Data Engineering introduction

Build your first data pipeline

Le Wagon Assessment
Baptiste PICARD - 28/06/2025

A short introduction

Requirements and what you can expect from this course ?

Requirements and expectations

Require Python basics

Improve Your Data understanding

Exercise Keep practicing on real usecase

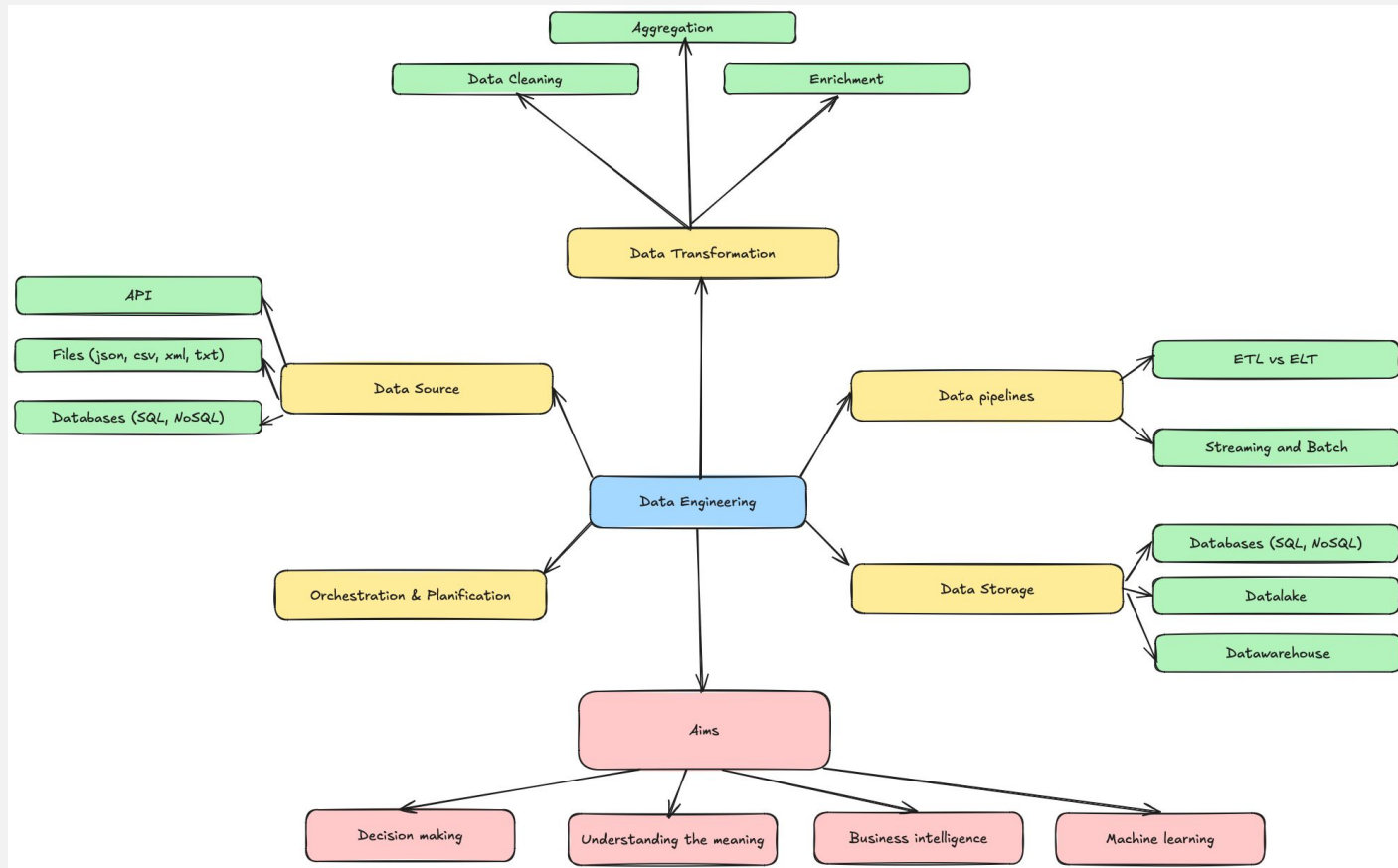**Learn** Data Standards and good practices

