

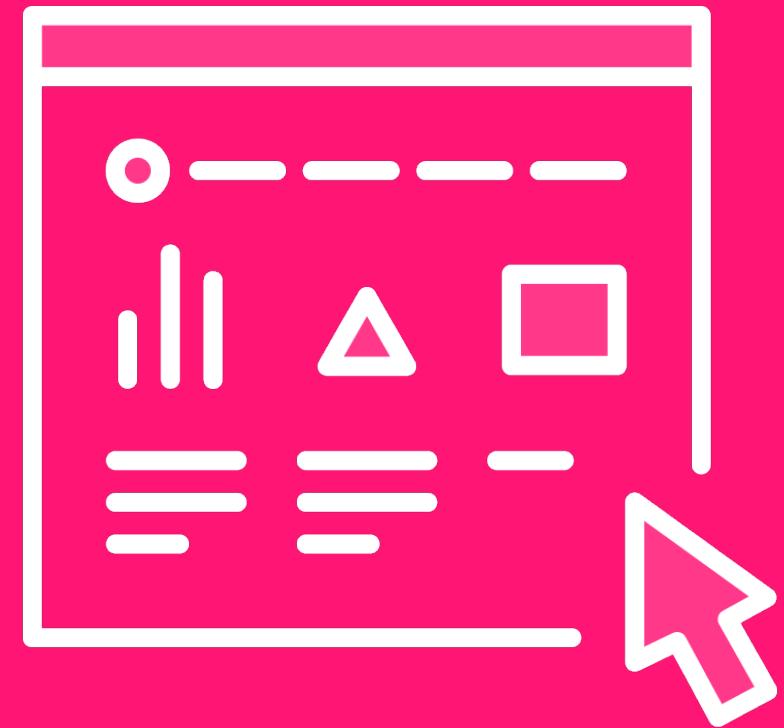
ASP.NET Core Fundamentals



Gill Cleeren

CTO Xebia Microsoft Services Belgium

@gillcleeren



You know HTML and CSS and want to build your
next web application.





HTML and CSS can be used to create static content.



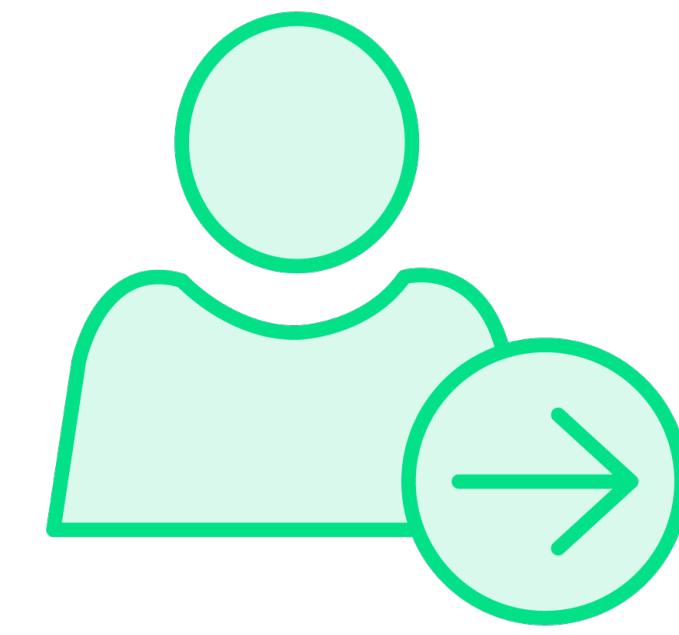
You'll Want to Create Dynamic Content



List of products



Shopping cart



Authenticate





**You'll need a web framework that can render
HTML dynamically.**





**With ASP.NET Core, you
can use C# to create
modern web
applications.**



Overview



What is ASP.NET Core?

What will you learn in this course?

