Top .NET (ASP.NET Core) Open-Source Projects

Awesome useful .NET Projects on GitHub — Most popular .NET Projects to get practical knowledge.

1/ E-Commerce

nopCommerce

nopCommerce is the most popular and one of the best open-source eCommerce shopping cart solution based on ASP.NET Core that contains both a catalog frontend and an administration tool backend.

Using the latest Microsoft technologies, it provides high performance, stability, and security. It is also fully compatible with Azure and web farms.

nopCommerce architecture follows well-known software patterns and the best security practices. Pluggable and clear architecture makes it easy to develop custom functionality and follow any business requirements.

GitHub ↔ Website ↔ Docs

GrandNode

GrandNode is the most advanced free, open source, fast, headless, multi-tenant eCommerce platform built with the newest version of .NET Core, MongoDB, AWS DocumentDB, Azure CosmosDB, Vue.js.

It is an intuitive e-Commerce platform that enables the flexible development of online stores. It supports various business models such as B2B, B2C, Multi-Store, Multi-Vendor, Multi-Tenant, Multi-Language, Multi-Currency.

Advanced personalisation, scalability, speed, and high efficiency — these are features that effectively support your e-business management.

[GitHub](#) ↔ [Website](#) ↔ [Docs](#)

[SimplCommerce](#)

A simple, cross platform, modularized ecommerce system built on .NET Core.

[GitHub](#) ↔ [Website](#) ↔ [Docs](#)

[VirtoCommerce](#)

Virto Commerce is an open-source platform for an extensible e-commerce applications.

Complex digital commerce solutions for B2B, B2C or B2B2C businesses, marketplaces and derived SaaS commerce platforms.

Virto Commerce architecture was designed on principles: microservices, API-first, cloud-native, headless, and advanced extensibility.

[GitHub](#) ↔ [Website](#) ↔ [Docs](#)

2/ Blog Website

[Miniblog.Core](#)

A full-featured yet simple blog engine built on ASP.NET Core.

[GitHub](#) ↔ [Website](#)

[Blogifier](#)

Blogifier is an open-source publishing platform Written in .NET and Blazor WebAssembly. With Blogifier you can make a multi-author or a personal blog and a powerful website.

Right now it can be used as a personal or group blog, and more features are under development.

[GitHub](#) ↔ [Website](#) ↔ [Docs](#)

3/ Architecture Styles and Patterns

eShopOnContainers

Cross-platform .NET sample microservices and container based application that runs on Linux, Windows, and macOS. Powered by .NET 6, Docker Containers, Azure Kubernetes Services and it supports Visual Studio, VS for Mac and CLI based environments.

The architecture proposes a microservice oriented architecture implementation with multiple autonomous microservices (each one owning its own data/db) and implementing different approaches within each microservice (simple CRUD vs. DDD/CQRS patterns) using HTTP as the communication protocol between the client apps and the microservices and supports asynchronous communication for data updates propagation across multiple services based on Integration Events and an Event Bus (a light message broker, to choose between RabbitMQ or Azure Service Bus, underneath) plus other features defined at the roadmap.

GitHub

CleanArchitecture (ardalis)

Clean Architecture Solution Template: A starting point for Clean Architecture with ASP.NET Core.

[Clean Architecture](#) is just the latest in a series of names for the same loosely-coupled, dependency-inverted architecture. You will also find it named [hexagonal](#), [ports-and-adapters](#), or [onion architecture](#).

[GitHub](#)

CleanArchitecture (jasontaylordev)

Clean Architecture solution template for .NET 6.

This is a solution template for creating a Single Page App (SPA) with Angular and ASP.NET Core following the principles of Clean Architecture. Create a new project based on this template by installing and running the associated NuGet package.

[GitHub](#) ↔ [Docs](#)

dotnet-webapi-boilerplate

.NET Web API Boilerplate is a Clean Architecture Template for .NET 6.0 WebApi built with Multi-tenancy Support.