Agenda

1. Why Data Engineering matters?
2. What is Data Engineering?
3. What is a Data Pipeline
4. Data pipeline example – country population
5. Tools and best practices
6. Conclusion

Why Data Engineering matters?
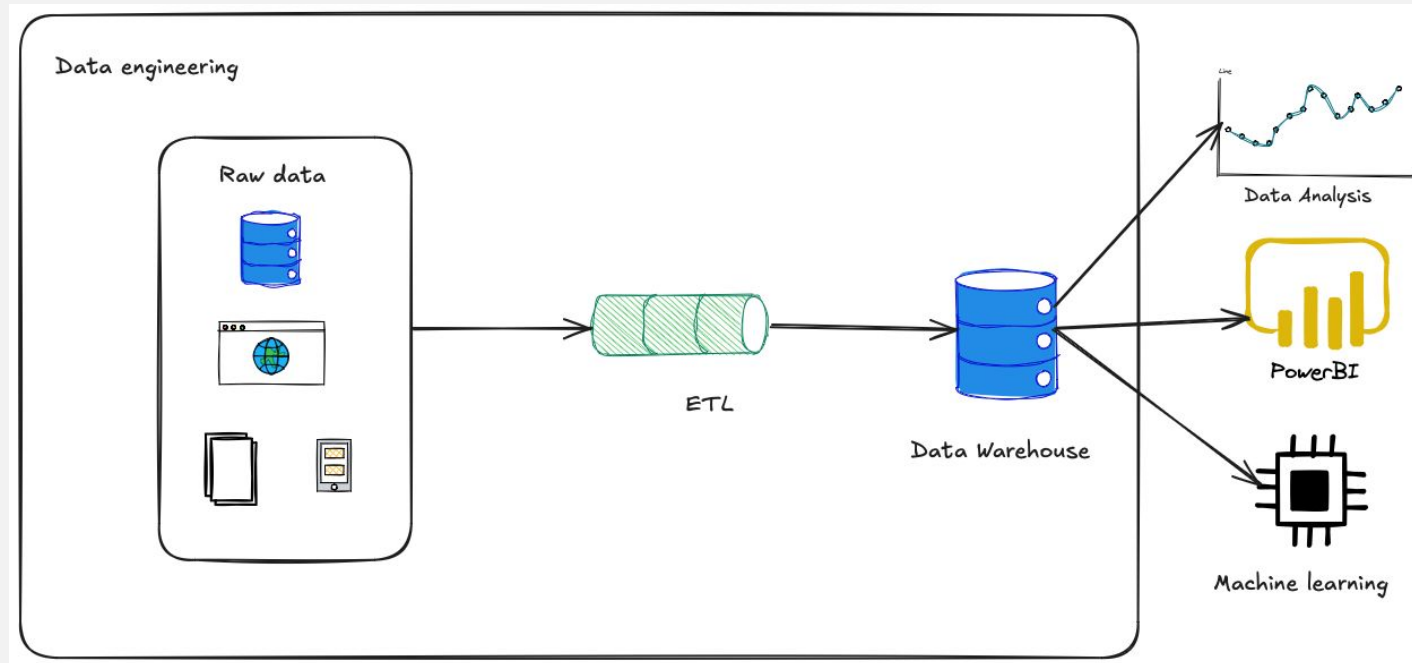
Let's walkthrough a mindmap on excalidraw

