ANGULAR 10 SYLLABUS

- **Angular**
  - What is Angular
  - Difference between Angular 2.0 vs 7.0
  - Angular CLI and Troubleshooting
  - Node JavaScript Introduction
  - Setup a Project
  - Setup Node js with angular
  - Typescript Introduction
  - What is bootstrap
  - Create Your Fist App

- **Modules and Components**
  - What is Component in Angular js
  - What is Module in Angular js
  - Create and Start Component
  - Why Components are important.
  - How we create a component
  - Create Component using CLI
  - What is nesting Component
  - What is Component Template
  - Component Styles and Selectors

- **Data Binding in Angular**
  - What is Data binding
  - Splitting Application into Component
  - String Interpolation
  - What is Property Binding
  - Difference between Property Binding and String Interpolation
  - Binding with Custom Events.
  - What are Binding Properties and Events
  - Two Way binding
  - Combine Forms with Data binding
  - Custom Properties
  - What is Encapsulation
  - How to Use Local Reference in Templates Template Access and DOM

- o Component Lifecycle
- o What is Hooks in Angular js
- o Access Template with Hooks

- **Directives in Angular js**
  - o What is Directives
  - o Using Output Data Conditionally
  - o What is ng if and else condition
  - o Output List
  - o Styling Element with ngStyle
  - o How to apply css class dynamically with angular js
  - o How to Create Basic Attribute Directive
  - o What is Renderer
  - o What is HostBinding and HostListener
  - o Directive Properties
  - o ngSwitch

- **Dependency Injection in Angular js**
  - o What is Dependency Injection
  - o What is Services
  - o Logging Service and Injection
  - o Create Data Service
  - o Instance of Services
  - o Insert Service into Services
  - o How to use service in Cross Component
  - o What is Hierarchical Injector

- **Routing**
  - o What is Routing?
  - o Loading of Routes
  - o Navigation and it path
  - o Styling of Router Links
  - o Relative Path Navigation
  - o De ne parameter in Routing
  - o Fetch Routing Parameter
  - o Observables
  - o Passing & Retrieving Parameters & Fragments
  - o Nested RoutingCon g Query Parameters
  - o Redirection Routes

- o Route con guration
- o Route Guards
- o Protect Routes with canActivate
- o Navigation Controlling
- o Static Data in Route
- o Location Strategies

- **Forms**
  - o What is Forms and how do we handle it?
  - o Reactive Approach
  - o Template Driven
  - o Create Template Driven Forms
  - o What is Registering Control
  - o Use and Submit of Forms
  - o Access of Forms
  - o How to add validation in use input
  - o Build-In Validation
  - o HTML5 Validation
  - o Output Validation and Error Messages
  - o Two Way Binding
  - o Grouping
  - o Radio Button Handling
  - o Patch Forms Values
  - o Resetting Templates form Forms

- **Reactive Forms**
  - o What is Reactive Forms
  - o Create Reactive form through code
  - o Syncing of HTML and Form
  - o Adding Validation
  - o Sumit Forms
  - o Grouping
  - o Form Control Arrays
  - o Custom Validators
  - o Relative Forms
  - o Async validation
  - o Value changes and Reacting to status

- **Pipes**
  - What is Pipes in Angular
  - How we use pipes
  - Chaining Multiple pipes in angular
  - parameterizing a pipe
  - Filter Pipe
  - Impure & Pure Pipe
  - async Pipes

- **HTTP Requests**
  - What is HTTP Requests
  - How it work
  - How to send requests
  - Adjusting Request Headers
  - How to handle Get and Put Request
  - Catching HTTP Error
  - async with HTTP Requests

- **Authentication**
  - What is Authentication
  - How Authentication Work
  - Introduction to JSON Web Tokens
  - Creating Page and Route
  - Firebase SDK
  - User Signing UP and In
  - Sending Token & Requiring
  - Authentication Status
  - How to add Logout button
  - Protection & Redirection of Route

- **Angular Modules**
  - What is idea behind Modules
  - What is feature Modules and how we create it
  - What is App Modules
  - Registering Routes in Feature Modules
  - What is Shared Module and how we create
  - Create the Auth Feature module
  - What is Lazy LoadingHow to Modules & Services works
  - What is Core Module
  - How to Create Basic Core Module
  - AoT Compilation with CLI

- **HTTP Client**
  - What is HttpClient and how we unlock it
  - Request Configuration with Response
  - Request Events
  - Set up Headers
  - HTTP Parameters
  - Progress
  - What is Interceptors
  - Modify Request in Interceptors
  - Multiple Interceptors
- **Animations**
  - What is Angular Animations
  - Triggers and State
  - Switch between States
  - Basic and Advanced Transitions
  - What is void state
  - Key frames in animation
  - Grouping
  - Animation Callback
- **Unit Testing**
  - What is Unit Testing
  - How to Analyze CLI Testing Setup
  - Running Test with CLI
  - Components and dependencies
  - Async Tasks
  - Adding Component with tests
  - Difference between Isolated and Non-isolated Tests

Performing CRUD Operations as in Realtime Angular Application.

- Create and ASP.NET MVC Web API Application
- Add Angular Seed, download files and Configure Project
- Setup Project for Entity Framework Code First Model
- Add Web API Controller to perform CRUD Operations using EF.
- Create Angular Feature and Routing Modules
- Configure Angular to use HTTP and Json Services.
- Program Angular Modules to performing CRUD Operations.

Angular CLI and MVC Application

- Create an Angular CLI Project

- o Build CLI Project

- o Integrate build output with MVC Application