The goal of this repository is to provide a complete and feature-rich starting point for any .NET developer / team to kick-start their next major project using .NET 6 Web API. This also serves the purpose of learning advanced concepts and implementations such as Multitenancy, CQRS, Onion Architecture, Clean Coding standards and so on.

[GitHub](#)

Architecture (rafaelfgx)

.NET 6, ASP.NET Core 6, Entity Framework Core 6, C# 10, Angular 13, Clean Code, SOLID and DDD.

This project is an example of architecture using new technologies and best practices. The goal is to share knowledge and use it as reference for new projects.

[GitHub](#)

Abp Framework

ABP Framework is an Open Source web application framework and it offers an opinionated architecture to build enterprise software solutions with best practices on top of the .NET and the ASP.NET Core platforms.

It provides the fundamental infrastructure, production-ready startup templates, modules, themes, tooling, guides and documentation to implement that architecture properly and automate the details and repetitive works as much as possible.

[GitHub](#) ↔ [Website](#) ↔ [Docs](#)

modular-monolith-with-ddd

Full modular Monolith .NET application with Domain-Driven Design approach.

[GitHub](#)

sample-dotnet-core-cqrs-api

Sample .NET Core REST API CQRS implementation with raw SQL and DDD using Clean Architecture.

[GitHub](#)

University-Microservices

Implementing an "University" microservices application with .Net Core, Docker, RabbitMQ, CAP, gRPC, Ocelot API Gateway, Redis, PostgreSQL, SqlServer, Entity Framework Core, CQRS , DDD and Clean Architecture implementation. Also includes Cross-Cutting concerns like Implementing Centralised Distributed Logging with Seq.

[GitHub](#)

4/ .NET Samples-Examples

Practical-aspnetcore

Practical samples of ASP.NET Core 2.1, 2.2, 3.1, 5.0 and 6.0 projects you can use.

The goal of this project is to enable .NET programmers to learn the new ASP.NET Core stack from the ground up directly from code. There is so much power in the underlying ASP.NET Core stack.

[GitHub](#)

aspnetcore-realworld-example-app

ASP.NET Core codebase was created to demonstrate a fully fledged fullstack application built with ASP.NET Core (with Feature orientation) including CRUD operations, authentication, routing, pagination, and more that adheres to the RealWorld spec and API.

[GitHub](#) ↔ [Website](#) ↔ [Docs](#)

EquinoxProject

The Equinox Project is an open-source project written in .NET Core with DDD, CQRS and Event Sourcing concepts.

The goal of this project is to implement the most common used technologies and share with the technical community the best way to develop great applications with .NET.

[GitHub](#) ↔ [Docs](#)

5/ .NET libraries, tools, frameworks and roadmap

awesome-dotnet-core

A collection of awesome .NET core libraries, tools, frameworks and software.

[GitHub](#)

awesome-dotnet

A collection of awesome .NET libraries, tools, frameworks and software.

[GitHub](#)

AspNetCore-Developer-Roadmap

Roadmap to becoming an ASP.NET Core developer in 2022.

You can find a chart demonstrating the paths that you can take and the libraries that you would want to learn to become an ASP.NET Core developer.

[GitHub](#)

.NET-Backend-Developer-Roadmap

A roadmap for .NET developers that want to focus on backend and specifically work with microservices.

[GitHub](#)

Awesome-Microservices-DotNet

A collection of awesome training series, articles, videos, books, courses, sample projects, and tools for microservices in .NET.

[GitHub](#)

clean-code-dotnet

Clean Code concepts and tools adapted for .NET.

[GitHub](#)

6/ View more from **.NET Hub**

- [Clean Architecture with .NET and .NET Core](#)

- [Most popular .NET Libraries every developer should know](#)

- [Interception in Entity Framework Core](#)

- [Use Azure App Configuration with ASP.NET or ASP.NET Core Applications](#)

- [Health Checks in ASP.NET Core](#)

Happy Coding!!!

Top 10 ASP.NET Open Source Projects GitHub

Looking for project inspiration for your upcoming .NET projects? Then rest your search here. This collection will provide you with the best ASP.NET Core Open Source Projects from GitHub. Here you will also find the ASP.NET Core MVC project which uses the MVC tech as well. Therefore, you will not need to search the .NET core MVC project anywhere else.

