"



Review milestone tasks





Module 4 milestone: Data Preparation and Feature Engineering

Milestone task 1



Data preprocessing and quality control:

Prepare your dataset for the proposed ML/AI solution by collecting relevant data and ensuring it meets the quality and governance standards established in Module 3. Clean, preprocess, and validate the data, addressing common issues such as missing values, outliers, and inconsistencies to ensure it is ready for modeling.

Milestone task 2



Feature engineering and selection:

Design and select features that improve the performance and interpretability of the ML/AI solution.

Milestone task 3



AI-based approaches and automation opportunities:

Identify opportunities to enhance efficiency through automation by evaluating potential areas where AI solutions can be embedded within AI/ML solution. Describe the approach you used to identify these opportunities and explain your reasoning. Additionally, assess and integrate AI-based tools and techniques to support and streamline data preparation and feature engineering, and describe your integration process.

Milestone task 4



Pipeline documentation and feedback:

Present your findings and proposed ML/AI project idea to a manager or stakeholder for feedback and initial buy-in.

Module 4 milestone: KSB requirements

Task 1 KSBs



Data preprocessing and quality control: none

Task 2 KSBs



Feature engineering and selection: none

Task 3 KSBs



AI-based approaches and automation opportunities: K30, S33, S34

Task 4 KSBs



Pipeline documentation and feedback: S34

Module 4 milestone tips for success

- 1 Embed ethics and privacy from the start.
- 2 Prioritize interpretable and quality features.
- 3 Document and iterate with stakeholder input.





Questions?



Wrapping up

Action items

- Attend Group Coaching session
- Complete your project milestone
- Share your project progress with your manager
- **Take the Module Survey** on My Multiverse



Next steps

- **Have questions?**
 - Chat with Atlas
 - Reach out to your Cohort Coach
 - Sign up for Tutoring
- **Log your OTJ hours**
- **Take the Module Survey** on My Multiverse



Looking ahead

Module 5: Phase 1 Hackathon

multiverse