

Full Stack Developer - MEAN Course Content

SECTION 1: HTML 5

- Introduction - Web
- What are the different Types of Web Apps overview?
- Introduction to HTML
- Define HTML Structure
- Difference between Tag vs Element
- Difference between Semantic vs Non-semantic elements
- Difference between Block level elements vs Inline elements
- HTML Elements
- HTML Forms & its Attributes
- HTML Input Elements
- HTML Global Attributes
- HTML Element Specific Attributes

SECTION 2: CSS & Bootstrap

- What is CSS?
- Understanding the CSS Syntax.
- CSS Selectors
- How To Add CSS in HTML
- CSS Colors & Backgrounds
- CSS Borders, Margins, Padding, Height and Width
- Responsive Web Design – Media queries
- What is Bootstrap?
- Get Start with Bootstrap
- Containers
- Grid System
- Structure of a Bootstrap Grid
- Bootstrap Colors
- Bootstrap Tables
- Bootstrap Jumbotron
- Bootstrap Alerts
- Bootstrap Buttons

SECTION 3: JavaScript

- Introduction – Javascript
- JavaScript Events
- JavaScript Functions
- Inbuilt methods in JS
- Arrays in JavaScript
- Objects in JavaScript
- Conditional and loops in JavaScript
- HTML DOM Manipulation

SECTION 4: TypeScript

- TypeScript Introduction
- TypeScript Environment Setups
- Variables in TS
- Datatypes in TS
- OOPS in TypeScript
- Features in TS

SECTION 5: Angular Introduction

- Angular- Definition
- Difference between Framework & Library?
- History of Angular and its versions.
- Why Angular?
- What are the Features of Angular
- Define Single Page Application
- What is the Difference between SPA & Traditional Application?
- Define MVC
- How MVC works in Client & Server sides?

SECTION 6: Angular Environment setups

- What is Angular CLI?
- What is the Purpose of the CLI?
- Angular CLI installation.
- CLI vs Without CLI Overview.
- Create an Angular App by using CLI.
- Compiling the Angular App & Open it in a browser.

- Angular app Bootstrapping process.
- About Angular libraries
- Brief explanation about the structure of the Angular App.

SECTION 7: Main Building Blocks of Angular

- An Overview of the below Main Building blocks of Angular
 - Modules
 - Components
 - Decorator
 - Metadata
 - Templates
 - Data binding - Directives
 - Services
 - Dependency Injection.

SECTION 8: Angular Modules

- Angular Module Overview.
- Define the Importance of the Module?
- Why Modules?
- Root Module, Core Module, Feature Module and Shared Module - Overview.
- How to create Angular Modules?
- @NgModule Decorator & its Meta data properties - Overview.

SECTION 9: Components

- Angular Component - Overview.
- @Component decorator & its Meta data properties.
- Component's Structure overview.
- What are the ways to render a Component in the view?
- Component Lifecycle Hooks.
- Nested or Parent & Child Component - Overview

SECTION 10: Data Binding, Property Binding, Event Binding & 2-way Data Binding

- Data Binding Introduction
- Define String Interpolation.
- Property Binding - Overview.
- what is Custom Property Binding?
- Overview of Event Binding.
- String Interpolation VS Property Binding
- Two-way Data Binding
- Implementing the 2-way Data Binding

SECTION 11: Services

- Introduction - Service.
- Importance of Service.
- How to create Services in Angular?
- What are the ways to Provide Services in Angular?
- Dependency Injection - Overview.
- How to use Dependency Injection?
- What is @Injectable()?

SECTION 12: Directives

- Directives - Introduction.
- Component VS Directives
- What are the Different kind of Directives available in Angular?
- Difference between Structural & Attribute Directives.
- Overview of All Structural & Attribute Directives.
- @Input decorator and its methods.
- What is ElementRef and its purpose?

SECTION 13: Components Communication

- Overview of Components Interaction.
- Component Interaction from Parent to Child.
- Component Interaction from Child to Parent.
- @ViewChild decorator overview
- @Input & @Output decorator overview

SECTION 14: Reactive Form in Angular

- What is Reactive Form?
- Difference between Template Drive & Reactive Form
- What is form group & form control?
- How to sync view & Reactive form TS?
- What is Patch Values & Set Values?
- How to get Reactive from Values?

