Use C# and Build an ASP.NET Core Web API with Entity Framework Core, SQL Server, Authentication, Authorization | .NET8

Rating: 4.6 out of 5**4.6**

5,321 ratings

**26,575**

Students

**18 hours**

Total

Last updated May 2024

English

English [Auto], Arabic [Auto], Italian [Auto], Portuguese [Auto], Simplified Chinese [Auto], Spanish [Auto], Turkish [Auto], Vietnamese [Auto]

**What you'll learn**

* Learn, Understand and Create ASPNET Core Web API From Scratch using .NET8
* Building scalable REST APIs from scratch using ASPNET CORE and C#
* Learn and Apply Entity Framework Core to perform CRUD operations on a SQL Server database
* Use Entity Framework Core in a code first approach
* Understand and Apply the Repository Pattern in ASPNET Core Web API
* Use Domain Driven Design (DDD) approach to create domain first models and project
* Understand RESTful Principles and Apply them in ASPNET Core Web API
* Understand Best practices and Clean Coding Techniques, Know Shortcuts and Tips and Tricks
* Add Validations In ASPNET CORE Web API
* Use popular third-party libraries such as AUTOMAPPER
* Understand and Use Interfaces, Inheritance, Dependency Injection etc
* Understand and Implement Authentication and Role based Authorization to Authenticate and Authorize the ASPNET Core Database
* Create JWT tokens to Authenticate API
* Test ASPNET Core Web API using Swagger and Postman
* Use ASPNET Core Identity in ASPNET Core Web API to Authenticate and add Role based Authorization
* Learn Filtering, Sorting and Pagination in ASPNET Core Web API

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**Description**

**THIS COURSE HAS BEEN UPDATED TO THE LATEST VERSION [*.NET8]***

The course is compatible with both versions - .NET7 & .NET8

This is a complete guide to creating ASP.NET Core Web API  using  .NET8, Entity Framework Core (EF Core), and SQL Server database.

With over **11000 student enrolments**and more than **2000**5-star **reviews, this course has helped students from all backgrounds to learn and implement ASP.NET core Web API.**

This course is for **all skill levels** and best suits **beginners and intermediate developers** who have gained knowledge in C# and ASP.NET Web MVC and want to use their skills to learn ASP.NET Core and specifically ASP.NET Core Web API.

In this ASP.NET Core WEB API course, we will use **.NET8** and create a **REST WEB API**.

During this course, you will gain so much experience creating ASP.NET Core APIs and endpoints and by the end, I am confident that you will gain enough practical knowledge to create your own ASP.NET Web APIs.

We will create a very engaging Web API in which we will create the regions and walks of New Zealand and we will **create an ASP.NET Core Web API**so that clients of this API can consume this data.

We will start with learning what are the principles of REST and understand the files that ASP.NET Core creates as part of a new project.

Then we will create and understand our domain and domain models.

Then we will go ahead and install **Entity Framework Core**and using EF Core migrations we will create our **SQL Server Database.**

We will then create controllers for our API and test them using **Swagger UI.**

We will also understand and implement the concepts of **Domain and Data models** and use **clean coding techniques** to build our ASP.NET CORE Web API.

We will use a famous third-party library called **Automapper**to map objects inside our API.

With all of this, we will go on and create **CRUD**operations for our Web API. We will perform **Create, Read, Update, and Delete**operations on our API using the **Repository Pattern** in ASP.NET Core API.

Then we will understand and implement Authentication and Authorization in ASP.NET CORE Web APIS using JWT tokens and see how we can generate **JWT tokens** using our API (Server) so that we can Authenticate and Authorize the clients of our application.

We will learn more **advanced** level stuff by implementing **Filtering, Sorting, and Pagination** in our ASP.NET Core Web API.

We will use Postman and Swagger to test our **Authentication and Authorization.**

We will also use ASP.NET Core Identity in our API where we Register users and assign roles to them.

