C# .NET CORE Technology that has bright future

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Things about C# and .NET Core proving me right

- Easy to learn
- Modern language features
- ▶ Versatility. web, mobile, server, desktop applications, game development
- High-quality developer tools
- Generalization of skills
- ▶ .NET Core is an open source framework

Easy to learn



- Very easy to switch from one language to C #
- Pluralsight Excellent training content
- Microsoft Virtual Academy Free Video Tutorials
- Microsoft Getting Started with C# Free interactive tutorials

Modern language features

- Strongly typed
- High-quality class libraries
- Asynchronous programming async / await
- Garbage collection, automatic memory management
- ► LINQ Language Integrated Query
- Package Management
- Common binary files for different platforms and frameworks
- Easy to use frameworks for creating MVC web applications and REST APIs.

Versatility: web, mobile, server, desktop applications ...



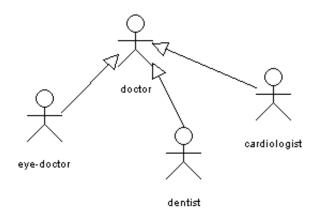
- ▶ Web development ASP.NET MVC, ASP.NET WEB API
- Mobile development Xamarin
- Background services NT Service
- Desktop applications WinForms, WPF, UWP
- Game development Unity

High-quality developer tools

- Visual Studio
- Visual Studio Code (Cross platform)
- JetBrains Resharper, dotPeek



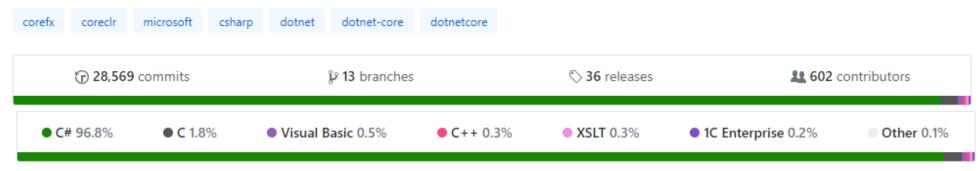
Generalization of skills



- NET has a very good collection of base libraries
- Newtonsoft Popular high-performance JSON framework for .NET
- Entity Framework and MVC

.NET Core is an open source framework

This repo contains the .NET Core foundational libraries, called CoreFX. It includes classes for collections, file systems, console, XML, async and many others. We welcome contributions. https://github.com/dotnet/core



- Now everyone on GitHub can view, edit and contribute to it.
- ▶ F12 People are amazed.

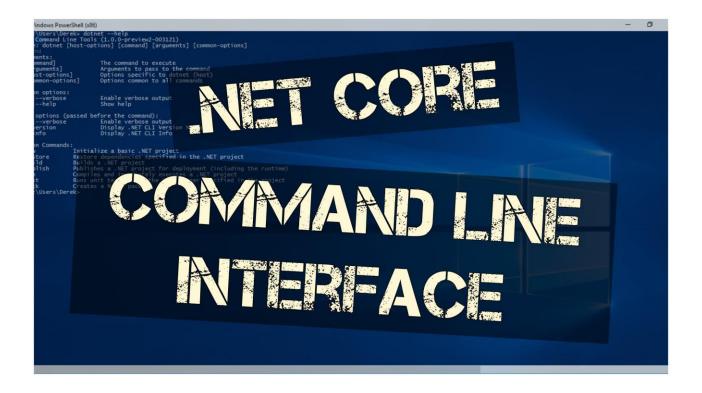
The core is equipped with Agile Development Capability



- Modular infrastructure
- Faster upgrade platform

Command line interface

 All product scenarios can be executed on the command line



Still in development

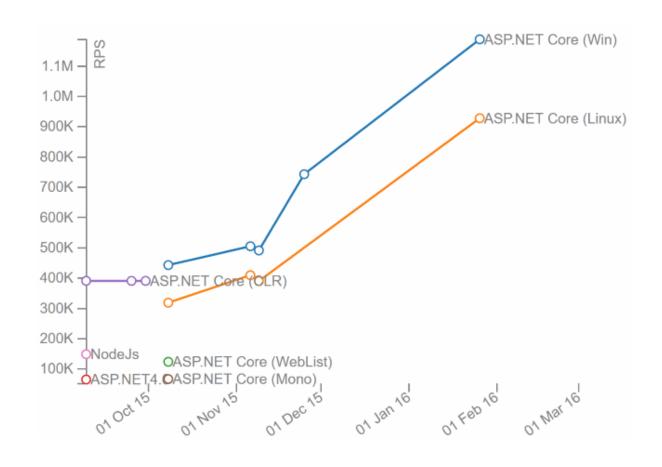
- ▶ .NET Core 1.1
- ▶ .NET Core 2.0 also supports Visual Basic
- ▶ .NET Core 2.1



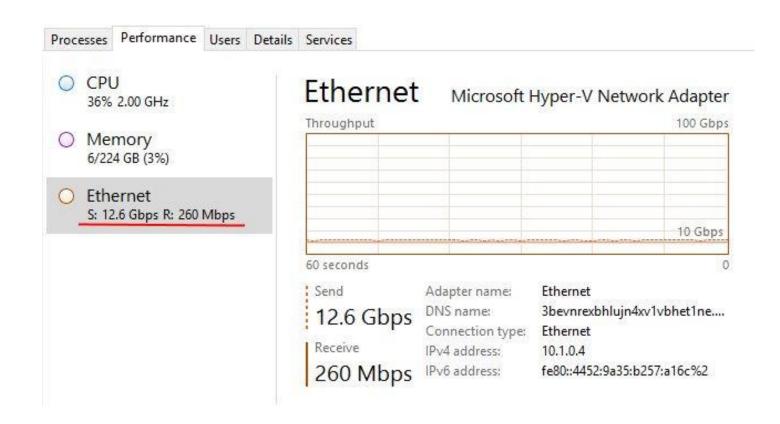
"In a couple of years .NET Core will push Java from the enterprise solutions market" - Jon Skeet author book "C# in Depth"

ASP.NET Core Requests Served Per Second

Exceeds 1.15 Million request/s



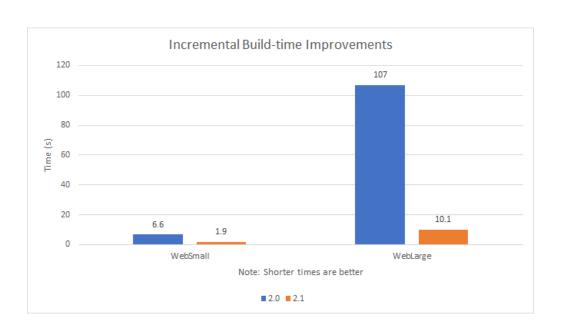
More than 12.6 Gbps of Throughput



In Bonuse. .NET core 2.1 released

- ▶ New platform support, such as: Ubuntu 18.04, Alpine, ARM32.
- Chip support follows: x64, x86, ARM32 on Linux
- Now has a new deployment and extensibility mechanism for tools.
- Runtime Performance Improvements
- Networking Performance Improvements
- New Cryptography APIs
- Build Performance Improvements

Build Performance Improvements



- ▶ The image refers to the 2.1.300 SDK version.
- ► These benchmarks were produced from projects at <u>mikeharder/dotnet-cli-perf</u>.

