Learn More about MEAN

1 JavaScript

The MEAN (MongoDB / ExpressJS / AngularJS / NodeJS) stack utilizes JavaScript as its programming language. So having a good working knowledge of JavaScript is fundamental for MEAN development.

The following web sites are good starting points for learning JavaScript. Also, although I don't have any JavaScript books, I'm sure you can find plenty on Amazon.

codecademy (https://www.codecademy.com/learn/javascript)

codecademy is a *free* site that provides training courses on numerous programming languages, including JavaScript and AngularJS.

w3schools (http://www.w3schools.com/js/)

w3schools is a *free* site that provides numerous tutorials on web based programming languages, including JavaScript, AngularJS, and Bootstrap.

Code School (https://www.codeschool.com/courses/javascript-road-trip-part-1)

Code School is a *pay* site that provides some free courses. I've included a link above to their free intro level JavaScript course. The videos and programming 'challenges' are a bit corny, but I've learned enough there that I've actually paid them some money.

2 MongoDB

MongoDB is a NoSQL database that stores documents based on JavaScript Object Notation [JSON] (https://en.wikipedia.org/wiki/JSON) format.

MongoDB provides quite a few online courses at <u>https://university.mongodb.com</u>. All of the courses mentioned below are *free*.

For MEAN development, the following courses are helpful:

M101P: MongoDB for Developers (https://university.mongodb.com/courses/M101P/about)

M101JS: MongoDB for Node.js Developers (<u>https://university.mongodb.com/courses/M101JS/about</u>)

UD032: Data Wrangling with MongoDB (Udacity course, <u>https://www.udacity.com/course/data-wrangling-with-mongodb-ud032</u>)

M101X: Introduction to MongoDB using the MEAN Stack (edX course, https://www.edx.org/course/introduction-mongodb-using-mean-stack-mongodbx-m101x)

3 ExpressJS

To quote the ExpressJS site (<u>http://expressjs.com</u>), Express is a fast, unopinionated, minimalist web framework for Node.js. We've found it particularly helpful for providing a robust API server with particularly nice route handling.

I haven't come across too many online courses on Express, but here are a few:

Express (http://expressjs.com)

The Express site has a 'Getting started' section that goes over installing Express (which requires Node.js), a Hello World application, basic routing, etc.

Code School (https://www.codeschool.com/courses/building-blocks-of-express-js)

As mentioned in the JavaScript section, Code School is a *pay* site that provides some free content. The Express course costs money, but the first level is free.

4 AngularJS

To be honest, AngularJS (<u>https://angularjs.org</u>) has a bit of a learning curve, but it is a powerful front-end JavaScript framework for Single Page Applications (SPA).

There are lots of tutorials and YouTube videos on AngularJS, below are some of the ones we've used:

w3schools (http://www.w3schools.com/angular/)

w3schools is a *free* site that provides numerous tutorials on web based programming languages, including JavaScript, AngularJS, and Bootstrap.

Code School (https://www.codeschool.com/courses/shaping-up-with-angular-js)

As mentioned in the JavaScript section, Code School is a *pay* site that provides some free content. The intro level Shaping up with Angular.js course happens to be entirely free.

udemy (https://www.udemy.com/angularjs-jumpstart)

Udemy is a *pay* site that provides some free courses. The AngularJS JumpStart with Dan Wahlin class provided in the link above costs money, but Udemy is always providing promotions to get courses for \$10 to \$15 - I certainly wouldn't pay full price.

5 NodeJS

To quote the NodeJS site (<u>http://nodejs.org</u>), Node.js is a JavaScript runtime built on Crome's V8 JavaScript engine. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient.

The Node.js ecosystem is pretty large and there is a lot of information online. The tutorials and courses below should help get you started.

Code School (https://www.codeschool.com/courses/real-time-web-with-node-js)

As mentioned in the JavaScript section, Code School is a *pay* site that provides some free content. The Node.js course costs money, but the first level is free.

tutorialspoint (http://www.tutorialspoint.com/nodejs/)

I haven't actually used this Node.js tutorial, but it looks decent.

Thinkster (https://thinkster.io/mean-stack-tutorial)

There are quite a few MEAN tutorials online similar to this one on Thinkster. Scotch (<u>https://scotch.io</u>) also has quite a few MEAN tutorials.