#### Asp.Net Core 3.1 Blazor Course Content –

#### Blazor (ASP.NET Core 3.1) Introduction

- What are Blazor; Razor Components and Web Assembly?
- Web Assembly vs Server
- Configuring Core 3.1
- Discuss the rapid development and evolution of ASP.NET
- Comparison of features for web technologies
- Creating Progress Web Application
- Support for Dependency Injection
- Creating your first Blazor Web Application
- Configuration Options
- New Core 3.1 Features

## **Introduction to Blazor Application**

- Overview of Blazor
- Blazor and Razor Components
- Installing Blazor Templates
- Debugging Blazor Applications
- Pages
- · Layout and menu
- Dependency Injection

#### Razor Components

- Pages vs Components
- Routing
- Rendering Components
- Binding (one way and two way)
- Events (and stopping propagation)
- Code and Code behind files
- Razor Syntax
- Razor Directives

## Calling REST Services

- Creating Web API services
- Web API Controller
- Implementing Controller Actions
- Using HttpClient
- Configuring and Injecting HttpClient
- Using Get request for Web API service
- Using Post, Put and Delete

## Alternatively Calling gRPC Services

- What is gRPC?
- Create a gRPC service (using Proto 3)
- Define Messages and Remote Procedure Calls
- Connecting to service
- Create a client interface for service

## Components - continued

- Parameters
- Child Components
- RenderFragments
- Template Componnts#

### Using Entity Framework

- Introduction to Entity Framework Core
- Migrations and Database creation
- DataAnnocations
- Adding Migrations
- Creating a Database
- Creating Web API controller

#### Validation

- Introduction to Validation
- EditForm components
- Input components
- Validation components

# **MVC** Security

- Dealing with common security threats in Web Applications
- Authentication and Authorization
- Configuring Authorization
- Securing Pages and Components

### Razor Class Library

- Creating a Razor Class Library
- Using Components from a Library
- Routing to Pages in a Library

## Interop with JavaScript

- Calling JavaScript from Components
- Referring to Elements within the JavaScript
- Calling .NET methods from JavaScript

#### Bootstrap

- Using Bootstrap to provide a Responsive User Interface
- Layout using Bootstrap