

## Data Modeling

Data modelling is the process of creating a blueprint of how data is stored, connected, and retrieved in a system.

(In simple terms: it's like making a blueprint or map of the data, showing how different pieces of information relate to each other.)

As a data engineer, it's not just about pipelines and tools – you need to design data structures that support reporting, scalability and performance.

### Why it matters?

Makes data easier to understand and use improves query performance, helps build scalable systems.

### Types of Data Models:

1. Conceptual
  - High-level overview
  - Entities and their relationships
2. Logical
  - Includes attributes, relationships
  - No concern for data type or DBMS
3. Physical
  - Real implementation
  - Data types, constraints, index, partitions