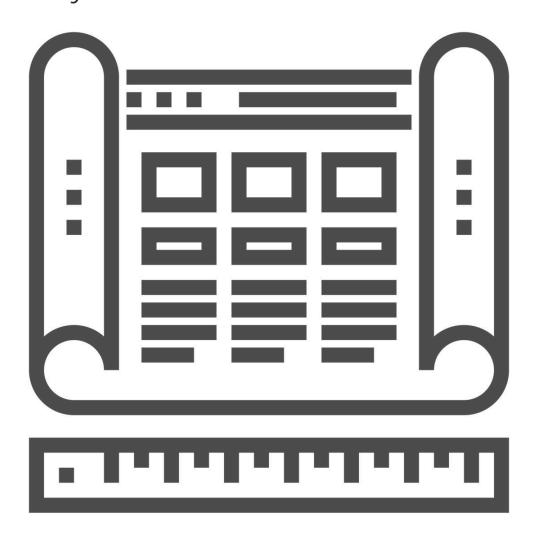
# .NET BLUEPRINTS

5 brilliant .NET reference apps to improve your software architecture skills



This PDF summarizes and links to various public GitHub repositories. All repositories remain owned by their respective authors. This resource is for educational purposes only.

# 1. Evolutionary Architecture by Example

#### REPO INFORMATION

#### GitHub (2.3k stars)

https://github.com/evolutionary-architecture/evolutionary-architecture-by-example

#### Main NuGet Packages Used

- Dapper
- EntityFrameworkCore
- FluentValidation
- MassTransit
- MediatR
- Shoudly
- Testcontainers
- xUnit

#### **Features**

#### DESCRIPTION

Right from the start, something different.

Instead of showing you a single architecture, **Evolutionary Architecture by Example** repo walks you through the stages of app evolution.

It starts simple, then adds module separation, then microservices, and finally, DDD.

Step-by-step, it shows how to evolve an application's design as requirements change — helping you avoid both overengineering and oversimplification.

Perfect if you want to understand how architectural decisions happen and how code evolves as the app grows.

# 2. eShop Reference Application

#### REPO INFORMATION

#### GitHub (7.7k stars)

https://github.com/dotnet/eShop

#### Main NuGet Packages Used

- Aspire
- EntityFrameworkCore
- FluentValidation
- OpenTelemetry
- Polly
- MediatR
- NSubstitute
- Yarp

#### **Features**

Clean Arch | ♣ Microservices | ★
Modular Monolith | ➡ Diagrams | ♠
Docker | ⋪ CI/CD | ▼ Tests | ○ Cloud
Services | ♠ Security

#### **DESCRIPTION**

The **eShop** reference application shows a complete e-commerce cloud-native microservices architecture built with .NET.

It covers everything: modular monoliths, service decomposition, cloud readiness, resilience with Polly, API Gateway patterns, identity and authentication, and event-driven communication.

The .NET team maintains this repo. And it's perfect if you want to see how a production-grade .NET backend is designed for real-world scalability.

### 3. Modular Monolith with DDD

#### REPO INFORMATION

GitHub (11.9k stars)

https://github.com/kgrzybek/modular-monolith-with-ddd

#### Main NuGet Packages Used

- Autofac
- Dapper
- EntityFrameworkCore
- FluentValidation
- Polly
- Quartz
- NSubstitute
- Serilog

#### **Features**

🟛 Clean Arch | 🛠 Modular Monolith |

듣 Diagrams | 📦 Docker | 🗸 Tests

#### **DESCRIPTION**

**Modular Monolith with DDD** is not another simplistic repository implementing the "Orders" domain. Instead, it shows an application with production-grade practices.

It uses the Meeting Groups domain to create an application with clear module separation, event-driven communication, identity, authentication, Docker, and CI/CD support.

Maintained by a seasoned architect, it is ideal if you want to learn to build scalable enterprise applications using DDD, CQRS, and vertical slicing – all the while keeping the code modular and evolution-ready.

### 4. FullStackHero .NET 9 Starter Kit

#### REPO INFORMATION

#### GitHub (5.6k stars)

https://github.com/fullstackhero/dotnet-starter-kit

#### Main NuGet Packages Used

- Ardalis.Specification.EntityFrameworkCore
- EntityFrameworkCore
- FluentAssertions
- FluentValidation
- Hangfire
- MediatR
- OpenTelemetry
- Serilog

#### **Features**

#### DESCRIPTION

This repository introduces a comprehensive starter kit using the modern .NET stack.

With a focus on modular monolith architecture, multitenancy, cloud readiness, and the presence of both backend (Web API) and frontend (Blazor), the **FullStackHero Starter Kit** is here to save hours of coding time.

Not only that, it also includes infrastructure tools like Docker and Terraform, and features like authentication, logging, monitoring, CQRS with MediatR, and support for multiple databases.

This repository is a solid choice if you require an enterprise-grade, well-structured foundation for a web app.

### 5. Contoso University

#### REPO INFORMATION

#### GitHub (1.4k stars)

https://github.com/jbogard/ContosoUniversityDotNetCore-Pages

#### Main NuGet Packages Used

- AutoMapper
- EntityFrameworkCore
- FluentValidation
- MediatR
- Moq
- Respawn
- Shouldly
- xUnit

#### **Features**

#### **DESCRIPTION**

**Contoso University** simulates a complete university system where you can manage students, courses, departments, and instructors.

It was created by Jimmy Bogard, a creator of MediatR, AutoMapper, Respawn libraries, and the Vertical Slice Architecture concept.

Therefore, it represents a sample app of how to divide project features into vertical slices.