Mean Stack Course Syllabus

Module 1

- Introduction to Angular
- Introduction to TypeScript and ES6
- Components in Angular

Module 2

- Data and Event Binding
- Structural Directives
- Attribute Directives and Property Bindings
- Template/ Model Driven Forms

Module 3

- Pipes and Data Formatting
- Service and Dependency Injection

Module 4

- Introduction to Single Page Application
- Angular Component Router
- Modules
- Deploying an Angular App

Module 5

- More Topics
- Performance Tuning and best practices

Module 6

- Introduction to Node JS

- Creating first Node JS app

- Understanding NPM

- Creating and locating Modules

- Specifying dependencies with package. Json

- Understanding CPS (Continuation Passing Style)

- Understanding the Event Loop

- NPM AND CPS

- Understanding NPM

- Creating and locating Modules

- Specifying dependencies with package. Json

- Understanding CPS (Continuation Passing Style)

- Understanding the Event Loop

- Build app with Node and express with MVC architecture

- MONGODB

Module 7

- Express JS with Middleware

- Working with third party API's

- Events and Streams

- Socket IO

- Node JS Best Practices

→NOSQL DB

- Introduction to NOSQL DB

- Overview of DB

- Adv of NOSQL DB

- Type of NOSQL DB

→MongoDB

- Introduction to MongoDB
- Installation and Configuration of MongoDB
- Start and Stop MongoDB
- Connection with Javascript and Node.js
- Static and Dynamic Schemas
- Data Modeling
- Create database
- Drop database

→MongoDB Collection

- Introduction to Collection
- Collection Vs Tables
- Create Collection
- Drop Collection
- Operation on MongoDB

→MongoDB Document

- Introduction to document
- Create document
- Insert Document
- Update Document
- Delete Document

→MongoDB- Operation

- MongoDB - Limit Records
- MongoDB - Sort Records
- MongoDB - Indexing
- MongoDB - Create Backup

→JSON

- Introduction to JSON
- Uses of JSON
- JSON Datatype
- JSON Object
- JSON Schemas

→MongoDB with Javascript

- Creating and Dropping collection by javascript application
- Creating and Deleting document by javascript application
- Insert,Update,delete Operation with javascript

→REST API

- Introduction to REST API
- REST Architecture
- HTTP methods
- HTTP response
- Creating REST
- Testing REST
- POSTMAN
- Creating Application based on REST API with Javascript and MongoDB

NODE.JS & EXPRESS.JS

→ Node.js

- Introduction Node.js
- Why Node.js ?
- Feature of Node.js
- Node.js Installation & configuration
- Where to use Node ?

- Server-side JavaScript

- Asynchronous events vs. threads

- Performance

- Server utilisation

→ REPL Terminal

- REPL Introduction

- REPL Commands

- Operation In REPL

- Stopping REPL

→ NPM

- Introduction to NPM

- Installing module with npm

- Global Vs Local installation

- Package.json

- Updating a module

- Deleting a Module

→ EVENT LOOP

- What is Event Loop?

- Event Driven Programming

- Event Emitter

- Call back function

→ UTILITY MODULE

- OS module

- Path module

- Net Module

- DNS Module

- Domain Module

→ WEB MODULE

- What is web-server ?
- Web application architecture
- Creating web-server using Node
- Creating Web client Using Node

→ Express.js Introduction

- What is framework ?
- Express.js Overview
- Installing Express.js
- Request & Response
- Request Object
- Response Object
- HTTP method with Node
- Serving statics file
- Cookies management
- REST with Node.js

→Express.js

- Routing
- Configuration
- Views
- Middleware

→Building an Express app

- Creating an Express app/project
- Organising/structuring the app
- Generating HTML views with Jade

- Navigating datasets

- Filtering data

- Request variables and routes

- Posting data

- Modifying data through PUT requests

- Handling GET requests returning JSON

- Modifying HTTP response headers

→Node with REST API

- Introduction to REST API

- REST Architecture

- HTTP methods

- HTTP response

- Creating REST

- Testing REST

- POSTMAN

ANGULARJS

→Angular JS

- Introduction to MVC

- What is AngularJS

- What is SPA

- Angular Directives

- Angular Expression

- Angular Controller

- Angular Model

- Angular Services

- Angular Module

- Angular Filter

- Angular Data Binding

- Angular Filters

- Angular DOM

- Angular Validations

- Angular Forms

- Dependencies Injection

→Conclusion

- Hosting Node projects

- Node.js sites and resources

- Hosting MEAN-STACK application