SECTION 15: Service and Dependency Injection in Angular

- Service in Angular
- Create & configure Service in Angular.
- How to do Dependency Injection in Angular?
- Define Singleton Object

SECTION 16: Routing in Angular

- What is Routing?
- How Routing makes our App into SPA?
- How to configure Routing in an Application?
- Load our components dynamically based on url path.
- How to create Child Route?
- Navigating to other links programmatically.
- Passing Parameter to the Routes.
- Client-side authorization using Route Guard

SECTION 17: HTTP & Observable in Angular

- HTTP Client in Angular.
- REST API - Overview
- How to establish HTTP request to Server side.
- How HTTP Mechanism works?
- What are the methods available in HTTP?
- Define Observable & Observer
- What are the call back methods available in Observable?
- Creation of a Custom Observable

- Define next(), error() and complete()
- How to send Query Params & Custom Headers?
- How to connect any backend & APIs?

Section 18: Authorization in Angular & JWT

- Client side Authorization vs Server side Authorization.
- Server side Authorization by using JWT Token.
- Set JWT Key Expiry time.
- HTTP interceptors - Overview.
- How to configure HTTP interceptors?

SECTION 19: Real-time Project in Angular

- During the course we will take one Real-time E-commerce application and apply all the above sections into the project. In the project Front-end will be in Angular and Back-end will be in Node JS. On top of the Node JS we will write Express JS as a REST Api. For Database, we choose MongoDB for CRUD Operations.

SECTION 20: NODE JS AND EXPRESS JS

- What is Node JS?
- NPM Overview
- How to install NPMs
- Introduction about package.json
- What are the core Modules Available
- How to create & run a Node Server
- How to create Local Module?
- Node Routing in detail
- Error Handling in Node JS

SECTION 21: Working with top NPMs

- Nodemon
- JWT
- Body Parser
- HTTP Request & Response – GET, POST, PUT & DELETE
- How to handle Headers?
- How to receive form data?
- Authorization & Authentication

SECTION 22: EXPRESS JS

- Express JS Overview
- Routing in Express JS
- How to Run Express on top of Node JS?
- What is Middleware?
- How Middleware works?
- How to create RESTful API?
- Debugging

SECTION 23: MONGODB

- MongoDB Overview
- How to use MongoDB in Cloud?
- Cluster in MongoDB
- Create database
- Create Users
- Create table
- What is Collection & Document?
- Insert & Insert many Document
- Select & Select One Document
- Delete & Delete One Document.
- Update & Update one Document

SECTION 24: Real Time Projects

- 5+ Real-time projects (Full stack coverage)
- Setup Git for local repository
- Create a GitHub account
- Sync the code base with GitHub repo
- Firebase Hosting Overview
- Setting up Firebase in local
- Host your project in Firebase

SECTION 25: Placements

- Build your Professional Resume
- Update LinkedIn Profile
- Interview based Training – GD, Tech round, HR panel

- Minimum 5 Mock interviews before Real interview
- 100% Placement Guaranteed
- Join your Dream Job

Free Complementary Courses – 25hrs

AWS – Cloud Computing:

1. Cloud computing Introduction

- History of Cloud Computing
- What is Cloud Computing?
- Why Cloud Computing?
- Advantages of Cloud Computing

2. Cloud Computing Service Models

- What is Software as a Service (SaaS)?
- Platform as a Service (PaaS)?
- Infrastructure as a Service (IaaS)?

3. Introduction to AWS Architecture

- Key Considerations for Web Hosting in AWS

4. AWS – Management Console & Account

- How to Access AWS?
- AWS Identity & Access Management (IAM).
- Creating Free Tier Account in AWS
- Introduction of AWS Management Console / CLI / SDK

5. Compute Services in AWS

- AWS EC2
- AWS Lambda

6. Storage and Content Delivery Services

- AWS S3
- AWS EBS

7. Database Services

- Amazon RDS
- AWS DynamoDB

8. Networking Services in AWS

- VPC AWS
- Route 53

Agile Scrum:

1. Definition of SCRUM

2. Agile Manifesto

- Scrum Master
- Product Owner

3. Scrum Roles and Responsibilities

- Development Team

4. Typical Sprint Phases

- Product Backlog
- Sprint Planning
- Sprint Backlog
- Sprint
- Daily Scrum
- Sprint Review
- Sprint Retrospective