

Build Web APIs using ASP.NET

Modality: Self-Paced Learning

Duration: 16 Hours

SATV Value:

CLC:

NATU:

SUBSCRIPTION: Learn, Master

About this course

Want to learn how to serve data to your client applications using Web API? Perhaps you are considering creating applications for mobile devices but your data needs will exceed the storage capacity of the device. Perhaps you want tighter control over the data and wish to provide options for devices with limited or not always-on connectivity.

This course offers insight into the use of Web APIs using ASP.NET and C#. You'll start with a review of client/server architectures and learn about data serialization and deserialization with JSON as the data format.

You will then be introduced to REST and RESTful concepts with discussions on synchronous and asynchronous programming.

The third module introduces you to ASP.NET Core and using Entity Framework for data access.

Finally, you will learn how to use Cross-Origin Resource Sharing (CORS) with your services and how to secure your Web APIs

Course Objective:

- RESTful Services
- Web API
- ASP.NET Core
- CORS

Audience:

- Web Developer

Prerequisites

- Knowledge of C#
- Knowledge of web technologies
- Database knowledge

Course Outline:

Module 1 | Introduction to Web API

- Lesson One: What is Web API?
- Lesson Two: Serialization and Deserialization
- Lab Overview And Config
- Lab01 Run Client-Server System
- Lab02 Serialize and Deserialize in C# and JavaScript
- SelfAssessment Serialize and Deserialize Cross Applications

Module 2 | REST and HTTP

- Lesson One: What is REST?
- Lesson Two: What is RESTful Web API?
- Lesson Three: HTTP Request and Response
- Labs Overview And Config
- Lab01 Use Postman Create HTTP Requests
- Lab02 Debug Web API with Postman

Module 3 | Basic ASP.NET Core Web API

- Module Introduction
- Lesson One: Controllers and Actions
- Lesson Two: Extract Parameters from HTTP Request
- Lesson Three: Model Bindings
- Lesson Four: Action Result Serialization
- Lab00 Labs Overview And Config
- Lab01 Create Controllers and Actions
- Lab02 Working with Routes
- Lab03 Extract Action Parameters
- Lab04 Model Bindings
- Lab05 Status Codes in Response
- SelfAssessment Create Controller Actions

Module 4 | Advanced ASP.NET Core Web API

- Module Introduction
- Lesson One: Work With Entity Framework Core
- Lesson Two: Test the Web API
- Lesson Three: Cross-Origin Resource Sharing (CORS)
- Lab00 Labs Overview And Config
- Lab01 Tutorial WebAPI and Entity Framework Core
- Lab02 Tutorial Debug WebAPI with Unit Test
- Lab03 Final Project?