Well, it's common for developers to not use all of the methodologies, patterns, and computer programming techniques that are now available, even on their largest projects. A developer must work on several projects at once or switch projects frequently in order to learn as much as possible.

Here, real Open Source projects can be of assistance. These projects can be also helpful in improvising developers' practical expertise by simply downloading them from the repository to a local system and studying their architecture, design, and implementation details. Besides, the new information can be also useful in other projects, imparted to others, and just help the developer become more intelligent.

So to help you all with such projects, we have gathered some of the best Inspirational & useful DotNET Open Source Projects in this collection. It is advisable to use the **Asp. NET Admin Templates**.

Now, before we start the list of ASP.NET Open Source projects GitHub, let's know what ASP.NET is.

What is ASP.NET?

In case you are not familiar, **ASP.NET** is an open-source web framework developed by **Microsoft** to help developers create cutting-edge web applications and services. Running on Linux, Windows, macOS, and Docker, ASP.NET is a cross-platform application.

In ASP.NET, applications and online services are created using a variety of programming languages, including C# and VB.net. Additionally, it makes use of JavaScript, CSS, and HTML5 for front-end web development.

The ASP.NET Core is a redesigned version of ASP.NET. Besides, it is a modern and innovative platform that provides a variety of essential features to developers. Besides, it is compatible with Linux, macOS, and Windows.

In case you are a beginner, then we recommend checking the **Asp. NET Core Tutorial** first. Now, let's begin with the collection of .NET Open Source Projects.

ASP.NET Open Source Projects

A variety of open-source ASP.NET Core projects can be found on GitHub. These .NET Open Source projects can help you study ASP.NET Core technology comprehensively, covering diverse architecture and coding methodologies.

This article, on the other hand, contains a list of some of the top real-time applications or example architecture reference projects from numerous categories.

Now, let's begin the collection.

[Clean Architecture](#)

A starting point for Clean Architecture with ASP.NET Core. Clean Architecture is just the latest in a series of names for the same loosely-coupled, dependency-inverted architecture.

This is a solution template for building Single Page Applications (SPAs) using Angular and ASP.NET Core in accordance with the Clean Architecture guidelines. Installing and launching the related NuGet package will allow you to create a new project depending on this ASP.NET Core MVC project.

[NopCommerce](#)

ASP.NET Core eCommerce software. nopCommerce is a free and open-source shopping cart. Besides, you can run it on Windows, Linux, or Mac. Additionally, this .NET Open Source Project supports multi-factor authentication out of the box.

The nopCommerce architecture adheres to the finest security procedures and well-known software patterns. The source code can be altered in any way. It is simple to create unique functionality and adhere to any business needs thanks to pluggable and transparent architecture.

NopCommerce offers excellent performance, stability, and security by utilizing the most recent Microsoft technology. Azure and web farms are also completely compatible with nopCommerce.

Features:

- Runs on .NET 6 with an MS SQL 2012 (or higher) backend database.

- Cross-platform compatibility
- Supports Docker and MySQL out of the box, so you can easily run nopCommerce on a Linux machine.
- PostgreSQL database Support
- All methods in nopCommerce are async.

[Sneat ASP.NET Core Admin Template](#) (The Brand New ASP.NET Core Admin Template)

Sneat ASP.NET Core Admin Template – is the latest most developer-friendly & highly customizable Admin Dashboard Template based on ASP.NET 6. Besides, the highest industry standards are considered to bring you the best .NET admin template that is not just fast and easy to use, but highly scalable.

The **Asp NET Dashboard** offers amazing features. Furthermore, you can use this template to build any kind of web app without any hassle. Hence, you should not miss this one.

In addition, incredibly versatile, the Sneat .NET Core Admin Template also allows you to build any type of web application. For instance, you can create:

- SaaS platforms
- Project management apps
- Ecommerce backends
- CRM systems
- Analytics apps
- Banking apps
- Education apps
- Fitness apps & many more....

