Building a Web App with ASP.NET Core, MVC 6, EF Core, and Angular

What Is ASP.NET Core?



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Course Overview



What is this course?

- Build a web app using ASP.NET Core
- Learn by doing
- Feel free to follow along
- You'll see it all

Course Overview



What this course will teach you:

- ASP.NET Core and MVC 6
- HTML5, JavaScript, CSS
- Using Bootstrap
- Data with Entity Framework Core
- Client-side with AngularJS

Course Overview



What is this course built with?

- Visual Studio 2015 w/Update 3
- ASP.NET Core 1.0
- Entity Framework Core 1.0
- Bootstrap 3.3
- AngularJS 1.5

Questions During the Course?



This Module

ASP.NET Core Basics



Why Reinvent ASP.NET?

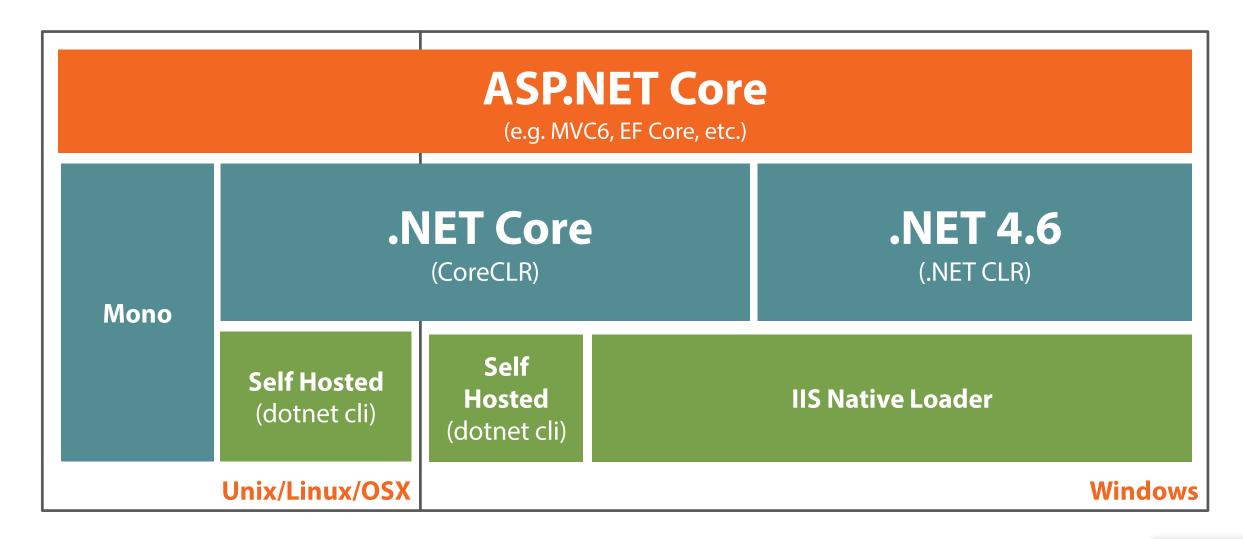
- What was the motivation?
 - The Web Stack is *old*!
 - Weighed down by old, unused code
 - Primarily in System.Web
 - Depending on machine level upgrades to .NET was problematic
 - Performance was as fast as it could be on existing platform

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 (MVC and WebAPI are combined, and WebForms is gone)
 - Everything is a dependency your app will be as lean as you like
 - Low memory footprint
 - Multiple deployment support
 - Cloud, IIS, Self-Hosting, etc.

Overview



Three Frameworks?

- Frameworks are about cross-platform
 - .NET 4.6
 - The .NET you've always known
 - .NET Core
 - The cross-platform .NET Framework (in progress!)
 - Mono
 - The existing open source cross-platform .NET Framework

CoreCLR is a subset of the .NET Framework. You'll need to work around missing functionality outside of ASP.NET Core.

Completely Composed

- Everything above the .NET layer is a NuGet Package
 - The frameworks are the bootstrap and CLR, not much more
 - MVC, StaticFiles, Logging, Configuration, Identity, etc. are all just packages
 - Everything is optional

Embraces Open Web Development

- Uses existing web development tooling
 - NPM for tooling support
 - Bower for client-side library support
 - Grunt and Gulp for build automation
 - NuGet for .NET Packages
 - None of it is required

Installing ASP.NET Core



Hello World



Creating a Project for VS Code



The Empty Project with Visual Studio



Where We're Headed



What We've Learned

What is ASP.NET Core?

It's a whole new .NET world out there! You have full support to go command-line or IDE Open Source top-to-bottom