Getting your machine ready



Version Check



This version was created for use with:

- ASP.NET Core 8
- .NET 8
- Visual Studio 2022



Version Check



This course is 100% applicable to:

- ASP.NET Core 6, 7 and 8
- Visual Studio 2022 (any edition)

Most code will work fine with older versions of ASP.NET Core





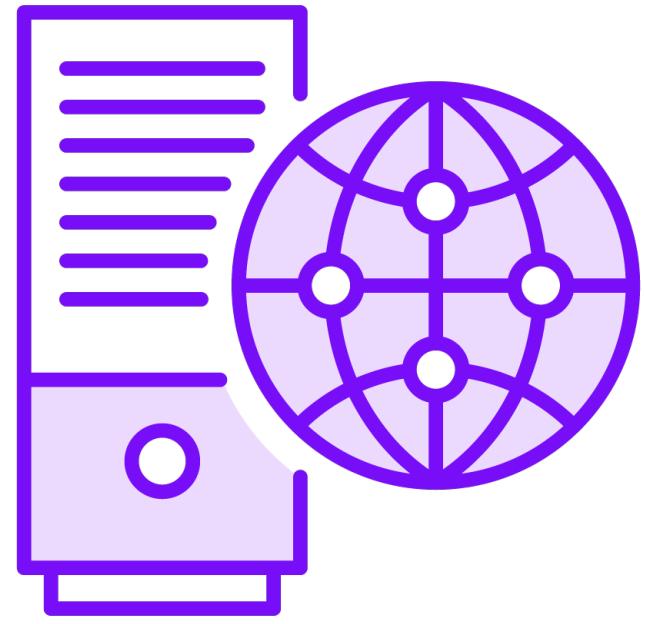
What Is ASP.NET Core?



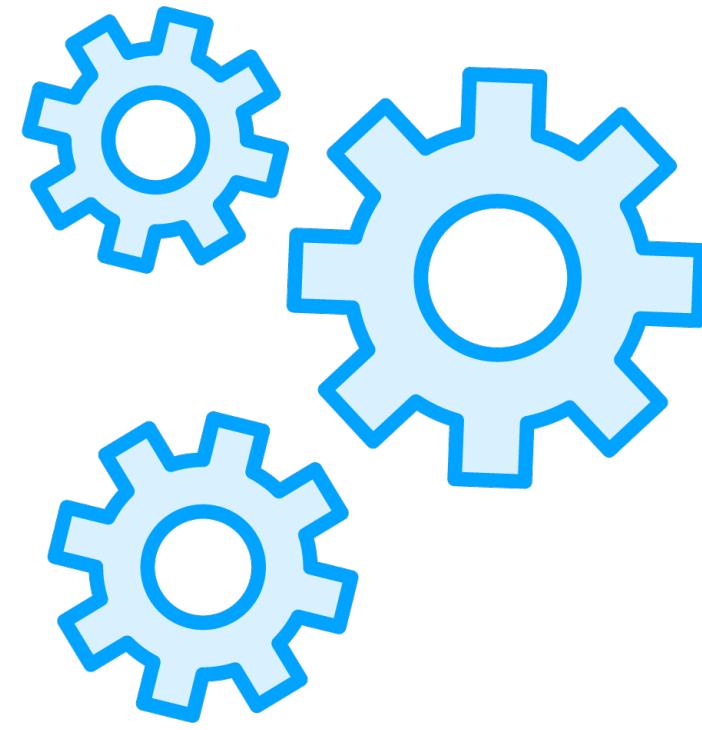
ASP.NET Core is an open-source web framework, created by Microsoft and the community, for building modern web apps and services with .NET.



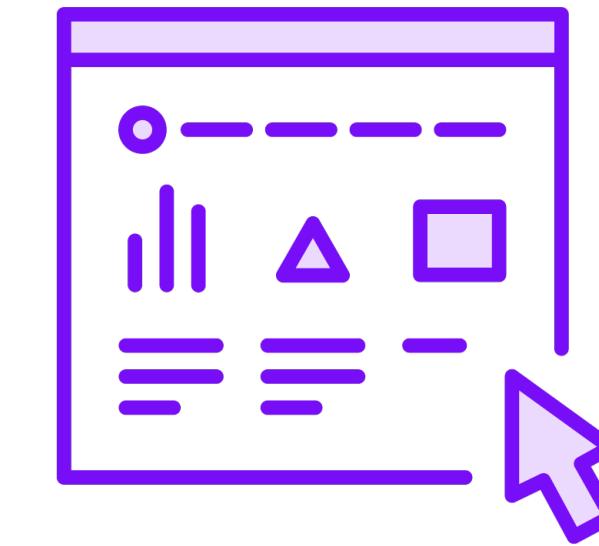
What Can We Build with ASP.NET Core?



