

The design of a database is an integral part of the Systems Development Life Cycle (SDLC) and it is typically performed during the **Analysis and Design phases**. The following is a general overview of how database design fits into each phase of the SDLC:

Requirements Gathering: During this phase, the requirements for the system are collected and analyzed to determine what data needs to be stored and how it should be organized. This information is used to create an Entity Relationship Diagram (ERD) that outlines the relationships between different entities and their attributes.

Requirement gathering chair form reports design gaerw garinx said

Analysis: During this phase, the ERD is refined and used to determine the tables, columns, and relationships required to store the data. The database design is also normalized to eliminate redundant data and improve efficiency. **conceptual datamodel**

Design: In this phase, the database design is finalized and the tables, columns, and relationships are defined. Primary and foreign keys are also established to ensure data consistency and integrity. **yo logical datamodel**

Implementation: During the implementation phase, the database is actually created, along with any **necessary indexes or views**. Any database scripts or code required for integration with the rest of the system are also developed in this phase.

Testing: The database is tested to ensure that it meets the requirements and performs as expected. This includes testing for data integrity, consistency, and performance.

Deployment: Once the database has been tested and found to be functional, it can be deployed and integrated into the system.

Maintenance: Ongoing maintenance is required to keep the database updated and functioning correctly. This includes tasks such as backing up data, monitoring performance, and making changes to the database structure as necessary.

In conclusion, the design of a database is an important aspect of the SDLC and is performed during the Analysis and Design phases. The database design must be well thought out and properly implemented to ensure that the system is reliable and meets the needs of the organization.