

# Angular 12

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- **Writing Your First Angular Web Application**
  - Introduction to Single Page Application
  - What do we need Angular for?
  - Setting up the Development Environment
  - Angular Application Architecture
  - First Angular App
  - Bootstrapping crash course
  
- **TypeScript**
  - Angular is built in TypeScript
  - What do we get with TypeScript?
  - Built-in types
  - Classes
    - Properties
    - Methods
    - Constructors
    - Inheritance
  - Utilities
    - Fat Arrow Functions
    - Template String
  
- **Angular Components**
  - Angular Components and the @Component Decorator
  - Creating an Angular Component using the Angular CLI
  - Component Decorator Metadata
  - 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.]

- **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 Form Control(s) or Form Group(s) using Form Array(s)
  - Validations to your Reactive Form
  - Validations to your Reactive Form
  - Resetting the value of a form
  
- **Angular Routing with Guards**
  - Why Do We Need Routing?
  - How client-side routing works
  - Components of Angular routing
    - Imports
    - Routes
    - Installing our Routes
    - RouterOutlet using <router-outlet>
    - RouterLink using [routerLink]
  - Putting all together
  - Implementing Child Routes
  - 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
  - Custom HTTP Headers
  
- **Data Architecture in Angular**
  
- **Introduction to Redux with TypeScript**
  - Redux
  - Storing our state
  - Setting up Redux
  
- **Intermediate Redux in Angular**
- **Advance Component**
  - Styling
  - Lifecycle Hooks
  - Advance Templates
  - Change Detection
  
- **Testing**
  - End to end testing
  - Unit testing
  - Testing Services and component