.NET Core for backend developers

Create your API project with .NET Core. Core ideas and technics extended with containerization and some architectural concepts. All you need to use ASP.NET Core and go with current trends in Microsoft backend stack.

1. .NET Core introduction
   a. Fundamentals
   b. Ecosystem
   c. Platform roadmap
   d. Tool and .NET CLI

2. API
   a. REST
   b. gRPC
   c. GraphQL

3. ASP.NET Core API (REST)
   a. Basic concepts
      i. Security
      ii. Documentation
      iii. Versioning
      iv. Monitoring
   b. Project structure
   c. Dependency Injection
   d. Middleware pipeline
   e. MVC Handlers
   f. Revers proxy
   g. Configuration System
   h. Routing
   i. Static files
   j. Basic logging
   k. Models, Controllers, View Models

4. Data access
   a. Entity Framework Core
   b. Dapper

5. ASP.NET Core Identity
   a. Authentication
   b. Authorization
   c. Claims

6. Architecture
   a. History
   b. 3 layer architecture vs 4 layer architecture
   c. Clean architecture
   d. CQRS
   e. Event sourcing
   f. Project structure

7. Containers
    a. Basic idea
    b. Docker
    c. Kubernetes
    d. Containers with Azure
    e. Developer environment with docker

8. Deployments
    a. Hosting models
    b. Azure AppService
    c. DevOps culture
    d. PaaS deployments
    e. Packaging
    f. Deployment process