

Logical Database Design for Sybase

Course Summary

Description

Learn the basics of designing a database from requirements gathering to implementation. Our instructors are hands-on Database Modelers. They will share their experiences while teaching the course material.

Topics

- Introduction To Databases
- Data Dictionary
- Introduction to Relational Database Design
- Denormalization
- Conceptual Design
- Distributed Database
- Logical Design
- Converting an OO design to a Relational Database
- Normalization
- Introduction to Informational Modeling
- Physical Design

Audience

This course is designed for analysts, programmers, and database administrators who are responsible for the design of a relational database.

Prerequisites

There are no prerequisites for this course.

Duration

Three days

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Course Outline

- I. Introduction To Databases**
 - A. Databases in General
 - B. Hierarchical Database
 - C. Network Database
 - D. Flat File Databases
 - E. Relational Database
 - F. Object Databases
 - G. Object Relational Databases
- II. Data Dictionary**
 - A. RDBMS Specific
- III. Introduction to Relational Database Design**
 - A. Design
 - B. Review of System Design
 - C. Different Methodologies
 - D. The Steps
 - E. Design Bias
 - F. RDB Design Methodologies
 - G. 3-Levels
 - H. CASE Tools
- IV. Denormalization**
 - A. Performance Implications of a Physical Database
- V. Conceptual Design**
 - A. Inputs
 - B. Outputs
 - C. When it is Done
 - D. Steps in Performing
- VI. Distributed Database**
 - A. Design for a Multi-site Database
- VII. Logical Design**
 - A. Inputs
 - B. Outputs
 - C. When it is Done
 - D. Entities
 - E. Attributes
 - F. Relations
 - G. Keys
 - H. Reviewing the Design
- VIII. Converting an OO design to a Relational Database**
 - A. How it differs from a Standard Database Design
- IX. Normalization**
 - A. Mathematical Meaning
 - B. Plain English Description
 - C. 6 Standard Forms
 - D. 1NF, 2NF, 3NF, Boyce-Code, 4NF, 5NF
- X. Introduction to Informational Modeling**
 - A. Understand Flow of Information at Your Site
- XI. Physical Design**
 - A. Inputs
 - B. Outputs
 - C. Tables
 - D. When it is Done
 - E. Columns
 - F. Nulls
 - G. Constraints
 - H. Indexes
 - I. Object Placement
- XII. Appendix**
 - A. Symbols for Different Methodologies
 - B. Step by Step Design a Database
 - C. Database Design Templates
 - D. Glossary