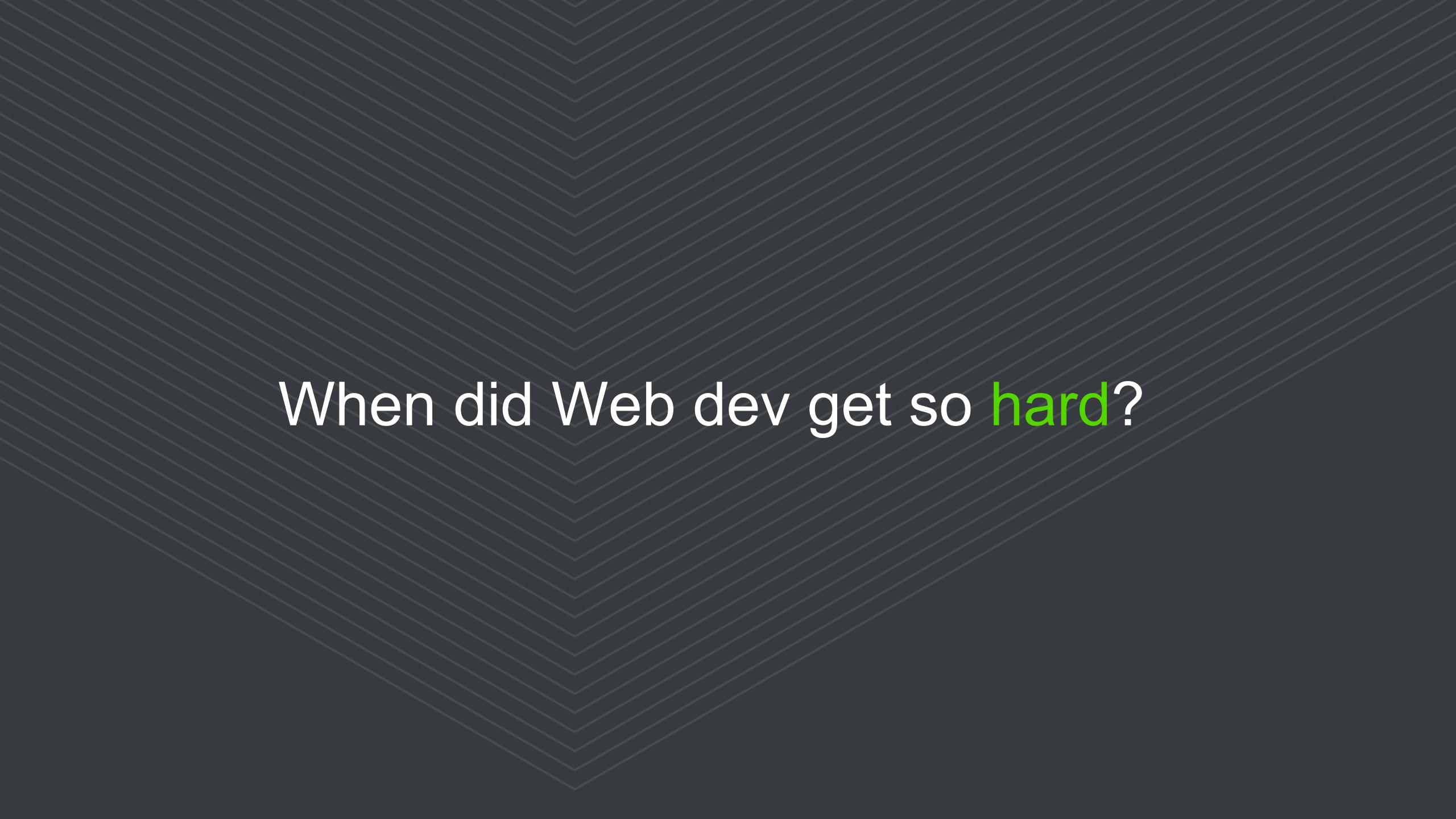




ASP.NET On All Devices!

Sam Basu | [@samidip](https://twitter.com/samidip)

Telerik Developer Advocate | Progress



When did Web dev get so **hard**?