**Server-side
rendered applications**



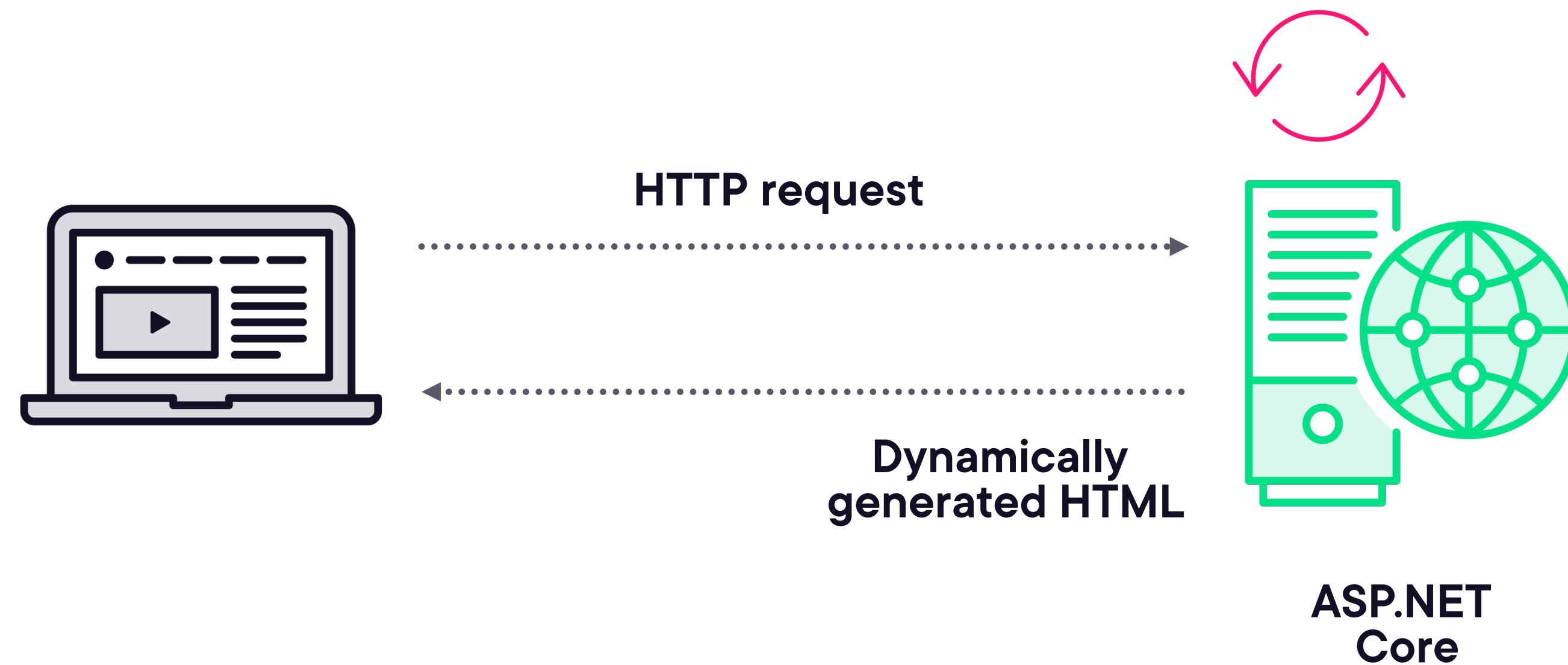
Services



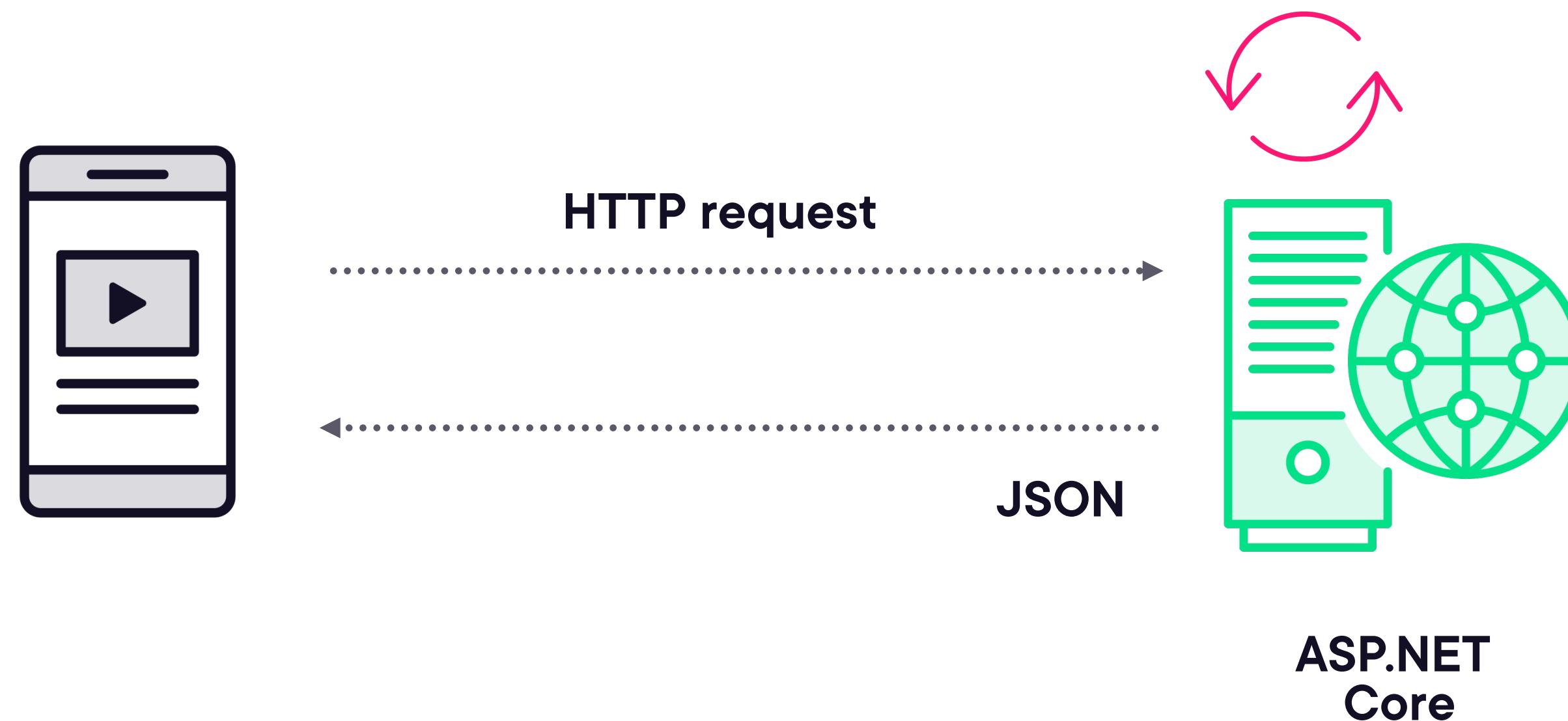
**Client-side
rendered applications**



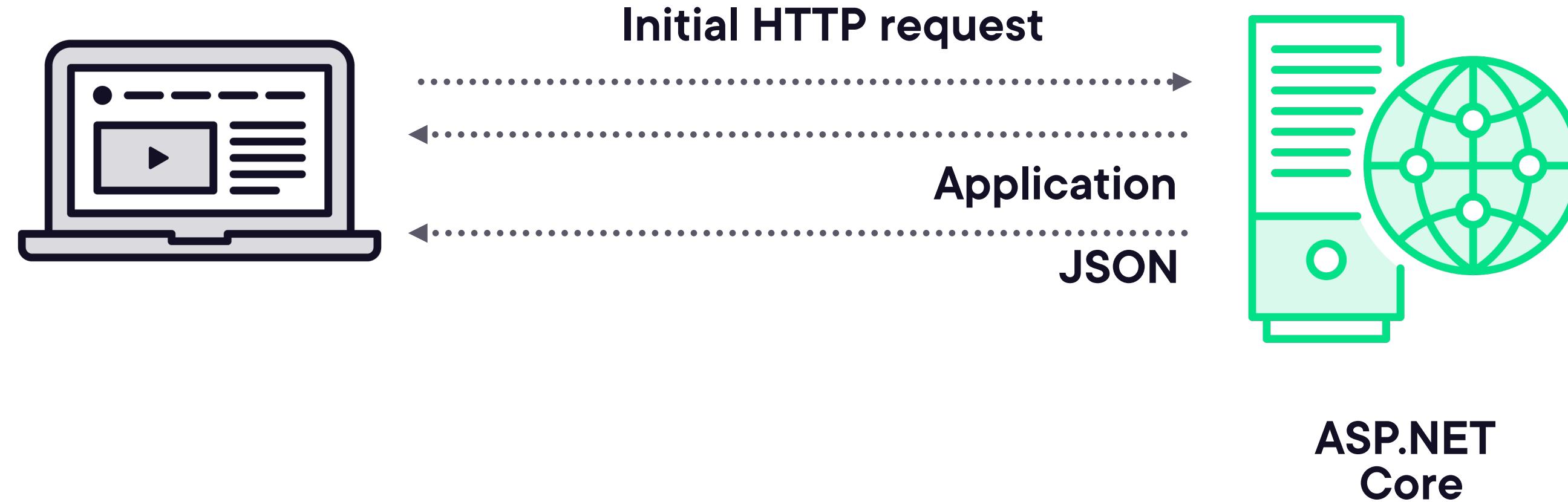
Server-side Rendered Applications



ASP.NET Core Services



Client-side Rendered Applications



Goals of ASP.NET Core

Cross-platform framework

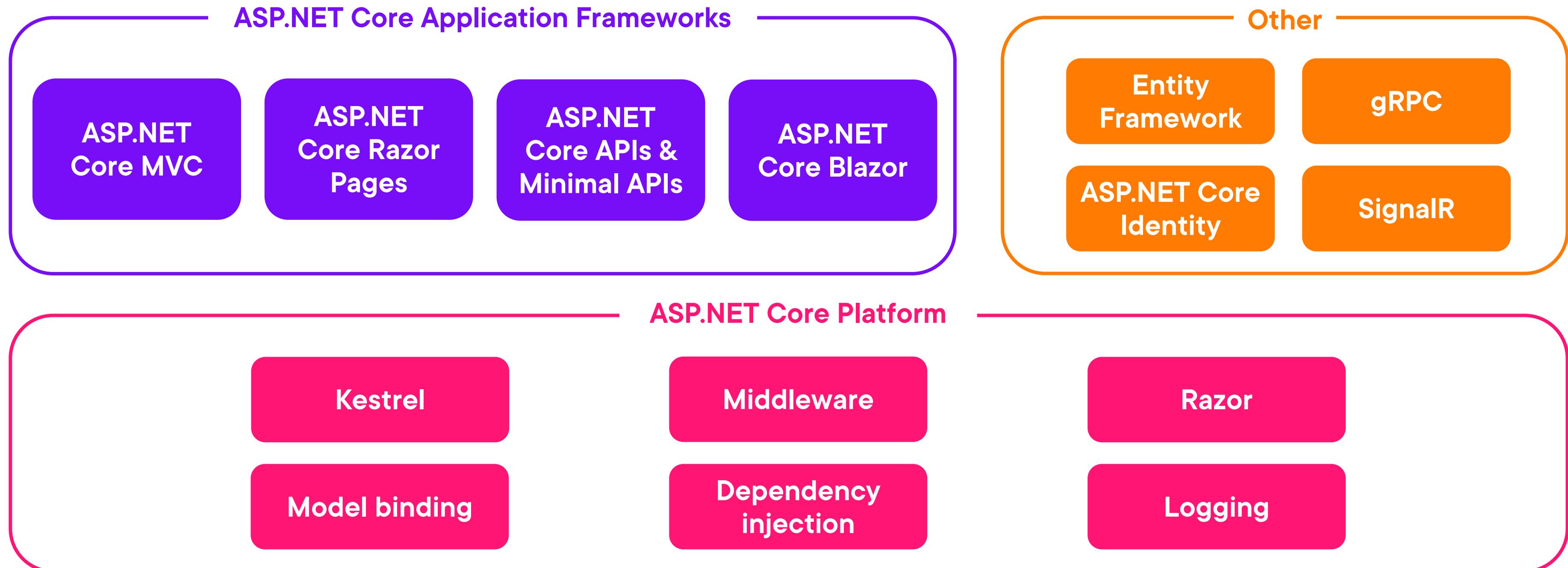
Open source

Faster development cycle

Modular



The Architecture of ASP.NET Core



ASP.NET Core Application Frameworks

ASP.NET Core MVC

ASP.NET Core Razor Pages

ASP.NET Core API & Minimal APIs