Furthermore, you can use this one of the best innovative Asp NET **Admin Panels** to create eye-catching, high-quality, and high-performing Web Applications. Besides, your apps will be completely responsive, ensuring they'll look stunning and function flawlessly on desktops, tablets, and mobile devices.

Features:

- Based on **ASP.NET Cor 6 Razor Pages**
- UI Framework **Bootstrap 5**
- **Vertical & Horizontal** layouts
- Default, Bordered & Semi-dark themes
- **Light & Dark** mode support
- Internationalization/i18n & RTL Ready
- [Theme Config](): Customize our template without a sweat
- 3 Dashboard
- 2 Chart libraries
- SASS Powered and many more

Also, Check The **Bootstrap Admin Dashboard** Version.

The **Admin Template** is loaded with pre-built HTML components and **30+ Pages** that contain all the commonly used pages to develop any kind of application.

Practical-aspnetcore

You can use real-world examples of ASP.NET Core projects from versions 2.1, 2.2, 3.1, 5.0, and 6.0. Besides, this .NET Open Source project aims to make it possible for.NET developers to study the new

ASP.NET Core stack straight from source code. The ASP.NET Core stack's underpinnings are incredibly powerful.

[OrchardCore](#)

Orchard Core is a content management system (CMS) developed on top of ASP.NET Core. This is an open-source, modular, and multi-tenant application framework. Enabling community-based networks of hosted applications that can be expanded using modules, such as e-commerce systems, blog engines, and more is one of our goals. The modular ecosystem made possible by the Orchard Core Framework makes it possible for several teams to work on various components independently and reused them across many projects.

It mainly consists of two distinct projects:

- Orchard Core Framework: An application framework for building modular, multi-tenant applications on ASP.NET Core.
- Orchard Core CMS: A Web Content Management System (CMS) built on top of the Orchard Core Framework.

Features:

- Multilingual support
- Liquid templates support
- Modular
- Multi-Tenant
- Multi-Tenant

[Equinox Project](#)

Equinox is one of the best .NET Open Source Projects with DDD, CQRS, and Event Sourcing concepts. Implementing the most widely

used technologies and disseminating to the tech community the best practices for creating outstanding .NET applications are the objectives of this project. There for this is the best ASP.NET core MVC project to look up to.

Features:

- Entity Framework Core 6.0
- Domain Validations
- .NET Core Native DI
- AutoMapper
- FluentValidator
- MediatR
- Swagger UI with JWT support

Now if you're working on frontend projects then we'd recommend you to use Materio Free MUI React Next Js Admin Template.

This **React Admin Template** is the most Comprehensive Admin Template with Elegant Design and Unique Layouts...

SimplCommerce

SimplCommerce provides a flexible way to interact with your line of business apps thanks to its built-in OAuth 2.0/OpenID Connect and several administrative APIs. This is the best ASP.NET core MVC project that you can take inspiration from.

Features:

- Cross Platform compatibility
- Rich product features
- Multi-vendors
- Localization
- Open for integration

Dotnet-WebAPI-Boilerplate

Clean Architecture Template for .NET 6.0 WebApi built with Multitenancy Support. Fullstackhero's **.NET Web API Boilerplate** is a starting point for your next .NET 6 Clean Architecture Project that incorporates the most essential packages and features your projects will ever need including out-of-the-box Multi-Tenancy support. This project can save well over 200+ hours of development time for your team.

The goal of this **Asp Net Boilerplate** is to provide a complete and feature-rich starting point for any .NET Developer / Team to kick-start their next major project using .NET 6 Web API. This also serves the purpose of learning advanced concepts and implementations such as Multitenancy, CQRS, Onion Architecture, Clean Coding standards, and so on.

Features:

- Built on .NET 6.0
- Follows Clean Architecture Principles
- Domain Driven Design
- Multi-Tenancy Support with Finbuckle
- Supports MySQL, MSSQL, Oracle & PostgreSQL
- Dapper Integration for Optimal Performance and many more.