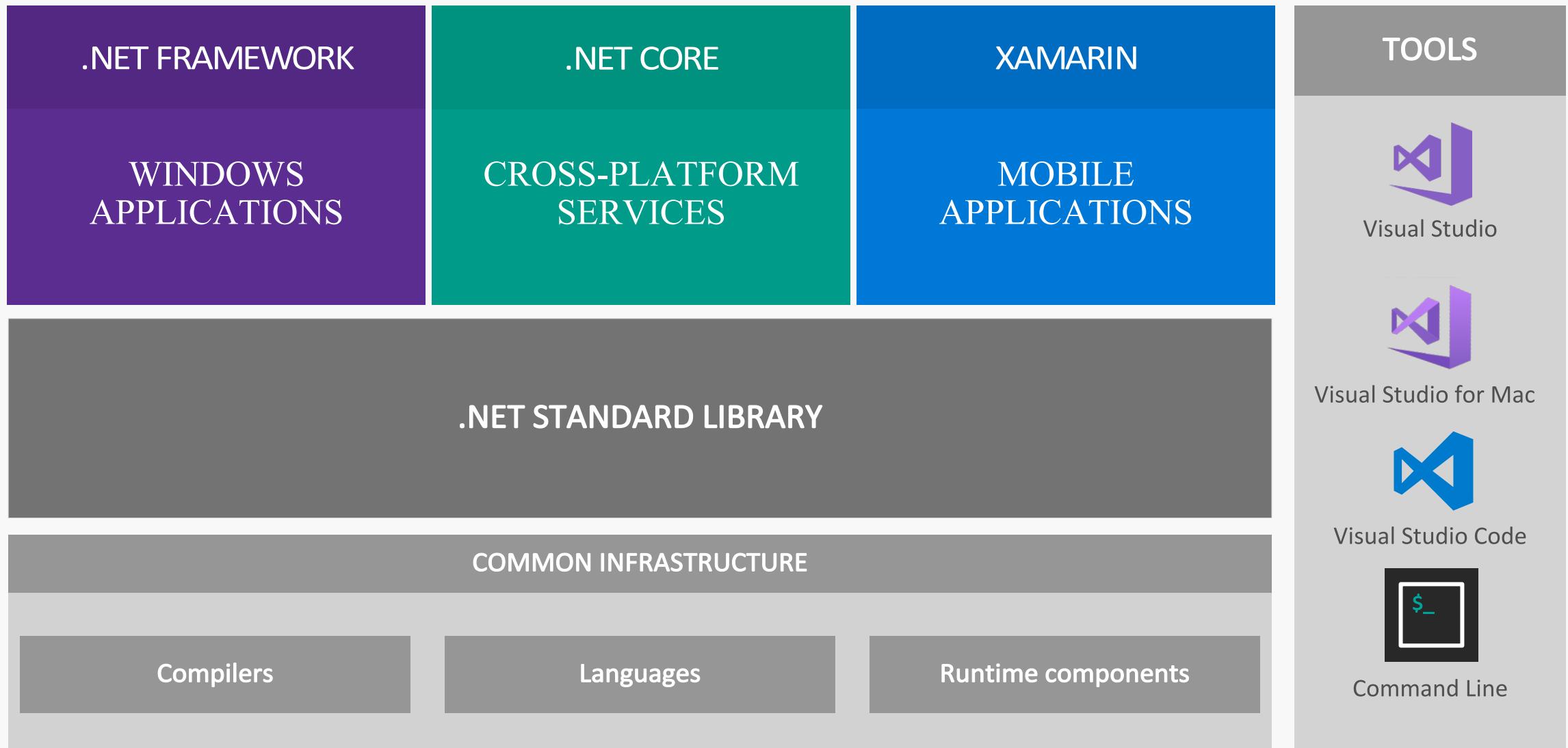


Let's make a beautiful Web
ASP.NET | Frameworks | Tooling | Simplicity



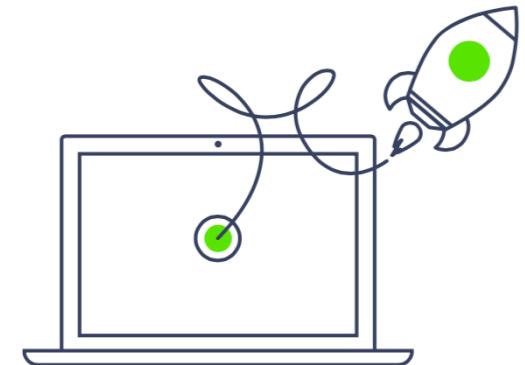
Let's talk .NET & ASP.NET

.NET – The Big Picture

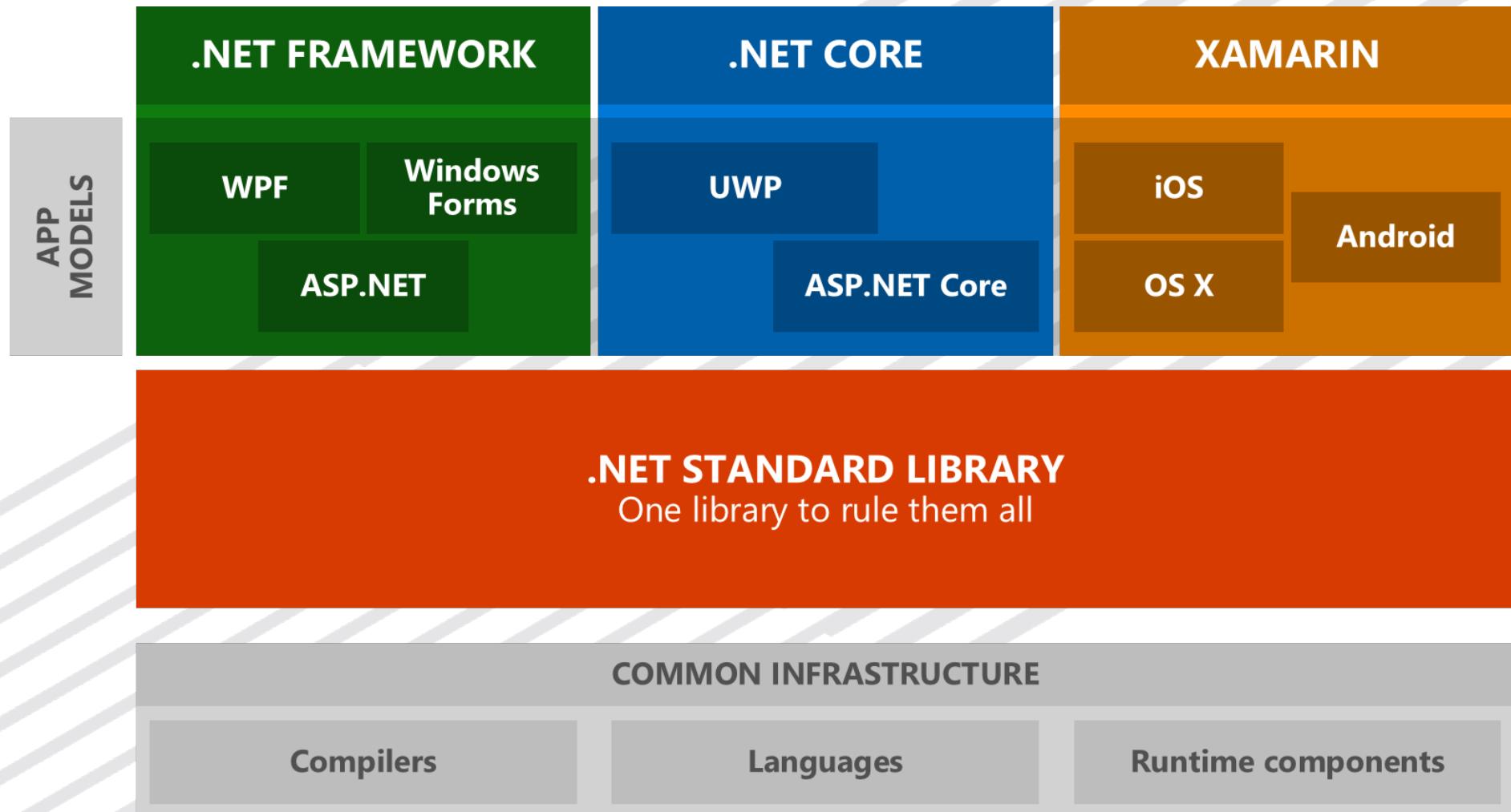


Meet .NET Core 2.0

- ❖ Everything begins @ <http://dot.net>
- ❖ .NET Core is lean, modular & sports a X-Platform CLR
- ❖ Fastest .NET ever
- ❖ Much wider API surface area | 20K new ones
- ❖ Tooling is mature now
- ❖ CLI & Visual tooling given equal preference
- ❖ Simplified project portability amongst CLI & VS family
- ❖ Comes with .NET Standard 2.0 support



Better Unification & Portability



A Grown-Up CLI

- ✓ *dotnet new*
- ✓ *dotnet restore*
- ✓ *dotnet build*
- ✓ *dotnet run*
- ✓ *dotnet test*
- ✓ *dotnet pack*
- ✓ *dotnet publish*

New Commands/Parameters | Easy Extensibility





Few Things in ASP.NET Core

Welcome to ASP.NET Core 2.0

1. One of the fastest full-featured Web frameworks
2. Full support for .NET Core 2.0
3. Backward compatibility on .NET Framework 4.6.1
4. Combined MVC and Web API stack
5. Super fast API backend for Mobile apps
6. New Razor Pages support
7. New project templates
8. Improved Logging, App Insight & Azure tooling

Love thy .NET APIs?