***In this course ASP.NET Core Web API course, you will learn and implement:***

* Understand REST APIs by creating a Web API using ASP.NET Core and .NET 7
* Understand REST Principles
* Understand Dependency Injection and Benefits
* Creating New ASP.NET Core Web API Project
* Understand .NET8 WEB API Project In .NET 8 and C#
* Learn And Install Entity Framework Core (EF Core) In ASP.NET Core Web API Project
* Learn Entity Framework Core Migrations
* Understand the difference between Domain models and DTOs
* Understand Domain Models and Repository Pattern
* Use Swagger To Test ASPNET Core WEB API project
* Learn How To Map Models To One Another Using Automapper
* Learn Asynchronous Programming (Async Await)
* Validate ASP.NET Core WEB API
* Secure your ASP.NET Core Web API using Microsoft Identity by adding Authentication and Role-Based Authorization to your REST API.
* Add JWT Authentication to ASP.NET Core Web API by creating JWT Tokens for API Clients.
* Understand and Add Authentication and Authorization To ASP.NET Core API and Create Read and Write Users To Test this Via Postman
* Incorporate ASP.NET JWT Authentication Into SwaggerUI
* Add advanced functionality like Filtering, Sorting, and Pagination to your ASP.NET Core Web API.

***Know me more***

I am Sameer, a professional software developer with over 15 years of industry experience. I love to educate myself and others and that's why I started with my YouTube channel where I have a loving audience. I create content for software developers like you so that I can share my knowledge.

***Statistics***

Over 27000 students on Udemy

Over 4000  Reviews on Udemy

Over 2.4 Million Views on YouTube

***Some of the reviews***

* Hands down the best way to learn this technology stack. Sameer did a good job here and I hope he will be blessing us with more interesting Angular projects in the future! Maybe a sample e-commerce or Hotel Booking app :)
* Although I didn't have any prior experience with C# OR .Net Core MVC, I was still able to grasp a lot from this course, all thanks to the instructor!
* A very detailed and extensive course! clear voice and great detail to topics.
* *and 1000s of more reviews on my courses.*

***Money Back Guarantee***

**I Guarantee you** that after finishing this course, you will be confident enough to create REST APIs in ASP.NET Core and .NET8 on your own.

You will feel confident at work or when creating your projects.

If you want to create functional, generic, clean, and usable websites using ASP.NET, then this is the course for you.

If still, you are unable to get benefit from this course (we will be sad to see you go!), there is a "30-day money back guaranteed by Udemy".

***Why do you need this course?***

By buying this course, you will make a fantastic choice as this course will help you gain the confidence you need to create ASP.NET Core Web APIs

I assure you that by the end of this course, you will have the confidence to create scalable ASP.NET Core Web APIs from scratch.

**Who this course is for:**

* Beginner to Intermediate Developer with some knowledge in ASPNET Core and C#

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**Instructor**

[**Sameer Saini**](https://www.udemy.com/user/sameer-saini-4/)

Professional Full Stack Developer and Instructor

[](https://www.udemy.com/user/sameer-saini-4/)

* 4.6 Instructor Rating
* 8,744 Reviews
* 39,105 Students
* 6 Courses

As a coding enthusiast, my vision is to help learners to understand and master the concepts of programming languages, and software design patterns and build highly scalable web applications.

When I remember my journey to date, I can recall how finding the right mentor is so important and equally difficult to get. I want to mentor my learners in this journey and be part of it.

I started my journey with backend development using C# and ASP.NET and I love this programming language and framework and that's the reason I chose to stick with this as my favorite backend language.

In the next few years, I also got attracted towards frontend development and started creating websites using the popular MVC framework but the need to create faster responsive and reactive websites was growing hence the leap towards Javascript and Angular.

**My Vision**

My aim is to create courses and content that learners can understand. It's dead simple. I try to use a language that could be understood by a vast majority of learners and I try to avoid complicated words wherever possible. This helps learners understand the concepts rather than paying attention to magic keywords.

I pair the above with real-world examples. All courses I create somehow try to create a real-world example that we all have seen or wish to create.

This helps in achieving the goal, to create something on your own and also to learn the programming language or framework.

As my Udemy and YouTube audience is growing, I would like to take this as an opportunity to thank every one of you who was part of this journey. Let's stay connected.

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**Requirements**

* Hello world experience in ASPNET Core
* Beginner knowledge about APIs and their use
* 3-6 months experience working with ASPNET Core and C#