Final Mindmap

data engineering mindmap
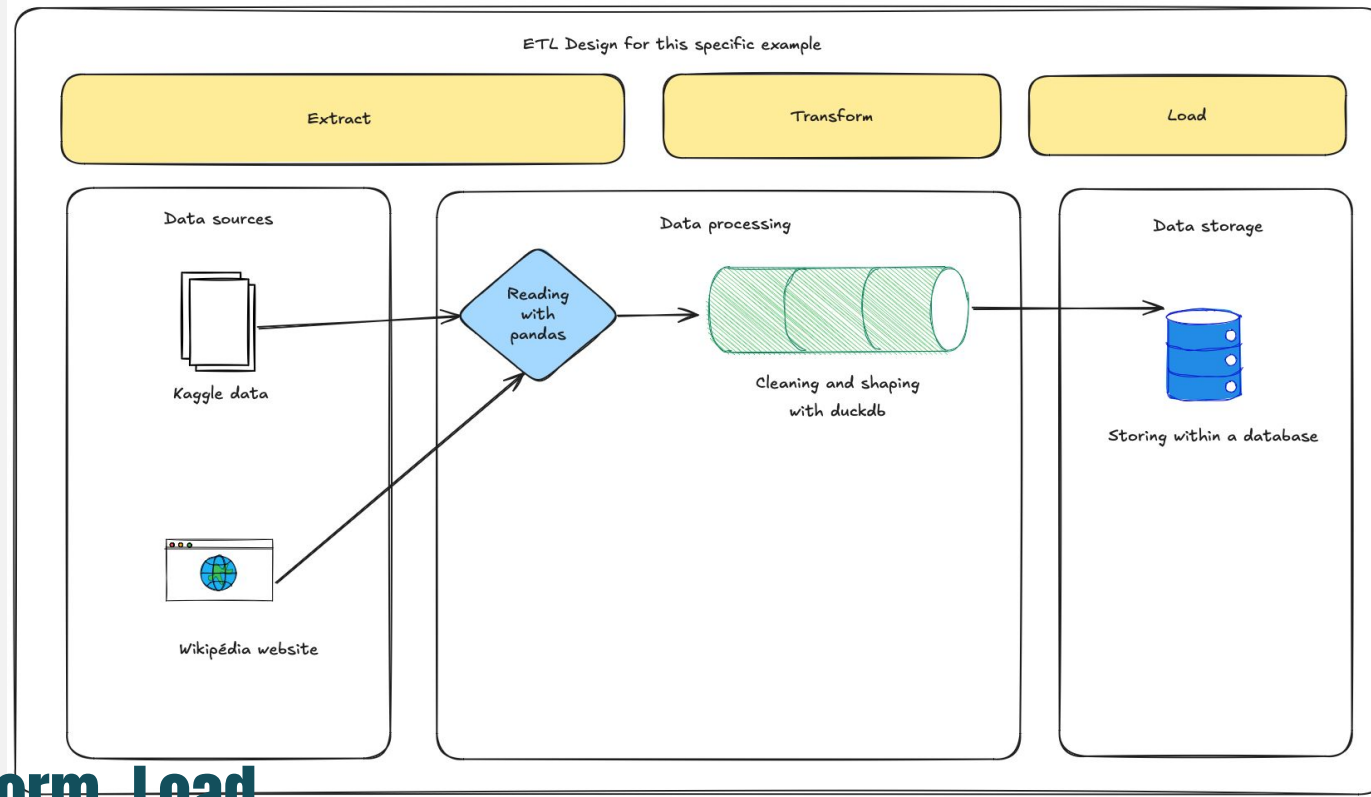
What is Data Engineering?

Where data engineering is spotted

data engineering vs data analytics

What is a data pipeline?

How to design an ETL?

ETL: Extract, Transform, Load

ETL design schema
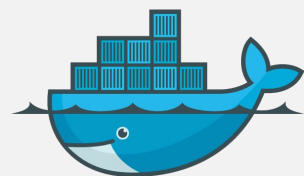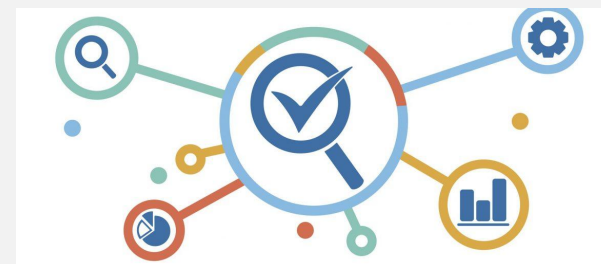
Data pipeline example: Country population data

https://github.com/BaptPicxDev/DataEng-teaching-pipeline/tree/playground

Important tools and best practices

Orchestration

Data/Code quality

Container

Big data solutions

Thank you!

Do you have some questions?