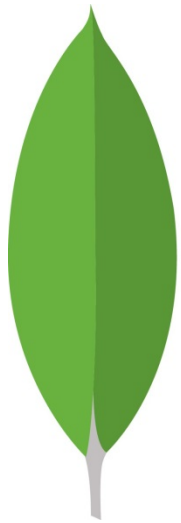
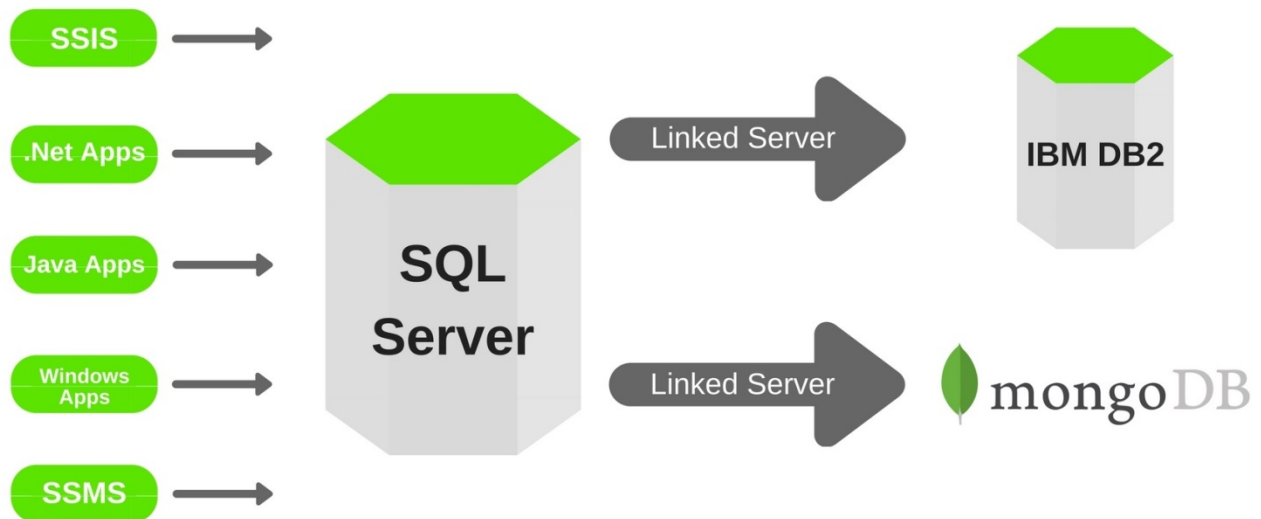




LEARN TODAY AND LEAD TOMMOROW



mongoDB



Overview

Let eMexo Technologies **Best MongoDB Training in Electronic City Bangalore** take you from the fundamentals of MongoDB to Advance MongoDB and make you an expert in developing real time MongoDB applications. Here are the major topics we cover under this MongoDB course Syllabus Introduction to MongoDB, The Mongo Shell, Saving Data, Finding Documents and Indexing. Each topic will be covered in practical way with examples.

All the topics will be covered with Practical and hands on training. Our trainers have industry experience with live project experience in cutting edge technologies which they teach. We hire only Best MongoDB industry specialists as trainer for our MongoDB trainings.

Come over to our training institute for a free demo class. Let our trainer give you a demo on MongoDB and only then you take the decision to enroll into the training program.

Training Features

Expert Instructors

60 hours of Instructor led Classes. Weekend class:20 sessions of 3 hours each and Weekday class:30 sessions of 2 hours each.

Real life Case Studies

Do a real life case study to understand the usage on real world scenarios.

Assignments

Each class will be followed by practical assignment which can be completed before the next class.

Unit 1 : INTRODUCTION TO MONGODB - ARCHITECTURE AND INSTALLATION

- Understanding the basic concepts of a Database
- Database categories: What is NoSQL? Why NoSQL? Benefit over RDBMS
- Types of NoSQL Database, and NoSQL vs. SQL Comparison, ACID & Base Property
- CAP Theorem, implementing NoSQL and what is MongoDB?
- Overview of MongoDB, Design Goals for MongoDB Server and Database, MongoDB tools
- Understanding the following: Collection, Documents and Key/ Values, etc.,

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- Introduction to JSON and BSON documents
- Case study discussion
- Environment setup (live Hands-on) and using various MongoDB tools available in the MongoDB Package

Unit 2 : SCHEMA DESIGN AND DATA MODELLING

- Data Modelling Concepts
- Why Data Modelling? Data Modelling Approach
- Analogy between RDBMS & MongoDB Data Model, MongoDB Data Model (Embedding & Linking)
- Challenges for Data Modelling in MongoDB
- Data Model Examples and Patterns
- Model Relationships between Documents
- Model Tree Structures
- Model Specific Application Contexts
- Use Case discussion of Data modeling
- Hands-on

Unit 3 : CRUD OPERATIONS

- MongoDB Development Architecture
- MongoDB Production Architecture
- MongoDB CRUD Introduction, MongoDB CRUD Concepts
- MongoDB CRUD Concerns (Read & Write Operations)
- Concern Levels, Journaling, etc.,
- Cursor Query Optimizations

- Query Behavior in MongoDB
- Distributed Read & Write Queries
- MongoDB Datatypes
- MongoDB CRUD Syntax & Queries
- Hands-on

