Database Design - A Modern Approach

Price	Duration	Delivery Methods
$395.00	1 Day	VILT, Private Group

This course introduces you to a process for effectively planning and designing a functional, efficient database. Knowing how to plan a relational database is important to the success of the databases you create. Without planning, you cannot possibly know what the database needs to do, or even what information to include in the database. Planning a database is essential, and prevents the extra work of fixing data maintenance problems later on. The concepts are not specific to a particular software application and can be applied to any relational database management system.

Who Should Attend

This course is designed for students who need to learn database design essentials, typically in preparation for, or as a supplement to, a course on SQL such as SQL Querying: Fundamentals and courses on specific relational database platforms.

This class is not currently scheduled.

Contact us and we will help you get the training you need!

Course Objectives

In this course, you will perform steps to design a relational database, including gathering requirements, data modeling, and planning implementation. You will:

- Follow an efficient process for designing a relational database - Define the database conceptual model - Define the database logical model - Apply database normalization methods to improve the initial design of a database - Complete the database design, including controls to ensure its referential integrity and data integrity

Agenda

1 - GETTING STARTED WITH RELATIONAL DATABASE DESIGN

- Identify Database Components
- Identify Common Database Design Problems

- Follow a Database Design Process
- Gather Requirements

2 - DEFINING THE DATABASE CONCEPTUAL MODEL

- Create the Conceptual Model
- Identify Entity Relationships

3 - DEFINING THE DATABASE LOGICAL MODEL

- Identify Columns
- Identify Primary Keys
- Identify and Diagram Relationships

4 - NORMALIZING DATA

- Avoid Common Database Design Errors
- Comply with Higher Normal Forms

5 - FINALIZING THE DATABASE DESIGN

- Adapt the Physical Model for Different Systems
- Ensure Referential Integrity
- Ensure Data Integrity at the Column Level
- Ensure Data Integrity at the Table Level
- Design for the Cloud

Prerequisite Courses Recommended

- Using Microsoft Windows 10