

A teal background with a vertical line on the left side. A small white circle is positioned on the line, to the left of the word 'Databases'.

Databases

Before we start...

- Concepts, not implementation
- Tortured metaphors
- Relational databases



What is a database

What is a database?

A database is a model of the real-world scenario that your application deals with.

This is broken down into real-world things (entities) that your website deals with, along with their relevant properties (fields) and relationships (relationships).



Why would you use one?

Key database concepts

	Real world	Databases
Language	English (UK vs US)	SQL (syntax differences)
Database Management System	Library	PostgreSQL, MySQL
Database	Collection of books	Database
Schema	Classification system	Schema
Client	Library terminal, librarian	PSQL, node-postgres

Exercise

○ What kind of relationships exist between people?

What type of relationships are they?

Relationships

Relationship	Type
Biological mother -> child	One to many
Friend -> Friend	Many to many
Boss -> Employee	One to many
Nemesis	One to one
Lover	Many to many
Siblings	Trick question
Client	Many to many
Acquaintance	Many to many

Final thoughts

- Designing a schema means understanding a situation
- Useful as reference tools
- Often no single correct way to design a schema
- Choices have consequences