**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

# ANGULAR JS

## →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