

ASP.Net Web API Development with Entity Framework

Course outline

Module 1. Introduction to .NET Web Api

- Introduction.
- REST in ASP.NET Core.
- Exercise - Create a web API project.
- ASP.NET Core Web API Controllers.
- Exercise - Add a data store.
- Exercise - Add a controller.

Module2. ASP.NET Web API Fundamentals

- Routing - Convention and Attribute Routing
- Route Constraints
- Action Result
- Content Negotiation
- Media Type Formatters
- Model Binding
- Model Validation
- Handling Validation Errors
- Dependency Injection.
- Exception Handling

Module 3. Building RESTful Services with ASP.NET Web API

- Building ASP.NET Web API
- ASP.NET Web API CRUD Operations
- Testing Web API Using Postman
- Consuming Web API in ASP.NET MVC
- Performing CRUD Operations using ASP.NET MVC

Module 4. Introduction to Entity Framework

- Entity Framework
- Overview of ORM Products
- Entity Framework introduction
- Using Database First Approach, Code First Approach.
- Using LINQ to Entities to perform CRUD operations" and connection with MS SQL Server.
- Migrations.

Module 5. Introduction to LINQ

- Introduction to LINQ Queries
- LINQ and Generic Types
- Basic LINQ Query Operations
- Data Transformations with LINQ
- C# Features That Support LINQ
- Walkthrough: Writing Queries in C# (LINQ)
- Standard Query Operators Overview
- Overview
- Query Expression Syntax for Standard Query Operators
- Classification of Standard Query Operators by Manner of Execution
- Sorting Data
- Set Operations
- Filtering Data
- Join Operations
- Grouping Data
- Order By Data