

Introduction to Database Modeling:

Understanding the basics of database design and the importance of modeling.

Normalization:

Learning about the first, second, and third normal forms to eliminate data redundancy and improve integrity.

Conceptual Data Model (CDM):

Creating an abstract representation of the data, focusing on entities, attributes, and relationships.

Logical Data Model (LDM):

Translating the conceptual model into a structured format, defining tables, keys, and relationships.

Physical Data Model (PDM):

Implementing the logical model in a database management system (DBMS), including tables, indexes, and constraints.

Practical Exercises:

Hands-on activities to apply modeling concepts using a library management example, for each part.

Discussion on Data Structuring:

Debating the pros and cons of normalization vs. denormalization, particularly focusing on the usage of data

Practical exercises will be for CDM, LDM, and PDM