

Course: Blazor Development with .NET 8

Duration: 4 days

Module 1: Introduction to .NET 8 | .NET 6 | .NET 5 | ASP.NET Core 3.1

- Understanding Core form of .NET
- What's new with .NET 8
- Evolution from .NET 6 to .NET 8

Module 2: .NET 8 Features

- Performance Improvements
- Native AOT (Ahead-of-Time Compilation)
- Enhanced JSON Serialization
- Improved Minimal APIs
- Blazor Unified Rendering Model
- Improved gRPC Performance
- EF Core 8 Enhancements

Module3: Overview of Blazor

- Blazor as a SPA (Single Page Application)
- Blazor Architecture with ASP.NET Core | .NET
- Introduction to Blazor Server
- Introduction to Blazor WebAssembly
- Lazy Loading in Blazor

Module 4: Developing .NET Applications with Blazor

- Blazor as RAD (Rapid Application Development)
- Installing Blazor using Visual Studio 2022
- Creating Your First Blazor Web Application
- Creating a Progressive Web Application (PWA)

Module 5: Razor Components

- Razor Syntax & Directives
- Pages vs. Components
- Routing in Blazor
- Rendering Components
- Data Binding in Blazor
- Events and Event Callbacks
- Communication Between Components & Child Components
- Passing Parameters

Module 6: Validation in Blazor Applications

- Introduction to Validation
- EditForm Components
- Input Components
- Validation Components

Module 7: Bootstrap in Blazor Applications

- Using Bootstrap to Provide a Responsive User Interface
- Layout Implementation Using Bootstrap

Module 8: Using REST Services (Web API) in Blazor WebAssembly

- Creating Web API Services
- Web API Controller Basics
- Implementing Controller Actions
- Configuring and Injecting HttpClient
- Implementing GET, PUT, POST, and DELETE Operations

Module 9: Using Entity Framework Core (EF) in Blazor Server

- Introduction to Entity Framework Core
- Migrations and Database Creation
- Data Annotations in EF Core
- Adding Migrations
- Creating a Database

- Creating Web API Controller for Database Interaction

Module 10: Securing MVC-based Applications Using Blazor

- Dealing with Common Security Threats in Web Applications
- Authentication and Authorization in Blazor
- Configuring Authorization
- Securing Pages and Components

Module11: gRPC Services in Blazor Applications

- Introduction to gRPC
- Comparing gRPC and Web API
- Implementing gRPC Service in a Blazor Application

Module 12: Razor Class Library (RCL)

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