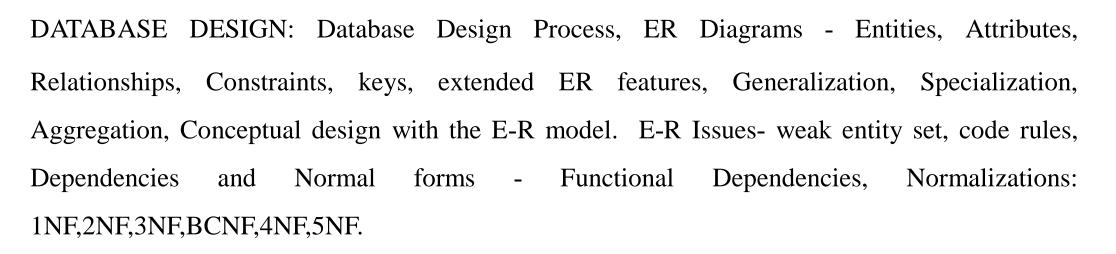


UNIT III ER DIAGRAM MODELS AND NORMAL FORMS







a model for identifying entities to be represented in the database and representation of how those entities are related.





Design Phases - Requirement Analysis:

➤ to understand what data need to be stored in the database, what applications must be built, what are all those operations that are frequently used by the system.

 \succ requires proper communication with user groups.





Design Phases – Conceptual database design:

 \succ E-R Model is built.

 \succ a high level model used in database design.

 \succ to create a simple description of data that matches with the requirements of users.





Design Phases – Logical database design:

 \succ ER model is converted to relational database schema.

Design Phases – Schema refinement:

 \succ to identify the potential problems and to refine it.

 \succ normalizing and restructuring the relations.





Design Phases – Physical database design:

building indexes on tables and clustering tables, redesigning some parts of schema obtained from earlier design steps.





- Design Phases Application and Security Design:
 - > UML design of the database can be accomplished.
 - ➤ the role of each entity in every process must be reflected in the application task.
 - ➤ some access rules must be enforced on the application to protect the security features.





 \succ provides a means for representing relationships between entities.

 \succ It is an aid for database design.

 \succ It is easy to visualize and understand.





Conn...

Thank You.....

DBMS/R.KAMALAKKANNAN/AP/CSE-IOT