M55352A - Introduction to SQL Databases

DURATION

3 Days

LEVEL

100 - Foundation

VENDOR

Microsoft, SQL Server

LEGACY MOC CODE

M10985A

COURSE OVERVIEW

This three-day instructor-led course is aimed at people looking to move into a database professional role or whose job role is expanding to encompass database elements. The course describes fundamental database concepts including database types, database languages, and database designs.

Labs available from go deploy.

AUDIENCE PROFILE

The primary audience for this course is people who are moving into a database role, or whose role has expanded to include database technologies.

This is student material. Instructors, please contact the publisher at https://cwlink.sc/InstructorAccess.

COURSE OUTLINE

Module 1: Introduction to databases

This module introduces key database concepts in the context of SQL Server.

Lessons

- Introduction to relational databases
- Other types of databases
- Data analysis

- Database languages

Lab: Querying SQL Server

Module 2: Data Modelling

This module describes data modelling techniques.

Lessons

- Data modelling
- ANSI/SPARC database model
- Entity relationship modelling

Lab: Entity relationship modelling

Module 3: Normalization

This module describes normalization and denormalization techniques.

Lessons

- Why normalize data?
- Normalization terms
- Levels of normalization
- Denormalization

Lab: Normalizing raw data

Module 4: Relationships

This module describes relationship types and effects in database design.

Lessons

- Schema mapping
- Referential integrity

Lab: Designing relationships

Module 5: Performance

This module introduces the effects of database design on performance.

Lessons

- Indexing
- Query performance
- Concurrency

Lab: Query performance

Module 6: Database Objects

This module introduces commonly used database objects.

Lessons

- Tables
- Views
- Stored procedures
- Other database objects

Lab: Using SQL Server in a hybrid cloud