

Course Content of Mongo DB:

Introduction

What is MongoDB?

The current SQL/NoSQL landscape

Document-oriented vs. other types of storage

Mongo's featureset

Common use-cases

Introduction to JSON

Documents and Collections

Creating documents

Managing documents in collections

Iterating over documents

Simple Queries

Field equality tests

Operators available

Projections

Limiting results and paging

Simple Updates and Deletes

Field updates

Field insertions and removal

Document deletion

More Complex Types of Queries

Existential field values

Aggregations and groups

Aggregations and groups in hierarchical data

Updates and Arrays

Altering array field elements

Insertion to array fields

Removing from array fields

Indexing 1

The primary index and the _id field

Problems requiring an index

Defining secondary indexes

Compound indexes

Indexing 2

Index selection

Index hints

Covering indexes

Index storage size

Indexes effect insertion and update speeds

Mongo RESTful API

CRUD operations through REST

MapReduce

Explanation of MapReduce

Types of logic that can be expressed as MapReduce declarations

Mapping documents

Reducing values

Mongo Security

Authorization and securing collections, documents

The limits of Mongo's authorization scheme

Authentication

Mongo in the enterprise

Mongo Replication and Sharding

Configuring replication

Configuring sharding

Accessing clustered data from client APIs

Latency and consistency in replicated and sharded Mongo

Conclusion