SpiralTrain
developer courses

MongoDB Data Access

Duration: 2 days   **Price: € 1299**

Open Schedule

Audience MongoDB Data Access
The course MongoDB Data Access is intended for developers and database administrators who want to learn how the NoSQL database MongoDB can be accessed and managed.

Prerequisites MongoDB Data Access
Participants must have basic computer skills to intend the course MongoDB Data Access. Knowledge of data access with other databases is beneficial for good understanding.

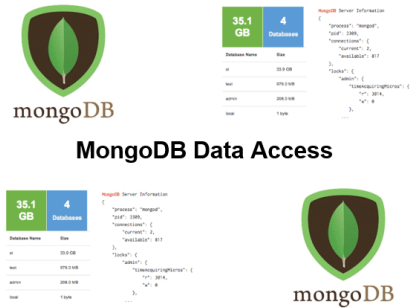### Realization Training MongoDB Data Access
The theory is treated on the basis of presentations. The concepts are explained with demos. The theory is interspersed with exercises. The course times are from 9.30 to 16.30.

Official Certificate MongoDB Data Access
Participants receive an official certificate MongoDB Data Access after successful completion of the course.

MongoDB Data Access

Content Course MongoDB Data Access

In the course MongoDB Data Access participants learn to access and manage the document-oriented database MongoDB. MongoDB is an open source NoSQL database and the documents are stored in binary JSON format. MongoDB has no support for joins and is not ACID compliant since transaction support is limited.

MongoDB Intro
The course MongoDB Data Access starts with a discussion of the MongoDB Architecture, the characteristics of the JSON-Based Document Store and the scalability of MongoDB. Installing and starting MongoDB and using the JavaScript console is treated as well.

MongoDB Data Model
Next the MongoDB Data Model is covered with the _id identifier, capped collections, blobs, schema evolution and polymorphic schemas. Attention is also paid to MongoDB drivers, the MongoDB shell and network access.

Queries in MongoDB
Queries in MongoDB are also discussed. Database creation is covered as well as insert queries and the use of Find One, All, Some, MapReduce, Projections and Pagination.

MongoDB Administration
The course MongoDB Data Access then pays attention to the management of the MongoDB database with creating users, stopping processes and monitoring with the mongostat and mongotop utilities. Configuring Replica Sets, Clustering, Load Balancing, Fault tolerance and creating Backups is also on the program.

Link to Programming Languages
Finally the course covers how the MongoDB database can be used from different programming languages such as Python, Java and JavaScript and a number of advanced operations in MongoDB are treated.

Modules Course MongoDB Data Access

Module 1 : Intro MongoDB	Module 2 : MongoDB Data Model	Module 3 : MongoDB Queries
MongoDB Design Philosophy	JSON and BSON	Create Database in MongoDB
MongoDB Architecture	The Identifier _id	Create Collection
Document Oriented Databases	Capped Collections	Insert into Collection
Speed, Scalability, and Agility	Polymorphic Schema's	Insert Multiple Documents
Non-Relational Approach	Object Orientation	Id Field
No SQL Advantages and Disadvantages	Schema Evolution	Find One, All and Some
JSON-Based Document Store	MongoDB Drivers	Query
Performance vs. Features	MongoDB Shell	Filter Regex
Running the Database Anywhere	Using Authentication	Indices
MongoDB Installation	Using Authorization	MapReduce
Starting MongoDB	Controlling Network Access	Projections
JavaScript Console	MongoDB Cloud Manager	Pagination
Module 4 : MongoDB Administration	**Module 5 : Connecting with Languages**	**Module 6 : Advanced Operations**
Renaming collections	Python connecting with PyMongo	Atomic find
Viewing Collections Stats	Aggregation with PyMongo	Atomic modify
Viewing Database stats	MapReduce with PyMongo	Atomic counters
mongostat and mongotop utilities	Java Clients	Server side scripts
Killing processes	Update and Delete with Java	Capped collection cursors
Setting up users	Query and insert with Java	Converting collections
Replica Set Configurations	MongoDB and JPA	Storing binary data
Clustering and Load Balancing	MongDB and REST	Storing large data
Fault tolerance and Backups	MongoDB and NodeJS	Storing data to GridFS