

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

HTML5, JavaScript, CSS

Using Bootstrap

Data with Entity Framework Core

Client-side with Angular



What You'll Use



Visual Studio 2019

ASP.NET Core 3.1/5

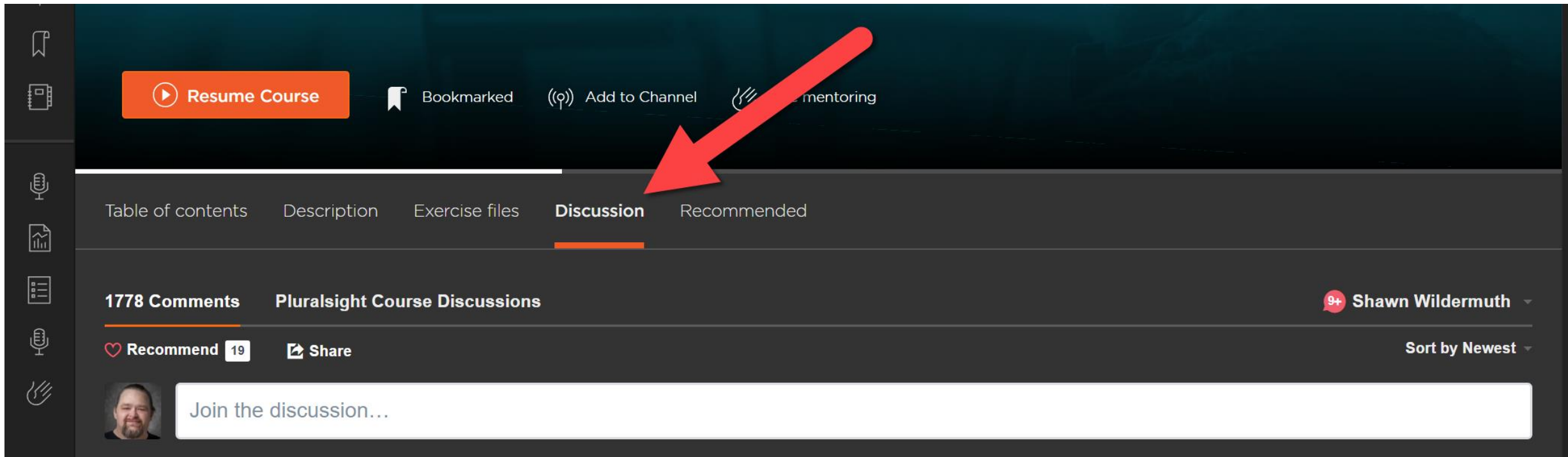
Entity Framework Core 3/5

Bootstrap 4

Angular v11



Questions During the Course?



The screenshot displays the Pluralsight course interface. At the top, there is a dark blue header with a navigation bar. The navigation bar includes a "Resume Course" button (orange with a play icon), a "Bookmarked" status, an "Add to Channel" option, and a "Mentoring" option. Below the navigation bar, there is a horizontal menu with five tabs: "Table of contents", "Description", "Exercise files", "Discussion", and "Recommended". The "Discussion" tab is highlighted with an orange underline, and a large red arrow points to it from the top right. Below the tabs, the "Discussion" section is visible, showing "1778 Comments" and the title "Pluralsight Course Discussions". On the right side of this section, there is a user profile for "Shawn Wildermuth" with a "9+" comment count. Below the title, there are two buttons: "Recommend" (with a heart icon and a "19" count) and "Share" (with a share icon). At the bottom, there is a text input field with the placeholder text "Join the discussion..." and a small profile picture of a man to its left. In the bottom right corner of the entire image, there is a small circular button with a right-pointing arrow.

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

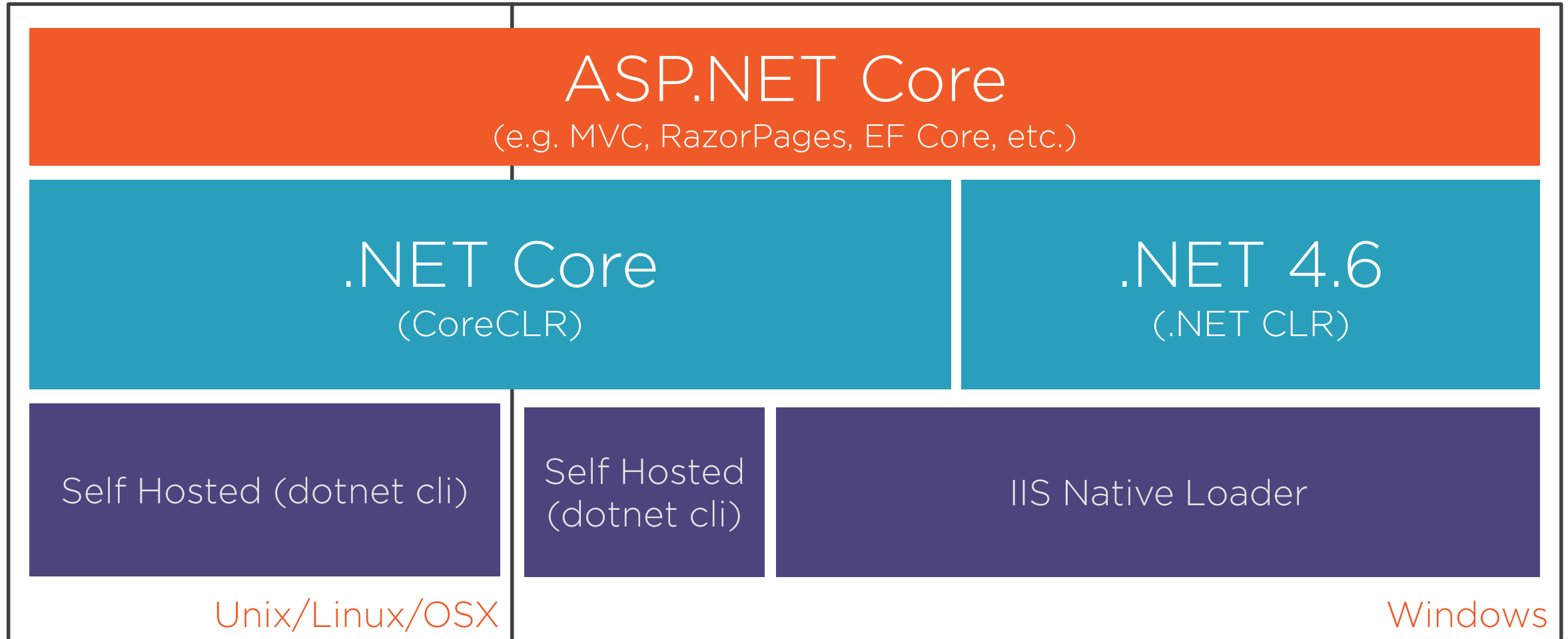
Low memory footprint

Multiple deployment support

Cloud, IIS, Self-Hosting, etc.



Overview



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

.NET 5

- A single .NET
- Cross-Platform
- Merging of the two platforms
- The future of .NET



Support?

.NET Core 3.0

- General Availability

.NET Core 3.1

- Long Term Support

.NET 5

- General Availability

.NET 6

- Long Term 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
- NPM/Yarn/etc. for client-side libraries
- 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 2019



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 the command-line



Open Source top-to-bottom



Up Next:

HTML and CSS Basics

