

Week 7: Discussion Question

What are some of the key points that should be considered in creating a good database design?

A good database design must be assessed on many different levels and perspectives from within the entire SDLC. The database design must satisfy the user requirements by meeting their data and transactional needs or solving deficiencies in the existing system. Additionally, the principle that "All that is needed is there, and all that is there is needed," should be adhered to so that the DB design stays within scope. This means normalization might need to be scaled back to keep the system running optimally or that unnecessary information is left out to keep the data requirements clean.

The RDBMS should come within an acceptable cost, be feature-rich, portable, and work within the hardware constraints. The system should be well-documented, matching the ERDs and using naming conventions that are intuitive or "self-documenting." The system must be secure, ensuring sensitive data is not accessible from users without proper privileges. Data must also be backed up and recoverable in the event of a disaster and the system should be properly maintained.

Satisfies the Objectives

Meets the users requirements or solves design deficiencies in the current system. Information needs.

System requirements:

Works within the Constraints

Stays within scope. "All that is needed is there, and all that is there is needed."

Well Documented

ER Diagrams. System that meets ER Diagrams. Self-documenting naming conventions.

Right Software

Cost. Feature-rich. Portable. Meets hardware requirements.

Secure

Recoverable

Data Integrity

Properly maintained.