



TECHNOCATION FREELANCING TRAINING INSTITUTE & SOFTWARE HOUSE

Professional Angular.js Course Outline

Module 1: Introduction to Angular.js

- What is Angular.js? Features & Advantages
- Understanding MVC Architecture in Angular.js
- Setting Up Angular.js Development Environment
- Angular.js vs. Modern Angular (Angular 2+ vs. Angular.js)
- First Angular.js Application

Module 2: Angular.js Fundamentals

- Understanding Modules & Components
- Directives & Expressions in Angular.js
- Scope & Two-Way Data Binding
- Filters & Custom Filters
- Handling User Input with Forms

Module 3: Working with Controllers & Services

- Role of Controllers in Angular.js
- Using \$scope & Dependency Injection
- Creating & Using Services (Factory, Service, Provider)
- Sharing Data Between Controllers
- Understanding \$rootScope & Event Handling

Module 4: Routing & Navigation with ngRoute

- Setting Up Angular.js Routing with ngRoute
- Configuring Routes & Navigation
- Route Parameters & Dynamic Views
- Handling 404 Pages & Redirects
- Nested Views & UI-Router

Module 5: Working with HTTP & APIs

- Making API Calls with \$http & \$resource
- Fetching Data from RESTful APIs
- Handling HTTP Requests & Responses
- Error Handling & Data Transformation
- Promises & Asynchronous Programming in Angular.js

Module 6: Directives & Custom Directives

- Understanding Built-in Directives (ngIf, ngFor, ngSwitch)
- Creating Custom Directives in Angular.js
- Isolate Scope & Data Binding in Directives
- Linking Functions & DOM Manipulation

Module 7: Forms & Validation in Angular.js

- Handling Forms with ngModel & ngForm
- Validating User Input (Required, Min/Max, Patterns)
- Custom Validation & Error Messages
- Handling Form Submission & Errors

Module 8: Dependency Injection & Modules

- Understanding Dependency Injection (DI) in Angular.js
- Using Providers, Factories & Services
- Creating Reusable Modules
- Best Practices for Managing Dependencies

Module 9: Performance Optimization & Debugging

- Optimizing Angular.js Applications for Speed
- Reducing Watchers & Scope Digests
- Using One-Time Binding for Performance
- Debugging Angular.js Applications with Batarang

Module 10: Security Best Practices in Angular.js

- Preventing XSS (Cross-Site Scripting) Attacks
- Avoiding CSRF (Cross-Site Request Forgery)
- Authentication & Authorization in Angular.js
- Handling JWT Tokens & API Security

Module 11: Deployment & Production Best Practices

- Minifying & Bundling Angular.js Applications
- Caching Strategies & Lazy Loading
- Deploying Angular.js Applications on AWS, Firebase, Netlify
- SEO Optimization for Angular.js Apps

Module 12: Final Project & Certification Preparation

- Building a Complete Angular.js Application
- Best Practices for Code Structure & Maintainability
- Preparing for Angular.js Certification
- Career Paths in Angular.js Development