

Angular 10

- **Getting started and Single Page Applications**
 - Introduction to Single Page Application
 - What do we need Angular for?
 - Setting up the Development Environment
 - Angular Application Architecture
 - First Angular App
- **TypeScript and ESNext**
 - Introduction to TypeScript
 - Setting the environment to write Typescript
 - Variable Declarations
 - Types-primitives
 - Types – Reference and Special Types
 - Operators - Spread and Backticks
 - Operators - Destructure and Rest
 - Classes
 - Interface
 - Arrow Functions
 - Modules
 - Fetch
 - Async/await
- **Decorators**
 - What are decorators?
 - Angular Modules and the @NgModule Decorator
 - Declarations
 - imports and exports
 - providers, bootstrap, and entryComponents
 - Angular Application Bootstrap Mechanism
- **Angular Components**
 - Angular Components and the @Component Decorator
 - Creating an Angular Component using the Angular CLI
 - Component Decorator Metadata
 - View Encapsulation - Emulated, ShadowDom, None
 - Data Binding - String Interpolation - {{ }}
 - Property Binding - []
 - Event Binding - ()
 - @Input and @Output Property Decorators
 - Two-way Data Binding - [()]
 - Attribute Binding - [attr.]
 - Class Binding - [class.]
 - Style Bindings - [style.]

- Introduction to Lifecycle Hooks in Angular
- Lifecycle Hooks - When to use which method?
- View Queries - @ViewChild
- View Queries - @ViewChildren
- View Queries - @ContentChild and @ContentChildren

- **Angular Directive and Pipes**
 - Introduction to Directives
 - Built in Structural Directives
 - Built in Attribute Directives
 - Building custom Attribute Directives
 - Building Custom Structural Directives
 - Introduction to Pipes in Angular
 - Using Built In Pipes
 - Creating Custom Pipes in Angular
 - Pure and Impure Pipes in Angular

- **Angular Forms**
 - Types of Form in Angular
 - Reactive form in Angular
 - Dynamically Adding or Removing FormControl(s) or FormGroup(s) using FormArray(s)
 - Adding Synchronous Custom Validations to your Reactive Form
 - Adding Async Custom Validations to your Reactive Form
 - Resetting the value of a form

- **Angular Routing with Guards**
 - Implementing Routing in an Angular App
 - Abstracting the user link to a separate component
 - Implementing Child Routes
 - Path Match and Route Types
 - Introduction to Route Guards in Angular
 - CanActivate and CanActivateChild Guards in Angular
 - CanDeactivate Guard in Angular
 - Prefetching Data for a Component using Resolve

- **HTTP, Observables**
 - Dependency Injection
 - Hierarchical Dependency Injection
 - Introduction to Services in Angular
 - GET data from a Rest API using HttpClient
 - CRUD Operations using HttpClient, HttpParams and HttpHeaders
 - Observables and Operators in Observables - Map, Retry, Catch

- **Angular Material & Firebase**
 - Introduction to Firebase
 - Creating an App using the Firebase Console
 - Interacting with Firebase Realtime Database using methods on AngularFireList
 - Adding and Reading Data from Realtime Database in Firebase
 - Updating and Deleting Data from Realtime Database in Firebase