

<u>Mean Stack Course Syllabus</u>

Module 1

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

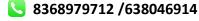
Module 2

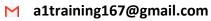
- Data and Event Binding
- Structural Directives
- Attribute Directives and Property Bindings
- Template/ Model Driven Forms

Module 3

- Pipes and Data Formatting
- Service and Dependency Injection

Module 4









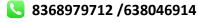
- Introduction to Single Page Application
- Angular Component Router
- Modules
- Deploying an Angular App

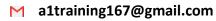
Module 5

- 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









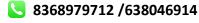
- Specifying dependencies with package. Json
- Understanding CPS (Continuation Passing Style)
- Understanding the Event Loop
- Build app with Node and express with MVC architecture
- MONGODB

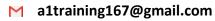
Module 7

- 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

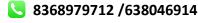
- Introduction to MongoDB
- Installation and Configuration of MongoDB
- Start and Stop MongoDB
- Connection with Javascript and Node.js
- Static and Dynamic Schemas
- Data Modeling
- Create database
- Drop database

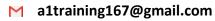
→ Mongo DB Collection

- 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

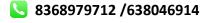
- MongoDB Limit Records
- MongoDB Sort Records
- MongoDB Indexing
- MongoDB Create Backup

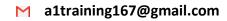
→JSON

- 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

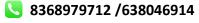
→REST API

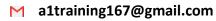
- Introduction to REST API
- REST Architecture
- HTTP methods
- HTTP response
- Creating REST
- Testing REST
- POSTMAN
- Creating Application based on REST API with Javascript and MongoDB

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

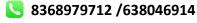
→ REPL Terminal

- REPL Introduction
- REPL Commands
- Operation In REPL
- Stopping REPL

\rightarrow NPM

- Introduction to NPM
- Installing module with npm
- Global Vs Local installation
- Package.json
- · Updating a module
- Deleting a Module

→ EVENT LOOP



→ a1training167@gmail.com







- What is Event Loop?
- Event Driven Programming
- Event Emitter
- Call back function

→ UTILITY MODULE

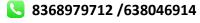
- OS module
- Path module
- Net Module
- DNS Module
- Domain Module

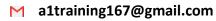
→ WEB MODULE

- 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











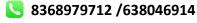
- Installing Express.js
- Request & Response
- Request Object
- Response Object
- · HTTP method with Node
- Serving statics file
- Cookies management
- REST with Node.js

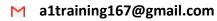
→Express.js

- 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

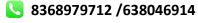
→Node with REST API

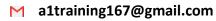
- Introduction to REST API
- REST Architecture
- HTTP methods
- HTTP response
- Creating REST
- Testing REST
- POSTMAN

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