

# MONGO DB.:

## SCALABLE , FASTER, BETTER

Welcome to the course!

In today's data-driven world, managing and manipulating information efficiently is crucial. Relational databases have long been the go-to solution, but for modern applications with ever-growing data volumes and evolving schema needs, a new breed of databases are emerging. Enter MongoDB, a powerful NoSQL database that offers a refreshing alternative.

This course is your comprehensive guide to mastering MongoDB. We'll delve into its core concepts, starting with the document-oriented data model. Unlike relational databases with rigid tables and rows, MongoDB stores data in flexible JSON-like documents, allowing for a more natural representation of complex information. This flexibility makes MongoDB ideal for applications with constantly evolving data structures or those that require frequent schema changes.

Furthermore, MongoDB boasts impressive scalability – it can effortlessly handle massive datasets and seamlessly scale up or down based on your needs. This makes it a perfect choice for applications with dynamic user bases or unpredictable data growth.

## Module 1

Introduction to MongoDB and Installation

- Introduction to MongoDB
- Why Choose MongoDB

## Module 2

Shell Commands using Mongo CMD Utility

- Introduction to Mongo vs. Mongod
- Data Definition Language (DDL) in MongoDB
- Data Control Language (DCL) and Transaction Control Language (TCL)
- Creating and Managing Databases
- MongoDB Indexing
- Aggregation Framework in MongoDB
- MongoDB Query Optimization
- Demo - SAP Ariba

## Module 3

Scripting and API Utilization with Node.js

- Collection Creation in MongoDB
- REST API Implementation with Express.js and MongoDB
- Practical Application and Troubleshooting

## Module 4

Conclusion