Relational database model

> Tags: Relational database model, Database, Hierarchical Database Model, Relational Model, Domain(POIS), [[]]

Relational Database Model

a method of structuring data using relations, which are grid-like mathematical structures consisting of columns and rows

- all data must be stored in **relations(tables)**, and each relation consists of **rows** and **columns**
- Each relation must have a header and body. The header is simply the list of columns in the relation.

Relational Model: a simple but highly useful way to organize data into collections of two-dimensional tables called relations.

Relational model databases include:

- Oracle
- Microsoft SQL Server
- Microsoft Access
- MySQL

Domain: range of allowable values for a data attribute.

Relational Model ExcaliDraw

Hierarchical Database Model

- A **Hierarchical Database Model** is a data model in which the data is organized into a tree-like structure.
- The data is stored as records which are connected to one another through **links**.
- A **record** is a collection of fields, with each field containing only *one value*. The **entity type** of a record defines which fields the record contains.
- **Simple and efficient but inflexible** - data stored in your database can be accessed through only one path.