ASP.NET Core Blazor



The History of ASP.NET Core

2002
ASP.NET WebForms

2016
ASP.NET Core 1.0 & 1.1

2019
ASP.NET Core 3.X

2023
ASP.NET Core 8

2008
ASP.NET MVC

2017 - 2018
ASP.NET Core 2.X

2020 - 2022
ASP.NET Core 5 – 6 - 7



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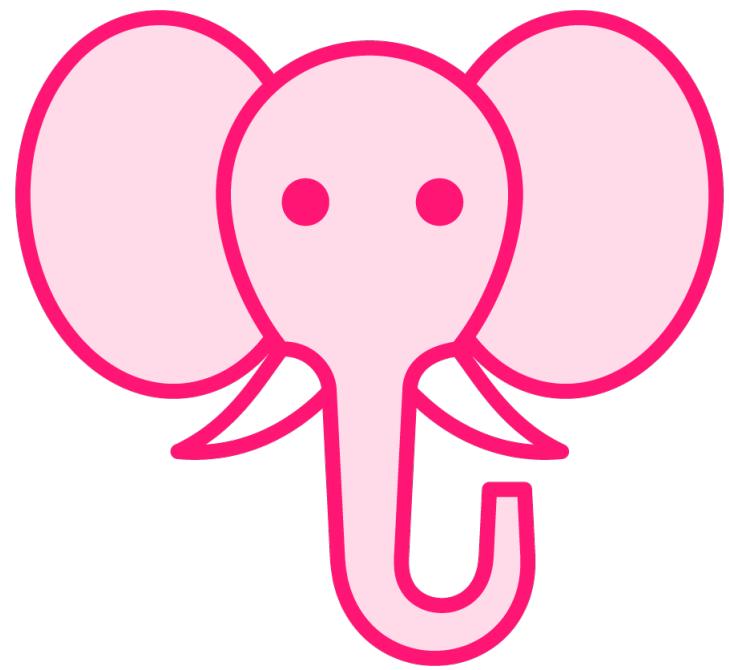
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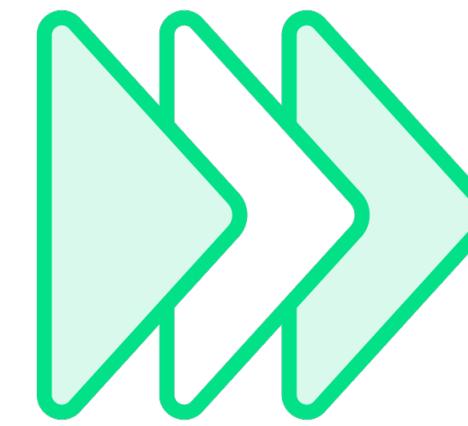
2020 - 2022
ASP.NET Core 5 – 6 - 7



Versions and Support



Long Term support (LTS)
Supported for 3 years



Standard Term Support (STS)
Supported for 18 months





What Will You Learn in This Course?



