+44 7989 401397
info@olsensoft.com

Implementing REST Services using Web API (3 days)

Course overview

REST has emerged in recent years as a tremendously important vehicle for creating flexible and standards-based distributed systems and microservice architectures.

This course describes REST best practices and discusses important architectural and API modelling concepts, which you need to know in order to create scalable, flexible, and performant REST APIs. The course is based on .NET 6, and discusses many of the rich framework APIs and advanced techniques available.

What you'll learn

- Creating REST services using Web API
- Understanding attribute routing
- Configuring serialization
- Implementing middleware, filters, and model binders
- Working with OData
- Containerizing ASP.NET Core applications
- REST best practices

Prerequisites

- 6 months experience of C# programming

Course details

- Web API Essential Concepts: Overview of REST Services; Web API Essential Concepts in .NET; Implementing Industrial-Strength Actions
- A Closer Look at Attribute Routing: Recap of Attribute Routing; Route Constraints; Additional Techniques
- Dependency Injection, Configuration, and Entity Framework: Dependency Injection in Web API applications; Configuration; Using Entity Framework Core
- Serialization: Essential Concepts; JSON Media-Type Formatting; XML Media-Type Formatting; Implementing HTTP Clients
- Web API Techniques: Parameter Binding; Custom Middleware Components; Overview of Filters; Defining and Using Custom Filters
- Working with OData: Introduction to OData; Performing OData Queries; Modifying Data using OData; Implementing an OData Service
- Containerizing ASP.NET Core Apps: Overview of Containerization and Docker; Understanding Docker Images; Containerizing a Minimal ASP.NET Web App ; Containerizing via Visual Studio

- REST Design Best Practices: Basic Good Practice; Designing Resources; Filtering, Sorting, and Searching; Representing Data; Quality of Service Issues