

- ✔ Personal Recommendation / Opinion
- ✔ Alternative Options
- ✔ Optional / Learn anytime

Special thanks for the roadmap contribution

Moien Tajik

- ✔ Git - Version Control
- ✔ GitHub, GitLab, BitBucket
- ✔ HTTP / HTTPS Protocol
- ✔ Data Structures and Algorithms

- ASP.NET Core Basics
 - ✔ MVC
 - ✔ REST
 - ✔ Minimal APIs
 - ✔ Razor Pages
 - ✔ Razor Components
 - ✔ Middlewares
 - ✔ Filters and Attributes
 - ✔ App Settings and Configs

- ✔ Entity Framework 2nd Level Cache

- ✔ Search Engines
 - ✔ Elastic Search
 - ✔ Solr
- ✔ Cloud
 - ✔ Cosmos DB
 - ✔ Dynamo DB
- ✔ Relational
 - ✔ SQL Server
 - ✔ PostgreSQL
 - ✔ MariaDB
 - ✔ MySQL
- ✔ NoSQL
 - ✔ MongoDB
 - ✔ Cassandra
 - ✔ LiteDB
 - ✔ CouchDB

- ✔ Web Sockets
- ✔ SignalR Core

- Message Brokers
 - ✔ ActiveMQ
 - ✔ RabbitMQ
 - ✔ Azure Service Bus
- Message Bus
 - ✔ NServiceBus
 - ✔ Mass Transit
 - ✔ EasyNetQ
- API Gateway
 - ✔ Ocelot
 - ✔ YARP
- Containerization
 - ✔ Docker
 - ✔ Kubernetes
- Other
 - ✔ .NET Aspire
 - ✔ Orleans
 - ✔ SteelToe
 - ✔ Dapr

ASP.NET Core

Find the detailed version of this roadmap along with other similar roadmaps

roadmap.sh

- Learn the Basics of C#
- General Development Skills

- ✔ C#
- ✔ .NET
- ✔ .NET CLI
- ✔ StyleCop Rules

- Database Fundamentals
- Object Relational Mapping

- ✔ SQL Basics
- ✔ Database Design Basics
- ✔ Stored Procedures
- ✔ Constraints
- ✔ Triggers

- ✔ RepoDB
- ✔ Dapper
- ✔ NHibernate
- ✔ Redis
- ✔ Memcached
- ✔ Distributed Cache
- ✔ Memory Cache

- Entity Framework Core
 - ✔ Framework Basics
 - ✔ Code First + Migrations
 - ✔ Change Tracker API
 - ✔ Lazy, Eager, Explicit Loading

- ✔ Scoped
- ✔ Transient
- ✔ Singleton

- Caching

- Dependency Injection

- Life Cycles

- Databases

- DI Containers
 - ✔ Microsoft.Extensions
 - ✔ AutoFac

- ✔ Serilog
- ✔ NLog

- Log Frameworks

- ✔ GraphQL .NET
- ✔ GraphQL
- ✔ REST
- ✔ Gridify
- ✔ Odata

- Real-Time Communication

- API Clients and Communication

- gRPC

- Object Mapping

- ✔ AutoMapper
- ✔ Mapperly
- ✔ Manual Mapping

- ✔ Native Background Service

- Task Scheduling

- ✔ Hangfire
- ✔ Quartz
- ✔ Coravel

- Testing

- E2E Testing
 - ✔ Playwright
 - ✔ Puppeteer
 - ✔ Cypress
- Integration Testing
 - ✔ WebApplicationFactory
 - ✔ Test Containers
 - ✔ .NET Aspire
 - ✔ Respawn
- Behavior Testing
 - ✔ Specflow
 - ✔ Light BDD
- Unit Testing Frameworks
 - ✔ MSTest
 - ✔ XUnit
 - ✔ NUnit
- Assertions
 - ✔ Shouldly
- Fake Data Generation
 - ✔ AutoFixture
 - ✔ Bogus
- Mocking
 - ✔ NSubstitute
 - ✔ Moq
 - ✔ FakeItEasy

- Microservices

- ✔ GitHub Actions
- ✔ Azure Pipelines
- ✔ GitLab CI/CD
- ✔ Circle CI

- CI / CD

- Software Design and Architecture

Client-Side .NET

- Template Engines
- Frameworks

- ✔ Blazor
- ✔ .NET MAUI

Good-to-Know Libraries

- ✔ Razor
- ✔ Scriban
- ✔ Fluid
- ✔ Scalar
- ✔ MediatR
- ✔ FluentValidation
- ✔ Polly
- ✔ Marten
- ✔ Nuke
- ✔ Benchmark.NET
- ✔ Distributed Lock

Visit Backend path and see what you missed

Backend Roadmap

TONIC
Synthetic data from scratch

Generate synthetic data
No production data needed!
Start from a varie (schema, sample, etc)

PARTNER CO