Building your First API with ASP.NET Core

GETTING ACQUAINTED WITH ASP.NET CORE



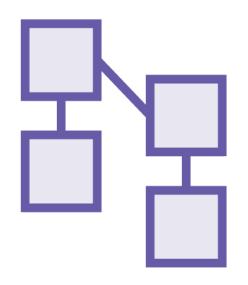
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It's all About Gradual Improvement



From introducing ASP.NET Core...



... to building the API ...



... to using Entity Framework Core



Coming Up



The Big Picture: ASP.NET Core, .NET Core and .NET Standard

Starting an ASP.NET Core Project

Request Pipeline and Middleware



Tooling







Visual Studio 2015 Update 3 or Community Edition

Postman
https://www.getpostman.com/

A browser of choice

https://www.visualstudio.com/free



Framework for building modern internet connected applications

Open-source

https://www.github.com/aspnet/

Cross-platform

- Runs on Windows, Mac, Linux
- Develop on Windows, Mac, Linux



Rethought from the ground up

Granular set of NuGet packages

Smaller application surface area

- Tighter security
- Reduced servicing
- Improved performance

Full .NET Framework

The full framework we know (& love ©)

.NET Core

Modular version of .NET Framework (which we'll grow to know & love ©)

Portable across platforms

Subset of .NET Framework

Web: Windows, Linux, Mac

Other: desktop, devices, phone

Implementation of .NET Standard



Full .NET Framework

Target all dependencies we're used to

.NET Core

Modularity

Small footprint

Performance improvements

Cross-platform

...

.NET Core is the go-to choice



Demo



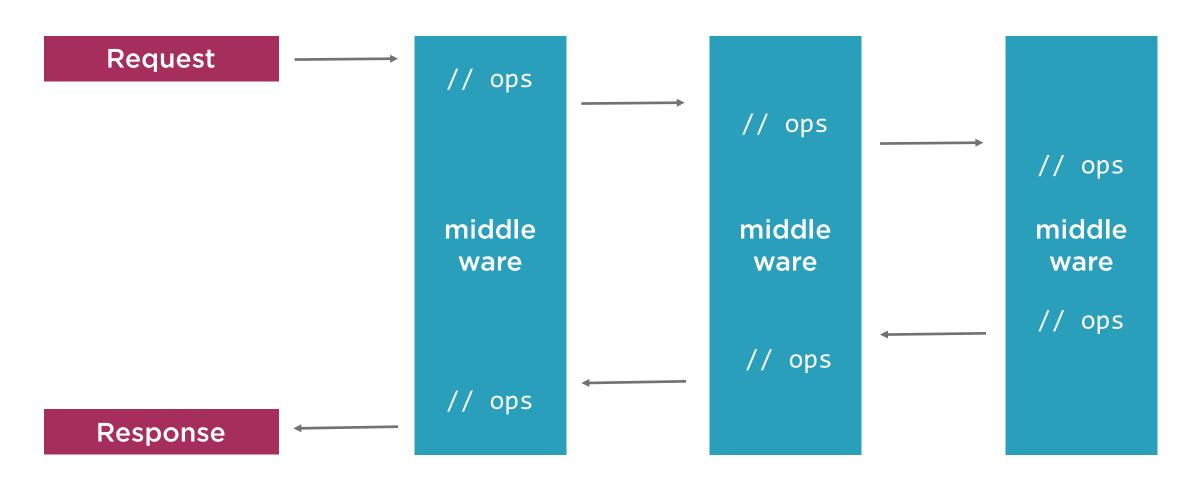
Downloading and Installing .NET Core

Demo

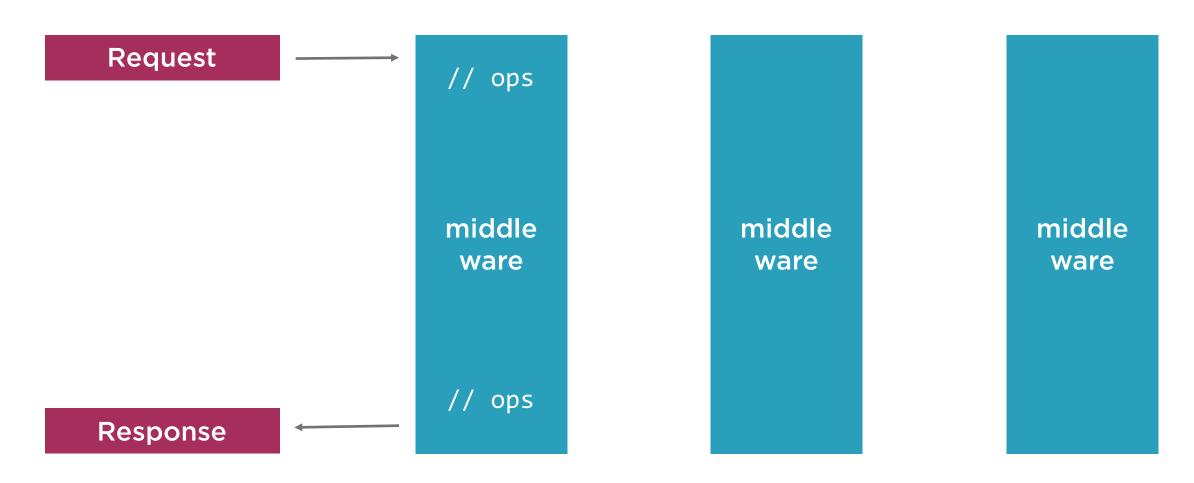


Starting a new ASP.NET Core Project

The ASP.NET Core Request Pipeline & Middleware



The ASP.NET Core Request Pipeline & Middleware



Demo



Configuring the ASP.NET Request Pipeline

Summary



ASP.NET Core

- Rethought from the ground up
- Tighter security, small footprint, crossplatform, better performance
- Runs on full .NET or .NET Core

Program class

Responsible for configuring and running the application

Startup class: entry point of our web application



Summary



ConfigureServices is used to add services to the container, and to configure those services

Configure is used to specify how an ASP.NET application will respond to individual HTTP requests

Use middleware to configure the HTTP request pipeline

ASP.NET Core supports different environments