ARYATECHNO

Angular Training

Topics : [Courses](#)
Written on [March 22, 2025](#)

Module 1: Introduction to Angular

- What is Angular?

- Angular vs. Other Front-End Frameworks

- Setting Up the Development Environment

- Installing Angular CLI

- Creating an Angular Project (`ng new project-name`)

- Understanding Angular Project Structure

Module 2: TypeScript Basics for Angular

- Introduction to TypeScript

- Variables and Data Types

- Functions and Arrow Functions

- Interfaces and Classes

- Modules and Namespaces

- TypeScript Decorators

Module 3: Angular Components & Templates

- What are Components?

- Creating Components (`ng generate component component-name`)

- Component Lifecycle Hooks (`ngOnInit`, `ngOnDestroy`, etc.)

- Interpolation and Property Binding

- Event Binding (`(click)`, `(input)`, etc.)

- Two-Way Data Binding with `ngModel`

Module 4: Directives and Pipes

- Structural Directives (`*ngIf`, `*ngFor`, `*ngSwitch`)

- Attribute Directives (`[ngClass]`, `[ngStyle]`)

- Custom Directives

- Pipes for Data Transformation (`uppercase`, `date`, `currency`)

- Creating Custom Pipes

Module 5: Angular Forms

Template-Driven Forms

- `FormsModule` and `ngForm`

- Form Validation (`required`, `minLength`, `pattern`)

Reactive Forms

- `FormGroup` and `FormControl`

- Form Validation with Reactive Forms

- Custom Validators

Module 6: Angular Routing and Navigation

- Setting Up Routing in Angular (`RouterModule`)

- Route Parameters and Query Parameters

- Lazy Loading Modules

- Route Guards (`CanActivate`, `CanDeactivate`)

Module 7: Angular Services & Dependency Injection

- What are Angular Services?

- Creating a Service (`ng generate service service-name`)

- Dependency Injection in Angular

- Using Services for Data Sharing

Module 8: HTTP Client & API Integration

- Using `HttpClientModule`

- Making GET, POST, PUT, DELETE Requests

- Handling API Responses and Errors

- Using Observables with RxJS (`subscribe`, `map`, `catchError`)

Module 9: State Management in Angular

- Introduction to State Management

- Using Services for State Management

- Introduction to NgRx (Redux Pattern for Angular)

- Actions, Reducers, and Effects in NgRx

Module 10: Authentication & Authorization

- User Authentication with JWT

- Using `HttpInterceptor` for Token Handling

- Role-Based Authentication

- Implementing Login and Logout Functionality

Module 11: Deployment & Final Project

- Building and Optimizing an Angular App (`ng build --prod`)

- Deploying Angular Apps on Firebase, Netlify, or Vercel

- Final Project: Creating a Full-Stack Angular Application