Learning Guide Unit 2

Reading Assignment

As you go through the readings and watch the video, consider the following:

1. Can you think of real-world examples where a poor choice of conceptual data model led to inefficiencies or challenges in database management?
2. Are ER diagrams typically used as a visual tool to aid in the communication and understanding of database structures?

Read

1. Vidhya, V., Jeyaram, G., & Ishwarya, K. (2016). *Database management systems*. Alpha Science International.

- Log into the UoPeople library and go to LIRN - How to Access LIRN?
- Select **Computer Science** under the **Jump to the Specific Group section**.
- Search using the entire name of the book.
- View the online book.

- **Read Chapter 2- Data Models**
  - Section 2.8 - Entity Relationship Model (pp. 43 till pp. 60)
    - 2.8.1 - Basic Concepts
    - 2.8.2 - Constraints
    - 2.8.3 - Keys
    - 2.8.4 - Entity-Relationship Diagrams
    - 2.8.5 - Dependency
    - 2.8.6 - Sample E-R Diagram
    - 2.8.7 - E-R Diagram
    - 2.8.8 - Extended E-R Features

- This section focuses on the **Entity-Relationship model**. It emphasizes the importance of understanding these models for database organization and highlights the ER model as a key concept in database design.

Additional Readings:

1. Groves, M. (2022, October 7). *What is data modeling? Conceptual, physical, logical.* https://www.couchbase.com/blog/conceptual-physical-logical-data-models/

- This reading provides an overview of data modeling focusing on conceptual, physical, and logical models.

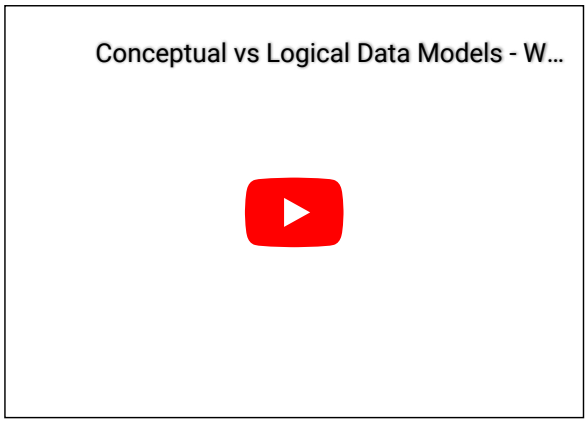
2. Nalimov, C. (2021, September 22). *What is a conceptual data model? With examples!* https://www.gleek.io/blog/conceptual-data-model.html

- This reading explores the concept of a conceptual data model providing definition and examples.

Watch

1. Ellie. (2022, July 6). *Conceptual vs logical data models - What are the key differences?* [Video]. YouTube.

- The video discusses the key differences between conceptual and logical data models.


Conceptual vs Logical Data Models - W...