Database schema

Keywords learnt

1) Metadata

- data about data
- info that's used to describe the data contained in something like a webpage, document or file
- For example a DOC file has the author, file size, date published et cetera as the metadata.
- A music file has the artist name, album, release year, et cetera as the metadata.

2) Database

- organised collection of data generally stored and accessed electronically from a computer system
- in relational database info is organised into rows (records), columns (attributes) and tables which are indexed to make it easier to find relevant info.
- Each table represents one entity type, example customer or product.
- What makes a database relational is the fact that there are relations between tables.

3) DB schema

- DB schema is a collection of metadata that describes the relationships between objects and info in a DB.
- Does not contain any data info just the logical view.
- Primary key is a field that uniquely identifies a row.

Relationships among tables :-

1) One to one
    - only one row of a table is linked to at most one row on the other table
2) One to many
    - One row of one table can link to many rows in another
    - advantage is to store the frequently used data in the parent table (one) while referencing this info many times in the child table (many)
3) Many to many
    - One or more rows of one table can link to 0, 1, or more rows in the other table
    - Implemented using junction table