Relational Databases & Data Modelling Overview

Cursusduur: 2 Dagen **Cursuscode: RDBO**

Beschrijving:

Relational Databases & Data Modelling Overview Course Overview

English - Please note this course is only available in English.
Nederlands - Let op: deze training is alleen in het Engels beschikbaar.
Français - Veuillez noter que ce cours est uniquement disponible en anglais.
The Relational Databases & Data Modelling Overview course is designed to give delegates practical experience i

Doelgroep:

Who will the Course Benefit?

Developers moving into the area of relational databases who need an understanding of the principles and logic of the relational database; programmers who are to start programming in SQL and need to know the principles on which it is built; programmers who need to understand entity modelling and normalization; analysts needing a knowledge of entity modelling and entity relationship diagrams and any others who need to know the principles of relational analysis and data modelling but do not need a complete systems analysis course.

Doelstelling:

- Course Objectives
- The Relational Databases & Data Modelling Overview course provides an understanding of the structure of a RDBMS (Relational Database Management System) and the underlying principles of relational analysis and data modelling.

Vereiste kennis en vaardigheden:

- An understanding of Information Technology concepts and computer terms is required.

Vervolgcursussen:

Further Learning

- Introduction to SQL
- Introduction to SQL on Oracle
- Oracle SQL & PL/SQL Fundamentals
- Oracle SQL Fundamentals
- Introduction to MySQL
- Oracle SQL
- Introduction to MariaDB
- SQL for PostgreSQL
- Querying Microsoft SQL Server with Transact-SQL
- Microsoft SQL Server with Transact-SQL

Cursusinhoud:

Relational Databases ; Data Modelling Overview Training Course Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: INTRODUCTION TO RELATIONAL DATABASES

- The Database Approach
- Database Management Systems
- The function of a Database Management System
- The Processing Architecture
- The Schema Architecture
- The Storage Architecture
- An overview of Database System Development
- An overview of general database principles

Session 2: CONCEPTUAL DATA MODELS

- Overview of Entity Models
- Entities and how to identify them
- Attributes and how to identify them
- Relationships and their qualities
- Building an Entity Relationship Diagram
- Resolving many-to-many relationships
- Sub-type and Super-type Relationships
- Arc Relationships
- Recursive Relationships
- Constraints and Assumptions
- Normalisation to the First Normal Form (1NF)
- Normalisation to the Second Normal Form (2NF)
- Normalisation to the Third Normal Form (3NF)
- Exercises:
- Analysing a specification
- Creating an Entity Relationship Diagram

Session 2: CONCEPTUAL DATA MODELS (continued)

- Normalisation to the First Normal Form (1NF)
- Normalisation to the Second Normal Form (2NF)
- Normalisation to the Third Normal Form (3NF)
- Exercises: Data Normalisation producing table specifications and Entity Diagrams

Session 3: THE RELATIONAL MODEL

- Relational Structure
- Relational Terminology
- Domains
- A Relational schema
- Candidate keys and Primary Keys
- Foreign Keys
- Key Constraints
- Attribute Constraints
- Implementing Sub-type/Super-type Relationships
- Views
- Denormalisation using Pre-joined Tables
- Denormalisation using Derived Data
- An Introduction to Structured Query Language (SQL)
- Simple Queries
- Simple Updates of the Data
- Exercise: Data Modelling from an Invitation to Tender

Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

info@globalknowledge.nl

www.globalknowledge.com/nl-nl/

Iepenhoeve 5, 3438 MR Nieuwegein