**Awesome collection of .NET Core realtime, sample, architecture reference application projects**

Open-source projects are great for getting started and serve as a good source for architecture reference. There are several open-source ASP.NET Core projects available in GitHub. These projects will help you learn ASP.NET Core technology in-depth, with different types of architecture and coding patterns. Some of the top real-time applications or sample architecture reference projects across different categories are listed below

**Realtime Applications**

[**nopCommerce**](https://github.com/nopSolutions/nopCommerce) (**E-commerce**) (**GPLv3**) - is a popular open-source e-commerce shopping cart application.

[**OrchardCore**](https://github.com/OrchardCMS/OrchardCore) (**CMS**) (**BSD 3-Clause**) - is an open-source content management system (CMS) framework supporting modularity and multitenancy.

[**SimplCommerce**](https://github.com/simplcommerce/SimplCommerce) (**E-commerce**) (**Apache 2.0**) - is a modular, microservice-based e-commerce application, built using ASP.NET Core.

[**grandnode**](https://github.com/grandnode/grandnode) (**E-commerce**) - Free and Open Source Ecommerce Shopping Cart solution based on ASP.NET CORE and MongoDB

[**squidex**](https://github.com/Squidex/squidex) (**CMS**) (**MIT**) - is a headless CMS and content management hub, built using ASP.NET Core with OData and CQRS patterns.

[**Miniblog.Core**](https://github.com/madskristensen/Miniblog.Core) (**Blog engine**) (**Apache 2.0**) - is a blog engine based on ASP.NET Core.

[**piranha.core**](https://github.com/piranhacms/piranha.core) (**CMS**) (**MIT**) - is a CMS application based on ASP.NET Core.

[**Blogifier**](https://github.com/blogifierdotnet/Blogifier) (**Blog engine**) (**MIT**) - is a lightweight blog engine written in ASP.NET Core.

[**Merp**](https://github.com/mastreeno/Merp) (**Merp**) (**AGPL-3.0**) - An event-based Micro ERP developed by Andrea Saltarello using ASP.NET Core 3.1

**Sample & Reference Applications**

[**eShopOnContainers**](https://github.com/dotnet-architecture/eShopOnContainers) (**Container-based microservices architecture**) (**MIT**) - is a sample reference application demonstrating various architecture patterns of container-based microservices by Microsoft.

[**eShopOnWeb**](https://github.com/dotnet-architecture/eShopOnWeb) (**Monolithic architecture**) (**MIT**) - is a sample reference application demonstrating monolithic architecture powered by Microsoft.

[**practical-aspnetcore**](https://github.com/dodyg/practical-aspnetcore) (**Samples**) (**MIT**) - is a practical sample for ASP.NET Core.

[**EquinoxProject**](https://github.com/EduardoPires/EquinoxProject) (**Samples**) (**MIT**) - Full ASP.NET Core 3.1 application with DDD, CQRS and Event Sourcing concepts

[**NorthwindTraders**](https://github.com/JasonGT/NorthwindTraders) (**Clean architecture, DDD, CQRS**) (**MIT**)- is a sample reference application for domain-driven architecture using Entity Framework and CQRS pattern.

[**ReactiveTraderCloud**](https://github.com/AdaptiveConsulting/ReactiveTraderCloud) (**Reactive programming architecture**) (**Apache 2.0**) - is a real-time trading application demonstrating reactive programming principles.

[**coolstore-microservices**](https://github.com/vietnam-devs/coolstore-microservices) (**Kubernetes-based microservice using service mesh**) (**MIT**) - is a sample application demonstrating the use of Kubernetes using a service mesh.

[**cloudscribe**](https://github.com/cloudscribe/cloudscribe) (**Multitenant framework architecture**) (**Apache 2.0**) - is a foundation framework for building a multitenant application.

