

Angular 7 Course Syllabus

Session 1- Basic Angular & Session 2

Introduction to Web Technologies

- What is Web
- What are the Requirements to build End to End Web Application?
- What are the Challenges in modern web development?
- What is a Stack?

Typescript Deep Dive-Type Script Architecture

- Basic types
- Variable declarations
- Interfaces
- Classes
- Functions
- Generics
- Enums
- Type inference
- Type compatibility
- Advanced types
- Symbols
- Iterators
- Modules
- Namespaces
- Namespaces vs modules
- Module resolution declaration merging
- Decorators

Setting Up Environment For Angular

- Installing node
- GIT
- Yarn
- Angular
- Structural Type Directives
- Attribute Type Directives

Introduction To Angular

- Evolution of client side technologies
- What is Angular JS?
- What is Angular?
- Angular vs Angular JS
- Various versions of angular
- Angular architecture
- MVC and MVW Overview
- SPA Overview
- Angular Versions
- New Features added for Angular8
- IVY
- Angular Universe
- PWI : Progressive WebApps Introduction
- Performance Improvement Overview

Angular Architecture

- Basic building blocks of angular application
- Intro to modules
 - NgModule meta data
 - NgModules & components
- NgModules & javascript modules
 - Angular libraries

Introduction to components

- Component meta data
- Templates&views
- Template syntax
- Data binding
- User input
- String interpolation
- Component styles
- Angular element
- Angular directives

Introduction to components

- HostsListeners
- HostBinding
- Attribute
- Property& Attribute binding
- Property Binding vs Interpolation
- Class binding
- Event binding
- Custom event
- Nested components
- Communication Between components
- Component life cycle
- LifeCycleHooks

Angular Pipes

- What is pipe?
- Built-in angular pipes
- Creating custom pipes
- Registering & Integrating pipes

Angular Services

- Introduction to service & dependency injection
- Providing service
- Creating custom service
- Consuming & registering service

Observables&Rxjs

- About observables
- RXJS library
- Use of observable in angular
- Compare RXJS with other techniques

Angular Animations

- Transition & Triggers
- Complex sequences
- Route transition animations

Angular Forms

- Intro to forms in angular
- Various types of forms in angular
- Difference between template driven & reactive forms
- Common foundation
- Form model setup
- Setup in template driven forms
- Data flow in forms
- Form validation
- Dynamic forms
- Validating reactive & template driven
- Form state validation
- Input state validation
- Custom validation

NG Modules

- JS modules vs ng modules
- Frequently used ng modules
- Single ton service
- Lazy loading feature modules
- Sharing ng modules
- Ng module API

Dependency Injection

- Angular dependency injection
- Hierarchical injection
- DI providers
- DI in action

Angular Materials

- Tables
- Forms
- Tabs
- Grid Layout
- List Layout

HttpClient

- Set up HTTP client
- Consume service from other technologies
- Creating API (REST API)
- Using node.js
- Create API in node.js
- Handling communication using MEAN
- MongoDB database
- Express middleware
- Angular client APP
- Node.js server side
- Creating and end-to-end app
- Handling CRUD operations

Routing & Navigation

- Router imports
- Router configuration
- Router outlet
- Router links
- Routing Resolvers
- Routing Guards
- Nested Routes
- Active router links
- Router state
- Router events

Unit Testing In Angular

- Karma with Jasmine
- Create unit tests
- Testing Angular app

Advanced Topics

- JWT Tokens
- Optimization Concepts
- Lazy Loading Overview
- Angular Universal