

PHASES of the Database Design Process

1) Requirements Analysis

- a. Determine Scope (How many users, who are the users).
- b. Work with users to determine how database will be used and what pieces of data are required.
- c. Generate a Process Model Diagram to document how the business processes work.

2) Logical Design

- a. Identify entities, attributes, primary keys.
- b. Determine relationships and cardinality.
- c. Generate an Entity Relationship Diagram (ERD).

3) Physical Design

- a. Determine the database technology to be used (in our case: Relational).
- b. Convert the ERD into a Relational Data Model.
 - i. Complete data modeling by incorporating foreign keys and/or intersection tables where applicable.

4) Database Testing

- a. Develop a Test Plan.
- b. Manufacture Test Data.
- c. Implement the Test Plan.
 - i. Make revisions for any failed tests.
 - ii. Major failures may require going back to step 1, 2, or 3.
- d. Document results of the Test Plan.

5) Database Implementation

- a. Load “real” application data, if applicable.
- b. Provide appropriate access permissions.
- c. Make database available to users.