

# MEAN Workshop

(By Naveen Pete, Saturday, April 22, 2017)

## Reading Reference

### Full Stack Developer

- **What is a Full Stack developer?**  
<http://www.laurencegellert.com/2012/08/what-is-a-full-stack-developer/>
- **The Myth of the Full-stack Developer**  
<http://andyshora.com/full-stack-developers.html>
- **What is the 3-Tier Architecture?**  
<http://www.tonymarston.net/php-mysql/3-tier-architecture.html>

### Node.js

- **Node.js Documentation**  
<https://nodejs.org/api/>
- **NPM Documentation**  
<https://docs.npmjs.com/>

### Node Modules

- **Modules**  
<https://nodejs.org/api/modules.html>
- **CommonJS**  
<http://www.commonjs.org/>

### Node and HTTP

- **Anatomy of an HTTP Transaction**  
<https://nodejs.org/en/docs/guides/anatomy-of-an-http-transaction/>
- **List of HTTP status codes**  
[https://en.wikipedia.org/wiki/List\\_of\\_HTTP\\_status\\_codes](https://en.wikipedia.org/wiki/List_of_HTTP_status_codes)

### Introduction to Express

- **Express**

<http://expressjs.com/>  
<https://github.com/expressjs/express/wiki>  
<http://evanhahn.com/understanding-express/>

- **Morgan**  
<https://github.com/expressjs/morgan>
- **Body Parser**  
<https://github.com/expressjs/body-parser>
- **Express Generator**  
<http://expressjs.com/en/starter/generator.html>

## MongoDB

- **MongoDB Manual**  
<https://docs.mongodb.com/manual/>
- **MongoDB Node.JS Driver**  
<https://github.com/mongodb/node-mongodb-native>  
<http://mongodb.github.io/node-mongodb-native/>

## Mongoose ODM

- **Mongoose**  
<http://mongoosejs.com/>  
<http://mongoosejs.com/docs/guide.html>

## REST API with Express, MongoDB and Mongoose

- **Build a RESTful API Using Node and Express 4**  
<https://scotch.io/tutorials/build-a-restful-api-using-node-and-express-4>
- **Creating RESTful APIs with NodeJS and MongoDB Tutorial (Part II)**  
<http://adrianmejia.com/blog/2014/10/01/creating-a-restful-api-tutorial-with-nodejs-and-mongodb/>

## Angular

- **Architecture Overview**  
<https://angular.io/docs/ts/latest/guide/architecture.html>

## Video Reference

### How does Node.js work?

New to Node.js? Check out this video that explains "How does Node work?"

<https://youtu.be/X3C2peMLW34>

### Ryan Dahl: Introduction to Node.js

Ryan Dahl, the creator of Node.js, introduces the project and talks about performance improvements and new architecture. This talk took place at the May 2010 BayJax meetup at Yahoo.

<https://youtu.be/M-sc73Y-zQA>

### Philip Roberts: What the heck is the event loop anyway? | JSConf EU 2014

JavaScript programmers like to use words like, "event-loop", "non-blocking", "callback", "asynchronous", "single-threaded" and "concurrency".

We say things like "don't block the event loop", "make sure your code runs at 60 frames-per-second", "well of course, it won't work, that function is an asynchronous callback!"

If you're anything like me, you nod and agree, as if it's all obvious, even though you don't actually know what the words mean; and yet, finding good explanations of how JavaScript actually works isn't all that easy, so let's learn!

With some handy visualisations, and fun hacks, let's get an intuitive understanding of what happens when JavaScript runs.

<https://youtu.be/8aGhZQkoFbQ>

### Arindam Paul - JavaScript VM internals, EventLoop, Async and ScopeChains

The goal of this talk would be to provide a good understanding of the following,  
A crisp understanding of the JavaScript VM and how a single threaded engine can be massively parallel. How event loop and callbacks works, example of blocking and non-blocking codes, ES6 generators for custom Async signaling. How function definitions happen and invocations happen, how scope chains are formed, what closures are and how to reason about them. Async programming, how reactive programming works at the bottom level, how event listeners registers themselves and then deregisters.

<https://youtu.be/QyUFheng6J0>