Unit 4 : INDEXING AND AGGREGATION FRAMEWORK

- Index Introduction, Index Concepts, Index Types, Index Properties
- Index Creation and Indexing Reference
- Introduction to Aggregation
- Approach to Aggregation
- Types of Aggregation (Pipeline, MapReduce & Single Purpose)
- Performance Tuning
- Hands-on

Unit 5 : MONGODB ADMINISTRATION

- Administration concepts in MongoDB
- Monitoring issues related to Database
- Monitoring at Server, Database, Collection level, and various Monitoring tools related to MongoDB
- Database Profiling, Locks, Memory Usage, No of connections, page fault etc.,
- Backup and Recovery Methods for MongoDB
- Export and Import of Data to and from MongoDB
- Run time configuration of MongoDB

- Production notes/ best practices
- Data Managements in MongoDB (Capped Collections/ Expired data from TTL), Hands on Administrative Tasks
- Hands-on

Unit 6 : SCALABILITY AND AVAILABILITY

- Introduction to Replication (High Availability)
- Concepts around Replication
- What is Replica Set and Master Slave Replication?
- Type of Replication in MongoDB
- How to setup a replicated cluster & managing replica sets etc.,
- Introduction to Sharding (Horizontal Scaling)
- Concepts around Sharding, what is shards, Key
- Config Server, Query Router etc.
- How to setup a Sharding
- Type of Sharding (Hash Based, Range Based etc.), and Managing Shards
- Hands-on

Unit 7 : MONGODB SECURITY

- Security Introduction
- Security Concepts
- Integration of MongoDB with Jaspersoft
- Integration of MongoDB with Pentaho
- Integration of MongoDB with Hadoop/Hive

- Integration of MongoDB with Java
- Integration of MongoDB with GUI Tool Robomongo
- Case Study MongoDB and Java
- Hands-on

Unit 8 : APPLICATION ENGINEERING AND MONGODB TOOLS

- MongoDB Package Components
- Configuration File Options
- MongoDB Limits and Thresholds
- Connection String URI Format/ Integration of any compatible tool with MongoDB API and Drivers for MongoDB
- MMS (MongoDB Monitoring Service)
- HTTP and Rest Interface
- Integration of MongoDB with Hadoop and Data Migration MongoDB with Hadoop (MongoDB to Hive)
- Integration with R
- Hands-on

Unit 9 : MONGODB ON THE CLOUD

- Overview of MongoDB Cloud products
- Using Cloud Manager to monitor MongoDB deployments
- Introduction to MongoDB Stitch
- MongoDB Cloud Atlas
- MongoDB Cloud Manager
- Working with MongoDB Ops Manager

- Hands-on

Unit 10 : DIAGNOSTICS AND FIXES

- Overview of tools
- MongoDB Diagnostic Tools
- Diagnostics Commands
- MongoDB Deployment
- Setup & Configuration, Scalability, Management & Security
- Slow Queries
- Connectivity
- Hands-on

FAQs

1.How is the training organised? How much percentage is theoretical and how much is practical hands on?

We at eMexo believe nothing beats a hands-on practice when it comes to learning a concept. Our teaching methodology is 100% practical hands-on oriented. You learn a concept, you practice it then and there with the trainer. We also give you assignments for each topic which you can practice at home and any doubts regarding the topic can be cleared with the trainer next day.

2.What is the course duration ? How and when do you plan to complete the course ?

We generally cover our courses in 60 hours, however, we are aware that we can't put a hard- stop to learning with a number. Our trainer will make sure that you have learned everything that is part of the curriculum. This could mean 48 hours or 60 hours, doesn't matter.

3.What is the material provided in the training ?

We have industry standard course material which is used by our trainers to train you. At the end of the training apart from the notes which you have taken during the course, we will also provide you with the training material which was used. This training material includes the training content, interview questions etc.

4.Do you help in preparing for the interview ?

Our trainers are working professionals who work in MNC's. They are the expert in their domain and they know exactly what an interviewer looks into a candidate. Our expert trainers apart from sharing the interview questions they will also conduct mock interviews to help you prepare for the real interview.

5. Who are your trainers ?

Our trainers are industry experts who work in their respective technologies day in day out. They work in MNC's and are technology experts within their organisation.

6. What is the total batch size per course?

We maintain a strict batch size of maximum 5 students. We also provide exclusive one to one training as well. Talk to our training partner to get more details.

7. Do you provide certification for the course?

Yes, at the end of training we provide a certification of completion.

8. Will I be joining a new batch or be merged with another batch ?

You will be added to a new batch.

9. Is fast track training available?

Yes, we provide fast-track training as well for those who want to complete the course faster. The curriculum and the total hours required to complete the course will remain same. However, the trainer will be spending more hours with you to complete the course.

10. Do you assist in job placement ?

Our trainers are expert professionals in their organisations and they often act as the interviewer to hire new candidates. Our trainers will help you prepare your resume with industry standards. After all, they know exactly what to look in a resume.

11. Timings for trainings - Regular training/weekend training

We provide both regular and weekend training. Talk to our training partner to learn more about the timings.

12. Will you be working on a live project during training ?

Yes, apart from doing the hands-on practice our trainer will also be taking a real-world project and work with you for the implementation.

13.What happens if I miss a class?

If you miss a class the content of that class will be taught to you again. With us you might miss a class but not the content.

14.Can I attend a demo before the actual class?

Yes, absolutely! Talk to our training counsellor on phone at 9513216462 or email us at info@emexotechnologies.com to arrange for a free demo. You can also fill in the contact us form below and we will call you to discuss your training requirements.