To know more about boilerplate, refer to this in-depth article on [Boilerplate in programming](#).

[Squidex](#)

Squidex is an open-source headless CMS and content management hub. In contrast to a traditional CMS Squidex provides a rich API with OData filter and Swagger definitions.

It is up to you to build your UI on top of it. It can be a website, a native app, or just another server. We build it with ASP.NET Core and CQRS and are tested for Windows and Linux on modern browsers.

A versioning system manages all modifications on Squidex. This makes it feasible to evaluate several revisions of your material and go back in time. Additionally, it offers the audit log so you can see who did what and when. The API is intuitive and easy to use, which allows you to incorporate it in exactly the way you want which ultimately helps you to deliver more value to your customers by educating them about materials and their usage.

Features:

- Content Versioning
- Seamless Integrations
- Workflow System
- Content Embedding

[Aspnetcore Realworld Example App](#)

ASP.NET Core codebase that adheres to the RealWorld standard and API and has real-world examples (CRUD, auth, advanced patterns, etc.). Besides. this codebase was developed to show how an entire

full-stack application, including CRUD operations, authentication, routing, pagination, and more, can be constructed using ASP.NET Core (with Feature orientation).

Features:

- JWT authentication using [ASP.NET Core JWT Bearer Authentication](#).
- AutoMapper
- Fluent Validation
- Entity Framework Core on SQLite
- Built-in Swagger

[**ASP.NET Admin Panel**](#) offers everything you need while building a modern, eye-catching, and responsive web apps in no time! 🚀

[Piranha.core](#)

Piranha Core is a friendly editor-focused CMS using .NET6. you can use it both as an integrated CMS or as a headless API. Besides, this is a **complete rewrite** of Piranha CMS. The goal of this ASP.NET core MVC project is to create a version capable of targeting multiple platforms & frameworks with minimal dependencies but still providing a flexible & high-performance CMS library.

Piranha is currently built for .NET 6 and uses in its simplest form the following awesome packages:

- AutoMapper

- Markdig
- Microsoft.EntityFrameworkCore
- Newtonsoft.Json

[Grandnode2](#)

GrandNode is an intuitive e-Commerce platform that enables the flexible development of online stores. Based on the modern MongoDB database, a fully free and open-source system allows you to support various business models: B2B, B2C, Multi-Store, Multi-Vendor, Multi-Tenant, Multi-Language, and Multi-Currency. Furthermore, this .NET Core Open Source project ensures functionality both now and in the future.

Also, it ensures the basic demands of each e-commerce as well as future features required for expansion. GrandNode is a platform that can accommodate a variety of business concepts. Besides, it has the potential to successfully empower traditional B2C and B2B stores, allowing local brands to expand globally. Additionally, it also helps with booking processes, manages the availability calendar, and even allows for the selling of online courses.

Features:

- Advanced personalization
- Scalability
- Speed
- High efficiency

The goal is to provide the platform with:

- The high-performance front-end, rendered within milliseconds,

- The high-performance application to handle temporary and permanent traffic overloads,
- Highly advanced e-commerce platform with unlimited possibilities of integration with existing third-party software
- Fast development with the modern codebase
- Scalable e-commerce platform to grow with the business

Conclusion:

So here was the best collection of **10+.NET Open Source Projects** on GitHub.

For every software engineer, open-source projects are a fantastic supplementary source of knowledge. Therefore, we decided to gather some of the best .NET Open Source projects that can be helpful to sharpen your skills. You can even use these projects directly by modifying the source code.

As you are learning ASP.NET, creating projects provides you with hands-on experience and confidence in any technology. Well, these .NET Open Source Projects are very inspirational & useful when it comes to practicing your skills.

With the help of these Open Source dotnet projects, you can kick-start your learning journey as a dotNET developer.

Apart from this, we also suggest using **UI Design kits** while working on any web apps as UI kits are very helpful to create appealing web apps. You can use the free UI kits as well.

In case you are looking for free dashboards to build responsive web apps, then do check the **Free Admin Templates**.