

欢迎来到 MongoDBx 的 M101x!

Introduction to MongoDB using the MEAN Stack

[继续课程](#)

课程更新与新消息

📅 May 23, 2016

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Introduction

Welcome to M101x, Introduction to MongoDB using the MEAN Stack! Please find a high level overview of what we will be covering below and links to the course handouts on the right. We hope you enjoy the course!

What you'll learn

- Installing and working with MongoDB and Node.js
- MongoDB schema design fundamentals
- Building REST APIs with Node.js and Express
- Building single page applications with AngularJS
- Building mobile apps with the Ionic framework

Format

This course is self-paced. All curriculum is available through the close date of December 31, 2016.

Prerequisites

Please note that this is an advanced course with the following prerequisites:

- Experience writing front- and back-end software
- Basic knowledge of web application architecture
- Knowledge of JavaScript fundamentals, including callbacks
- Experience working with SQL or NoSQL databases

Grading

Grading in this course will be based on the homework assignments in each chapter. You must complete the homework and download your certificate before the course closes.

When you complete the course, you will receive a discount to MongoDB Professional Certification, enabling you to demonstrate your skills, show recruiters and hiring managers your expertise, and earn a spot in the MongoDB Certified Professional Finder.

Schedule

PART 1: INTRODUCTION TO MONGODB AND NODEJS

- Starting a standalone mongod and connecting with shell
- package.json: installing dependencies with npm
- Connecting to mongodb with NodeJS
- Inserts and queries using the NodeJS driver
- NodeJS concurrency and event loop fundamentals
- require() basics
- Using mocha for testing
- package.json: npm run-script
- Running mocha tests with gulp

PART 2: MONGODB SCHEMA DESIGN

- Overview of retail application
- Introduction to mongoose
- Schema design principle: store what you query for
- Schema design principle: principle of least cardinality
- MongoDB indexes
- Retail application schema: product
- Retail application schema: category
- Retail application schema: user and cart
- Advanced mongoose features: virtuals
- Advanced mongoose features: custom setters + sorting by currency

PART 3: NODEJS REST APIS WITH EXPRESS

- What is a REST API?
- Introduction to express
- Dependency injection in NodeJS + ExpressJS
- API-level TDD
- Product API
- Category API
- Cart API
- Integrating facebook oauth on the server-side
- Integrating Stripe for payments
- Integrating MongoDB Text Search
- Integrating OpenExchangeRates

PART 4: BUILDING AN ANGULARJS CLIENT

- Introduction: browserify and gulp-browserify
- What is a single page app?
- AngularJS philosophy and why it matters

- Controllers
- Services
- Client-side routing
- Facebook oauth token authentication
- Category view
- Product view
- Cart view

PART 5: HYBRID MOBILE APPS WITH IONIC

- Introduction to hybrid mobile apps
- What is the Ionic framework?
- Code sharing between web client and Ionic app
- Ionic UI components
- Routing in Ionic
- Category view
- Product view
- Cart view



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