Building a Web App with ASP.NET Core, MVC, Entity Framework Core, Bootstrap, and Angular

WHAT IS ASP.NET CORE?

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Overview

Build a web app using ASP.NET Core

Learn by doing

Feel free to follow along

You'll see it all

What You'll Learn

ASP.NET Core and MVC 6

HTML5, JavaScript, CSS

Using Bootstrap

Data with Entity Framework Core

Client-side with Angular

What You'll Use

Visual Studio 2017

ASP.NET Core 2

Entity Framework Core 2

Bootstrap 3.3

Angular v4

Questions During the Course?

Why Reinvent ASP.NET?

The Web Stack is *old*!

Weighed down by old, unused code

Machine level upgrades is problematic

Had Reached a Ceiling of Performance

ASP.NET Core is a complete rethinking of the platform.

What Is ASP.NET Core?

Complete re-write of the platform

Cross-platform and open source

Single platform for MVC and WebAPI

Everything is a dependency

Low memory footprint

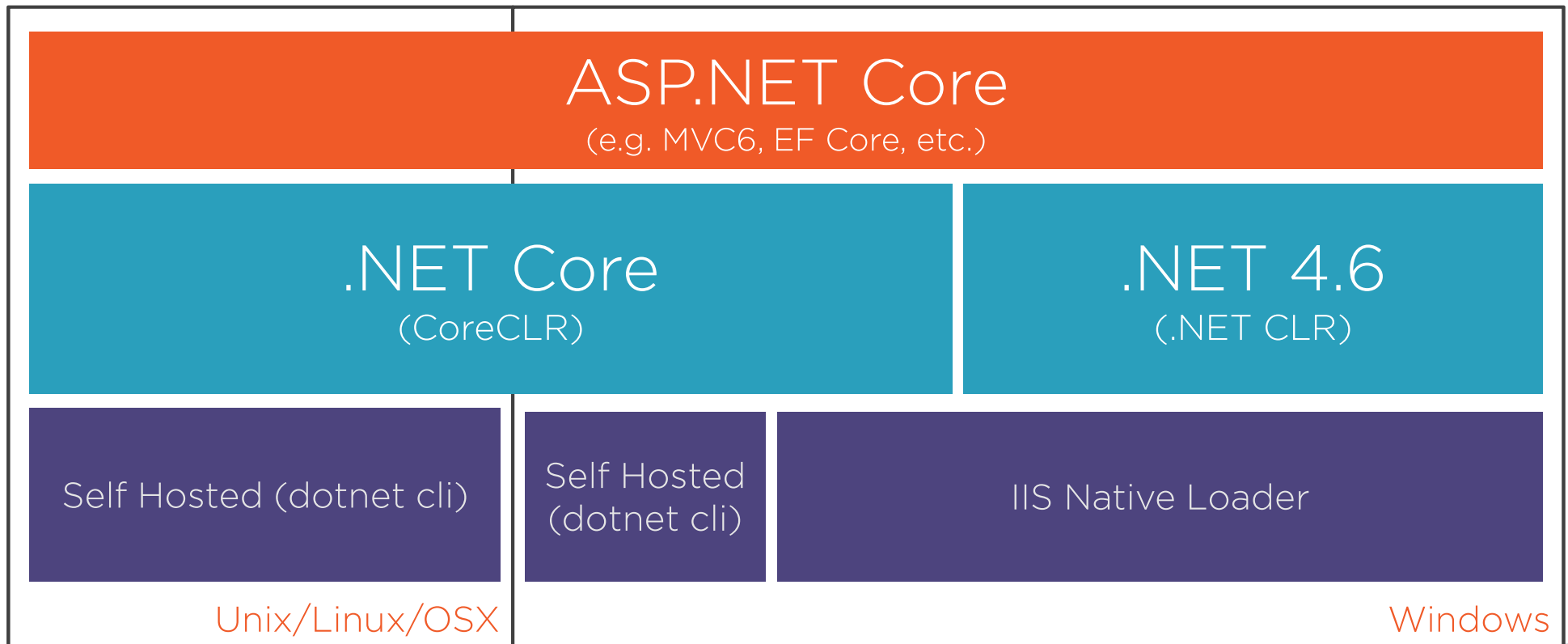Multiple deployment support

Cloud, IIS, Self-Hosting, etc.

Overview

ASP.NET Core
(e.g. MVC6, EF Core, etc.)

.NET Core
(CoreCLR)

.NET 4.6
(.NET CLR)

Self Hosted (dotnet cli)

Self Hosted
(dotnet cli)

IIS Native Loader

Unix/Linux/OSX

Windows

Frameworks?

.NET 4.x
- The .NET you've always known
- Limited to Windows Only

.NET Core
- The cross-platform .NET Framework
- Linux, Mac and Windows support

Completely Composed

Above the .NET Core layer is a Package

- Frameworks are the bootstrap and CLR
- MVC, Logging, Identity are just packages
- Everything is optional

Embraces Open Web Development

Uses existing web development tooling

- NPM for tooling support
- Bower/NPM for client-side libraries
- Grunt and Gulp for build automation
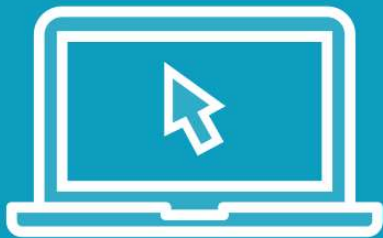- NuGet for .NET Packages
- None of it is required

Deployment Options for ASP.NET Core

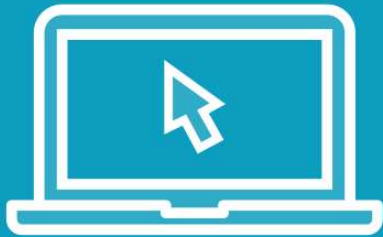|	Windows	Mac	Linux*
Directly on Hardware	✓	✓	✓
In a VM	✓		✓
In a Container	✓		✓
Cloud Hosting	✓		✓

Demo
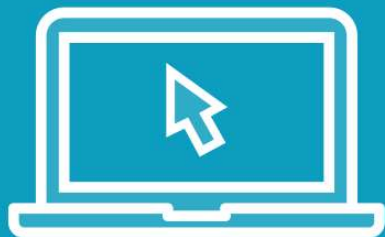
Installing ASP.NET Core
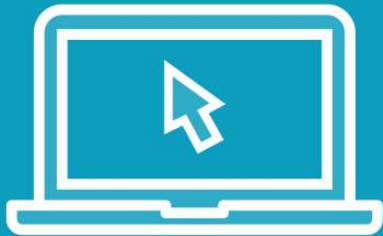
Demo

Hello World

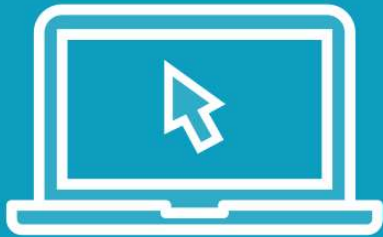# Demo

Installing Visual Studio 2017

Demo

Creating the Project with Visual Studio

Demo

Serving Your First File

What We've Learned

It's a whole new .NET world out there!

You can use the power of the full IDE

Or use command-line if you prefer

Open Source top-to-bottom