Angular 12

Writing Your First Angular Web Application

- Introduction to Single Page Application
- O What do we need Angular for?
- o Setting up the Development Environment
- o Angular Application Architecture
- First Angular App
- Bootstrapping crash course

TypeScript

- Angular is built in TypeScript
- O What do we get with TypeScript?
- Built-in types
- Classes
 - Properties
 - Methods
 - Constructors
 - Inheritance
- Utilities
 - Fat Arrow Functions
 - Template String

Angular Components

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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
- o Introduction to Pipes in Angular
- Using Built In Pipes
- Creating Custom Pipes in Angular
- o Pure and Impure Pipes in Angular

Angular Forms

- Types of Form in Angular
- o 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

- O 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]
- o Putting all together
- Implementing Child Routes
- o Introduction to Route Guards in Angular
- o CanActivate and CanActivateChild Guards in Angular
- o CanDeactivate Guard in Angular
- o Prefetching Data for a Component using Resolve

HTTP, Observables

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

• Data Architecture in Angular

• Introduction to Redux with TypeScript

- o Redux
- Storing our state
- Setting up Redux

• Intermediate Redux in Angular

Advance Component

- o Styling
- o Lifecycle Hooks
- Advance Templates
- o Change Detection

Testing

- o End to end testing
- Unit testing
- o Testing Services and component