[**sample-dotnet-core-cqrs-api**](https://github.com/kgrzybek/sample-dotnet-core-cqrs-api) (**Clean architecture**) (**MIT**) - Sample .NET Core REST API CQRS implementation with raw SQL and DDD using Clean Architecture.

[**clean-architecture-manga**](https://github.com/ivanpaulovich/clean-architecture-manga) (**Clean architecture**) (**Apache**) - is a clean architecture sample application.

[**clean-architecture**](https://github.com/jasontaylordev/CleanArchitecture) (**Clean architecture**) (**MIT**) - is a clean architecture template.

[**clean-testing**](https://github.com/jasontaylordev/CleanTesting) (**Clean Testing**) (**MIT**) - is a clean testing sample application.

[**Dotnet-Boxed**](https://github.com/Dotnet-Boxed/Templates) (**Dotnet Boxed**) (**MIT**) - is a project template.

[**StarWars**](https://github.com/JacekKosciesza/StarWars) (**GraphQL sample**) (**MIT**) - is a GraphQL-based ASP.NET Core Star Wars application.

[**aspnetcore-realworld-example-app**](https://github.com/gothinkster/aspnetcore-realworld-example-app) (**CQRS, Fluent Validation, Automapper**) - is a example project demonstrating the use of CQRS, Fluent Validation, Automapper, and Entity framework core.

[**ContosoUniversityDotNetCore**](https://github.com/jbogard/ContosoUniversityDotNetCore) (**CQRS**) - is a sample project demonstrating the use of CQRS, Automapper, Integration Testing.

[**modular-monolith-with-ddd**](https://github.com/kgrzybek/modular-monolith-with-ddd) (**CQRS**) (**MIT**) - Full Modular Monolith application with Domain-Driven Design approach.

[**EventSourcing.NetCore**](https://github.com/oskardudycz/EventSourcing.NetCore) (**Event Sourcing**) (**MIT**) - Example of Event Sourcing in .NET Core

[**Sennedjem**](https://github.com/keremvaris/Sennedjem) (**Clean architecture**) (**MIT**) - Sennedjem CQRS (Command Query Responsibility Segregation), Clean Architecture. RabbitMq, ElasticSearch sample

[**EventFlow.Example**](https://github.com/OKTAYKIR/EventFlow.Example) (**DDD, Event Sourcing, CQRS**) - DDD+CQRS+Event-sourcing example and contains following technology stack: [EventFlow](https://github.com/eventflow/EventFlow), [EventStore](https://eventstore.com/), [RabbitMQ](https://www.rabbitmq.com/), [MongoDB](https://www.mongodb.com/), [PostgreSQL](https://www.postgresql.org/), [Docker](https://www.docker.com/)

[**Pos**](https://github.com/NHadi/Pos) (**Microservices, DDD, CQRS**) - is a sample project demonstrating the use of microservices.

[**POPForums**](https://github.com/POPWorldMedia/POPForums) (**Sample**) (**MIT**) - is a forum application.

[**Pacco**](https://github.com/devmentors/Pacco) (**Sample**) (**MIT**) - microservices solution in .NET Core 3.1 based on the cloud-agnostic approach.

[**Awesome collection of .NET Core Static Analyzers**](https://github.com/bharatdwarkani/awesome-dotnet-core-static-analyzers/blob/master/README.md) - static Analyzers using the .NET Compiler Platform (Roslyn) to enforce and improve code quality

[**Awesome collection of Libraries to build SaaS applications**](https://github.com/bharatdwarkani/awesome-libraries-to-build-sass-application-dotnet-core) - Awesome collection of libraries to build Software as a Service (SaaS) application using ASP.NET Core

Visit my site [**Share Tech Links**](https://sharetechlinks.com/) for curated list of tech related interesting blog links.

**Pull requests are welcome for including new items in this list.**

This list was first posted in [Syncfusion Blog](https://www.syncfusion.com/blogs/post/awesome-list-of-top-asp-net-core-based-open-source-application-projects.aspx)