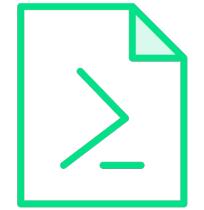
You'll build a full
ASP.NET Core 8 application
using Visual Studio 2022



How We Will Approach This Course



File → New Project



Quite some code...



And then, your first ASP.NET Core 8 application!



What You'll Learn in This Course

ASP.NET Core

Application
Frameworks

Entity Framework
Core

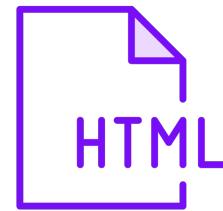
Security

Testing

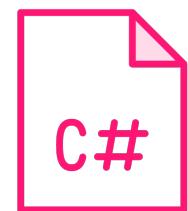
Deployment



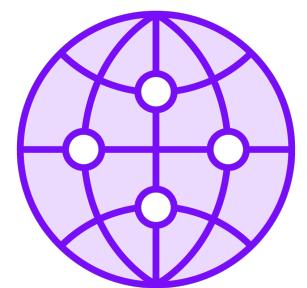
What I Assume You Know



Basic HTML and CSS



C#



Affinity with web development





The Scenario: Bethany's Pie Shop

- Home page and pie list pages
- Shopping cart
- Checkout form
- Interactive search page
- Authentication



Demo



Exploring the finished application



Getting Your Machine Ready



Installation Requirements

Visual Studio

Windows: Visual Studio 2022

Not supported on Mac or Linux

Visual Studio Code

All platforms supported

C# Dev Kit



Demo



Getting your machine ready



Summary



ASP.NET Core is the platform from Microsoft to build modern web applications

Cross-platform and open-source

Evolution of ASP.NET

- Not a direct migration path



Up Next:

Setting up and configuring our site

