#### **ANGULAR 10 SYLLABUS**

## **Duration:-45 days**

### Pre requested html, css, js, typescript

### 1. Angular

- What is Angular
- Difference between Angular 2.0 vs 7.0
- Angular CLI and Troubleshooting
- Node JavaScript Introduction
- Setup a Project
- Setup Node js with angular
- > Typescript Introduction
- What is bootstrap
- Create Your Fist App

## 2. Modules and Components

- What is Component in Angular is
- What is Module in Angular is
- Create and Start Component
- Why Components are important.
- How we create a component
- Create Component using CLI
- What is nesting Component
- What is Component Template
- Component Styles and Selectors

### 3. Data Binding in Angular

- What is Data binding
- Splitting Application into Component
- String Interpolation
- What is Property Binding

- Difference between Property Binding and String Interpolation
- Binding with Custom Events.
- What are Binding Properties and Events
- Two Way binding
- Combine Forms with Data binding
- Custom Properties
- What is Encapsulation
- How to Use Local Reference in TemplatesTemplate Access and DOM
- Component Lifecycle
- What is Hooks in Angular js
- Access Template with Hooks

### 4. Directives in Angular js

- What is Directives
- Using Output Data Conditionally
- What is ng if and else condition
- Output List
- Styling Element with ngStyle
- How to apply css class dynamically with angular js
- How to Create Basic Attribute Directive
- What is Renderer
- What is HostBinding and HostListener
- Directive Properties
- ngSwitch

### 5. Dependency Injection in Angular js

- What is Dependency Injection
- What is Services

- Logging Service and Injection
- Create Data Service
- Instance of Services
- Insert Service into Services
- How to use service in Cross Component
- What is Hierarchical Injector

### 6. Routing

- What is Routing?
- Loading of Routes
- Navigation and it path
- Styling of Router Links
- Relative Path Navigation
- De ne parameter in Routing
- Fetch Routing Parameter
- Observables
- Passing & Retrieving Parameters & Fragments
- Nested RoutingCon g Query Parameters
- Redirection Routes
- Route con guration
- Route Guards
- Protect Routes with canActivate
- Navigation Controlling
- Static Data in Route
- Location Strategies

#### 7. Forms

- What is Forms and how do we handle it?
- Reactive Approach
- Template Driven
- Create Template Driven Forms
- What is Registering Control
- Use and Submit of Forms
- Access of Forms
- How to add validation in use input
- Build-In Validation
- HTML5 Validation
- Output Validation and Error Messages
- Two Way Binding
- Grouping
- Radio Button Handling
- Patch Forms Values
- Resetting Templates form Forms

### 8. Reactive Forms

- What is Reactive Forms
- Create Reactive form through code
- Syncing of HTML and Form
- Adding Validation
- Sumit Forms
- Grouping
- Form Control Arrays
- Custom Validators
- Relative Forms
- Async validation
- Value changes and Reacting to status

# 9. Pipes

- What is Pipes in Angular
- How we use pipes
- Chaining Multiple pipes in angular
- parameterizing a pipe
- > Filter Pipe
- > Impure & Pure Pipe
- async Pipes

## 10. HTTP Requests

- What is HTTP Requests
- ➤ How it work
- How to send requests
- Adjusting Request Headers
- How to handle Get and Put Request
- Catching HTTP Error
- async with HTTP Requests

### 11. Authentication

- What is Authentication
- How Authentication Work
- Introduction to JSON Web Tokens
- Creating Page and Route
- Firebase SDK
- User Signing UP and In
- Sending Token & Requiring
- Authentication Status
- How to add Logout button
- Protection & Redirection of Route

# 12. Angular Modules

- What is idea behind Modules.
- What is feature Modules and how we create it
- What is App Modules
- Registering Routes in Feature Modules
- What is Shared Module and how we create
- Create the Auth Feature module
- What is Lazy LoadingHow to Modules & Services works
- What is Core Module
- How to Create Basic Core Module
- AoT Compilation with CLI

## 13. HTTP Client

- What is HttpClient and how we unlock it
- Request Configuration with Response
- Request Events
- Set up Headers
- HTTP Parameters
- Progress
- What is Interceptors
- Modify Request in Interceptors
- Multiple Interceptors

## 14. Animations

- What is Angular Animations
- Triggers and State
- Switch between States
- Basic and Advanced Transitions
- What is void state
- Key frames in animation
- Grouping
- Animation Callback

# 15. Unit Testing

- What is Unit Testing
- How to Analyze CLI Testing Setup
- Running Test with CLI
- Components and dependencies
- Async Tasks
- Adding Component with tests
- Difference between Isolated and Non-isolated Tests