

# Angular 5



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## Getting Started with Angular 5

- Course Introduction
- What is Angular
- Angular vs Angular 2 vs Angular 4 vs Angular 5
- LI Deep Dive
- Project Setup and First App
- The course Structure
- What is TypeScript
- A basic setup of Bootstrap for Styling

## The Basics of Angular 5

- Module Introduction
- How an Angular App gets loaded and started
- Components
- Creating new Component
- Understanding the role of AppModule and Component Declaration
- Understanding Component Templates
- Understanding Component Styles
- Understanding Component Selector

## Databinding & Directive Concepts

- Module Introduction
- What is Databinding
- String Interpolation
- Property Binding
- Property Binding vs String Interpolation
- Event Binding
- Bindable Properties and Events
- Passing and Using Data using Event Binding
- Two-Way Binding
- Forms Module and Two Way Binding
- Understanding Directives
- Using ngIf and Else Conditions
- Using ngStyle for Styling Angular App
- Applying css Class dynamically with ngClass
- Displaying Lists using ngFor



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## Advanced Component and Databinding

- Dividing the App into multiple components
- Property and Event Binding deep dive
- Binding to custom properties
- Binding to custom events
- View Encapsulation
- Understanding Local Reference inside Templates
- Getting Access to the templates using @ViewChild.
- Exploring Component Life Cycle
- Life cycle hooks deep dive
- Module Introduction

## Advance Directive Concepts

- Creating a basic custom attribute directive
- Exploring Renderer to create a Directive
- Understanding HostListener and HostBinding
- Binding to Directive's Properties
- Building Structural Directives
- Exploring ngSwitch

## Understanding Services and Implementing Dependency Injection

- Module Introduction
- Why Services are required
- Creating a Service
- Injecting the service into components
- Understanding Dependency Hierarchical Injector
- Injecting a Service into other services



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## Routing in Angular 5

Module Introduction

Understanding the need of a Router

Setting Up and implementing Routes

Navigating to Router Links

Understanding Router Paths

Styling Active Router Links

Understanding Navigation Paths

Styling Router Links

Navigating Dynamically

Using Relative Paths

Passing Parameters to Routes and fetching route parameters

Fetching route parameters in a Reactive Way

Passing query parameters and fragments

Understanding Nested Routes

Redirecting and Wildcard routes

Redirection Path Matching

Outsourcing the Route Configuration

Introduction to Guards

Understanding can activate

Understanding canActivateChild

Understanding canActivate

Passing Static Data to a Route

Understanding Resolve Guard

Exploring Location Strategies

## Observables in Angular 5

Module Introduction

Understanding built-in Angular Observable

Creating Observables

Using a Custom observable

Unsubscribe

Using Subjects to pass and Listen to Data



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## Forms in Angular 5

Module Introduction  
Need of Angular's help  
Template Driven vs Reactive Approach

### Template Driven Approach

TD: Creating the Form and Registering the controls  
TD: Submitting and Using the form  
TD: Understanding Form's State  
TD: Accessing Form using @ViewChild  
TD: Adding Validation to user input  
TD: Built-in Validator and using HTML 5 Validation  
TD: Understanding Form State  
TD: Outputting Validation Error Messages  
TD: Set Default Value with ngModel Property Binding  
TD: Using ngModel and two-way binding  
TD: Grouping Form Controls  
TD: Using Form Data

### Reactive Form Approach

Reactive: Creating a Form in Code  
Reactive: Submitting the form  
Reactive: Adding Validation  
Reactive: Getting Access to Controls  
Reactive: Grouping Controls  
Reactive: FormArray  
Reactive: Custom Validators  
Reactive: Exploring Error Codes  
Reactive: Custom Async Validator



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## Exploring Pipes in Angular 5

- Module Introduction
- Using Pipes
- Parameterizing Pipes
- Chaining Multiple Pipes
- Creating a custom Pipe
- Pure & Impure Pipes
- Understanding the Async Pipe

## Making HTTP Requests in Angular 5

- Introduction & how HTTP request works in SPAs
- Sending POST Request
- Adjusting request headers
- Sending GET requests
- Sending PUT Requests
- Response with observable operators
- Catching HTTP errors
- Using the async pipe with HTTP Requests

## Authentication & Route Protection in Angular Apps

- Module Introduction
- How Authentication works in SPAs
- Introduction to JWT
- Creating a Signup Page and Route
- Setting up Firebase SDK
- Signing users up
- Signing users in
- Token introduction
- Sending a token
- Route protection and redirection example.



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## Typescript Introduction

Module Introduction

Using types

Classes

Interface

Generics

Wrap up & Modules

Deep dive into typescripts



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