Entity Relationship Diagrams

ERD – A visual representation of the data base struction (similar like a blueprint of a house)

Helps identify problems in the structure.

Allows the team to see the database structure (quicky shows the relation of the different tables)

Helps to write SQL statement quickly. (eps when SQL statement refers two or more tables)

ERD components require

1. Tables required by the DB
2. List of field contain in the tables
3. Metadata about each field (name of field, data type and null or no null values)
4. PK and FK identification
5. Relation of the different tables

Relationships:

Arrow: pointing from one side to the many side of the relationship.

Crow's foot marking: three small lines to indicate many relationship

Small vertical line: shows that each record in the first table must have at least one related record in the second

Many to many relationship -> happens when multiple records in a table are linked many records in another tables

We can break up many to many relationships into two one to many relationships using join table.