

**Course Name: AngularJS 4.X**  
**Duration: 45hrs**

## **COURSE DESCRIPTION:**

AngularJS 4 is the second edition of the “superheroic” JavaScript framework.

Redesigned from the ground up by Google. AngularJS 4 provides advanced features for building single-page applications:

1. Declarative templates
2. Two-way data binding
3. TypeScript support
4. Dependency injection

And instead of the controllers typical of MVC architecture, AngularJS 4 now offers components. It’s a great update, suitable for mobile and web developers alike.

## **LEARNING OUTCOMES:**

- 1. Architecture, setup, source files**
  - i. Angular Architecture overview
  - ii. Setup instructions
- 2. ES5 to ES6 and TypeScript refresher**
  - i. Classes, Spread Operator, Arrow Functions, Immutability
  - ii. Understanding import and exports
- 3. Getting started**
  - i. Project Installation
  - ii. First component with `@component`
  - iii. Root Module with `@NgModule`
  - iv. Bootstrapping Angular

**Course Name: AngularJS 4.X**  
**Duration: 45hrs**

**4. Template fundamentals**

- i. Interpolation and expressions
- ii. Property binding
- iii. Event binding
- iv. Two-way databinding
- v. Template #ref variables

**5. Rendering flows**

- i. ngIf, \* syntax and <template>
- ii. ngFor and iterating collections
- iii. ngClass and className bindings
- iv. ngStyle and style bindings
- v. Pipes for data transformation
- vi. Safe navigation operator

**6. Component Architecture and Feature Modules**

- i. Smart and dumb components overview
- ii. One-way dataflow overview
- iii. Feature modules with @NgModule
- iv. ngOnInit lifecycle hook
- v. Presentational (dumb) components
- vi. Passing data into components with @Input
- vii. Dynamic @Input values with \*ngFor
- viii. Emitting changes with @Output and EventEmitter
- ix. Immutable state changes
- x. ngOnChanges lifecycle hook

**7. Services, Http and Observables**

- i. Data Services and Dependency Injection
- ii. Understanding @Injectable
- iii. Http data fetching with Observables

**Course Name: AngularJS 4.X**

**Duration: 45hrs**

- iv. Http put, delete with immutable state
- v. Custom Headers and RequestOptions
- vi. Http Promises alternative
- vii. Observable.catch error handling

#### **8. Template-driven Forms, Inputs and Validation**

- i. Forms container component
- ii. Form stateless component
- iii. ngForm and ngModel
- iv. Binding to radio buttons
- v. Binding to checkboxes
- vi. <select> option rendering, and ngValue
- vii. Form validation and error states
- viii. Dynamically disabling submit
- ix. ngSubmit and stateless @Output

#### **9. Component Routing**

- i. Base href and RouterModule
- ii. Root module routes and outlet
- iii. Wildcard routes for 404 handling
- iv. Understanding routerLink
- v. Styling active routes
- vi. Dynamic navigation with ngFor
- vii. Feature-module routes with forChild()
- viii. Child and dynamic routes
- ix. Route params, data-fetching with switchMap
- x. Imperative routing API
- xi. Hash location strategy
- xii. Applying redirects