

# **Angular Curriculum**

## Introduction

- Installing NodeJS
- Installing TypeScript - Creating Angular App
- Installing Angular-CLI Package
- Uninstalling Angular CLI & Verifying Cache
- Installing an Editor

## Understanding How an Angular Application Works

- Creating a Simple Angular Application
- Understanding Angular Project Structure
- Understanding Package.json
- Understanding Package-lock.json
- Understanding Global and Local Packages
- Understanding Angular.json
- Understanding Build Process
- Understanding Execution Flow of an Angular Application
- Running the Production Build

## Creating New Angular Components

- Creating Inline Template Angular Components
- Creating CodeBehind Angular Components
- Creating Angular Components Using Angular CLI
- Nesting Components

## Using Built-In Directives

- Using the ngIf Directive
- Using the ngSwitch Directive
- Using the ngFor Directive
- Making ngIf Work like ngSwitch
- Using ngFor with various HTML Form Elements

- Using nested ngFor

- Working with ng-Container

- Using the Class Bindings

## Understanding Data Binding

- Using One-Way Data Binding

- Understanding Attribute Binding

- Working with ngStyle

- Understanding Two-way Binding

## Working with Built-in Pipes

- Setting Up the Example Project

- Changing String Case

- Formatting Numbers, Currency Values, Percentage

- Formatting Dates

- Serializing Data as JSON

- Formating Key/Value Pairs

- Selecting Values

- Pluralizing Values

## Working with RESTAPI

- Overview of RestAPI

- Using fetch to retrieve all records

- Using fetch to retrieve a single record

- Using ViewChild to render a Template

- Show All Users using bootstrap Card Component

## Services

- Creating a Sample Service

- Calling Service Methods From a Component

## Working with Parent and Child Components

- Passing Data from Parent to Child Component

- Passing Data from Child to Parent Component

Designing a Child Component

Designing a Parent Component

Tracking Changes of @Input Properties using ngOnChanges

Understanding Component Life Cycle

Exploring OnChanges,OnInit,DoCheck,OnDestroy Life Cycle Hooks

ngOnChanges vs ngdoCheck

Exploring AfterContentInit, AfterContentChecked Life Cycle Hooks

Exploring AfterViewInit,AfterViewChecked Life Cycle Hooks

Cross Component Communication with Behavior Subject

Sharing Data Between Multiple Components Using Behavior Subject

Passing Data From Parent to Child Component Using Behavior Subject

State Management using Cookies

Using get, getAll, delete, deleteAll Methods to work with Cookies

Working with HTML Form Controls Using Model-Based Forms Approach

Enabling Model-Based Forms Feature in a new Solution

Creating an Angular Service

Working with TextBoxes

Setting up JSON Server To Create Fake REST API

Working with Radio Buttons

Working with CheckBoxes

Working with ListBox

Working with DropDownList Using Model Based Forms Approach

Load Items Into a DropDownList From a JSON File

Implementing View

Running and Debugging Application

Filling Items into a DropDownList Dynamically

Performing CRUD Operations on DropDownList Items

Developing a LIVE Currency Converter using DropDownLists

Working with various HTML Form Controls using Template Driven Approach

Working with TextBoxes

Implementing Validations for TextBoxes

Working with CheckBoxes

Working with Radio Buttons

Working with ListBox

Working with DropDown Lists Using Template Driven Approach

Event Handling with DropDown

Filling DropDown Lists Dynamically

Performing Delete, Select, Update, Insert Operations

Implementing Cascading Dropdown Lists

Creating Custom Attribute Directives

Creating a Custom Attribute Directive

Using Custom Attribute Directive in a Component

Creating Custom Structural Directives

Developing a Custom Structural Directive

Loading Components Dynamically

Dynamically Loading Multiple Components

Creating Custom Pipes

Implementing Pagination Functionality

Implementing Sorting Functionality

Implementing Filtering Functionality

Implementing Sorting with in a Specific Page

Implementing Sub Totals and Running Totals

Looking at the Final Look of the Report

Developing a Reporting Page To Display Sub Totals and Running Totals

Implementing Expand And Collapse Functionality

Look at the Final Look of the Report

Displaying Master Detail Records through Expand and Collapse Functionality

Implementing Expand All and Collapse All Functionality

## Implementing Multi Level Expand And Collapse Functionality

- Look at the Final Look of the Report

- Display Nested Grids through Expand and Collapse Functionality

- Implementing Expand All and Collapse All Functionality

## Performing Bulk Operations

- Look at the Final Look of the Component

- Inserting Bulk Records

- Updating Bulk Records

- Deleting Bulk Records

- Deleting A Single Record Using A Radio Button

## Developing a ListView

- Looking at the Final Look of the Component

- Displaying All Records Using Grid Layout with Pagination

- Setting Repeat Columns Direction

- Performing Insert Operation

- Performing Update Operation

- Performing Delete Operation

## Exporting Data To Various Formats

- Exporting Data To TXT,PNG,JSON,PDF,CSV File Formats

- Exporting Data To Excel

## Implementing Routing

- Implementing Routing Functionality

- Implementing Parameterized Routing

- Implementing Child Routes

- Implementing Nested Routes

- Passing and Reading QueryString Values

## Creating a REST API using ASP.NET Core

- Creating Sample Database and Table

- Creating and Configuring a Web API Project

Writing Get Method To Retrieve All Records From SQL Server Database Table

Writing Get Method To Retrieve An Individual Record From SQL Server Table

Writing Put Method To Update A Record

Writing Delete Method To Delete A Record

Writing Post Method To Insert A Record

Consuming REST API From Angular

Creating Domain Model and Service Methods for GET, POST, PUT, DELETE Requests

Calling Get Method To Retrieve All Records

Calling Get Method To Retrieve A Specific Record

Calling Put Method To Update A Record

Calling Delete Method To Delete A Record

Calling Post Method To Insert A Record