

M101JS: MongoDB for Node.js Developers

Units	Topics	Effort
Week 1: Introduction & Overview	Overview, Design Goals, the Mongo Shell, JSON Intro, Installing Tools, Overview of Blog Project. Swig, Express, Node Packaged Modules (npm) Intro	Lecture Videos: 2 hours Homework: 2-4 hours
Week 2: CRUD (Creating, Reading & Updating Data)	Mongo Shell, Query Operators, Update Operators and a Few Commands	Lecture Videos: 2.5 hours Homework: 2-4 hours
Week 3: Schema Design	Patterns, Case Studies & Tradeoffs	Lecture Videos: 1 hour Homework: 2-4 hours
Week 4: Performance	Using Indexes, Monitoring And Understanding Performance. Performance In Sharded Environments.	Lecture Videos: 2 hours Homework: 2-4 hours
Week 5: Aggregation Framework	Goals, The Use Of The Pipeline, Comparison With SQL Facilities.	Lecture Videos: 1.5 hours Homework: 2-4 hours
Week 6: Application Engineering	Drivers, Impact Of Replication And Sharding On Design And Development.	Lecture Videos: 1.5 hours Homework: 2-4 hours
Week 7: Mongoose	Introduction to Mongoose	Lecture Videos: 1.75 hours