MongoDB Essentials

Duration: 2 Days   Course Code: MONGOE   Delivery Method: Virtual Learning

Overview:

MongoDB Essentials Course Overview

The MongoDB Essentials course is designed to give delegates experience of installing and using the MongoDB database. This hands-on course introduces delegates to the concept of a document-oriented database then shows how to set up MongoDB for use. Delegates use the built-in shell and various APIs to build a database access application and manipulate data. We also investigate optimising queries using indexes and aggregating data with MongoDB functions.
Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Who will the Course Benefit?

Objectives:

- Course Objectives

- By the end of the course delegates should be able to:

- Install the MongoDB database

- Use the MongoDB shell to access the database

- Create,retrieve,update and delete data

- Use aggregation queries

- Appreciate the APIs used to interface with MongoDB

- Understand the document based structure of the database

- Use an API to develop applications

- Optimise queries with indexes

Prerequisites:

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An understanding of programming and database principles would be beneficial.

Content:

MongoDB Essentials Training Course Course Contents - DAY 1

Course Introduction

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

Session 1: NOSQL DATABASES

- What are NoSQL Databases?
- Common Database Features
- NoSQL Versus Relational Approach
- Types of NoSQL Databases
- Data Storage
- Transaction Handling
- Key Features

Session 2: INSTALLING MONGODB

- Downloading in the Required Software
- Installing MongoDB
- Configuration Files
- Touring the File Structure
- Securing the Installation

Session 3: DATA MODELLING AND DESIGN

- Data Storage
- Working with Datatypes
- Collections
- Document Datatypes
- Creating _id Fields

Session 4: QUERYING DATA

- Databases and Collections
- Querying Collections
- Working with Operators
- Referencing a Database
- Querying Dates MongoDB Essentials Training Course Course Contents - DAY 2

Session 5: THE AGGREGATION FRAMEWORK

- Aggregating Results
- Single Purpose Functions
- The Aggregation Pipeline
- Date Aggregation Operators

Session 6: MANIPULATING DATA

- Inserting Data into Collections
- Updates
- Deletes
- Atomic Operations
- Removing Data
- Capped Collections

Session 7: USING AN API

- Introducing Drivers
- Java
- PHP
- Ruby
- Python

Session 8: HIGH PERFORMANCE OPTIONS

- Creating Indexes
- Manipulating Index Behaviour
- Index Properties
- Specialised Index Types
- Replication
- Sharding

Further Information:

For More information, or to book your course, please call us on 0800/84.009

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www.globalknowledge.com/en-be/