

**Day 1: Introduction to MongoDB** 1.1. Welcome and Course Overview 1.2. What is MongoDB? 1.3. MongoDB vs. Traditional Databases 1.4. Installation and Setup 1.5. Basic CRUD Operations

**Day 2: MongoDB Data Modeling** 2.1. Schema Design Best Practices 2.2. Data Types in MongoDB 2.3. Document Structure and Embedding 2.4. Indexing and Query Optimization 2.5. Working with Collections and Documents

**Day 3: Advanced Querying and Aggregation** 3.1. Querying with MongoDB Query Language (MQL) 3.2. Filtering, Sorting, and Projection 3.3. Aggregation Framework Introduction 3.4. Pipeline Stages and Expressions 3.5. Real-world Query Examples

**Day 4: MongoDB CRUD Operations** 4.1. Create and Insert Documents 4.2. Reading and Querying Documents 4.3. Updating Documents 4.4. Deleting Documents 4.5. Bulk Operations and Write Concerns

**Day 5: MongoDB Indexing and Performance** 5.1. Index Types and Creation 5.2. Index Strategies and Optimization 5.3. Profiling and Performance Tuning 5.4. Monitoring Tools and Metrics 5.5. Handling Large Data Sets

**Day 6: MongoDB Administration and Security** 6.1. MongoDB Deployment Options 6.2. Backup and Restore Strategies 6.3. Security Best Practices 6.4. User Authentication and Authorization 6.5. Managing Replication and Sharding

**Day 7: Advanced Topics and Best Practices** 7.1. Geospatial Queries and Indexing 7.2. Time Series Data Modeling 7.3. MongoDB Atlas and Cloud Deployment 7.4. Integration with Programming Languages 7.5. Certification and Future Steps