XML

XLinq • XML Document • XPath • Schema • XSL

SERIALIZATION

BinaryFormatter • Data Contract • XML

NETWORKING

Sockets • HTTP • Mail • WebSockets

IO

Files • Compression • MMF

THREADING

Threads • Thread Pool • Tasks

CORE

Primitives • Collections • Reflection • Interop • Linq

ASP.NET Core Out of the Box!

Introducing Razor Pages!

1. New feature in ASP.NET Core MVC
2. Auto-enabled for simple page-focused scenarios
3. Directive turns Pages into MVC Actions .. Handles requests directly
4. Skips the Controller orchestration .. Between MVC & MVVM patterns
5. CSHTML View with optional Code-behind
6. Razor syntax, TagHelpers and MVC validations built-in
7. PageModel contains Handlers to support HTTP verbs
8. Simple convention-based routing .. Served from Pages directory



Razor sharp simplicity!

WebForms & Migration

1. WebForms isn't dead .. just not in ASP.NET Core
2. WebForms gets HTTP2 and Model Binding support
3. WebForms > MVC > Core
4. No magic wand for migration to ASP.NET Core .. but there is some help
5. Evaluate .NET Standard compatibility, API usage and benefits
6. API Port | .NET Portability Analyzer | I Can Has .NET Core

ASP.NET Core WebAPI .. For MBaaS



Holy Package Managers!

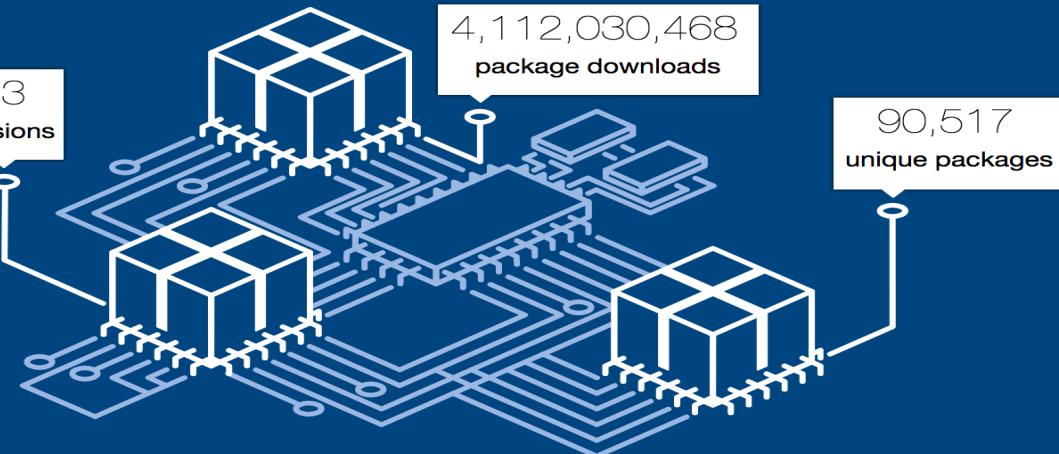
Create .NET apps faster with NuGet



972,313
package versions

4,112,030,468
package downloads

90,517
unique packages



What is NuGet?

NuGet is the package manager for .NET. The NuGet client tools provide the ability to produce and consume packages. The NuGet Gallery is the central package repository used by all package authors and consumers.



Learn



Explore



Create



find packages



sign up or log in

Build amazing things

npm is the package manager for JavaScript and the world's largest software registry. Discover packages of reusable code — and assemble them in powerful new ways.

[Sign up for npm](#)

npm Orgs is powerful collaboration — for free

- Encourage code discovery and re-use within teams
- Publish and control access to your own namespace
- Manage public and private code with the same workflow

[Sign up for Orgs](#)or, [Learn more about Orgs](#)



Bower

A package manager for the web

[Home](#)[Install Bower](#)[Getting started](#)[@bower](#)[Creating packages](#)[API](#)[Configuration](#)[Tools](#)[About](#)[Bower on GitHub](#)

Web sites are made of lots of things — frameworks, libraries, assets, utilities, and rainbows. Bower manages all these things for you.

Bower works by fetching and installing packages from all over, taking care of hunting, finding, downloading, and saving the stuff you're looking for. Bower keeps track of these packages in a manifest file, `bower.json`. How you use packages is up to you. Bower provides hooks to facilitate using packages in your [tools and workflows](#).

Bower is optimized for the front-end. Bower uses a flat dependency tree, requiring only one version for each package, reducing page load to a minimum.

 Search packages (i.e. babel, webpack, react...)

FAST, RELIABLE, AND SECURE DEPENDENCY MANAGEMENT.

[GET STARTED](#)[INSTALL YARN](#) [Star 27,102](#)

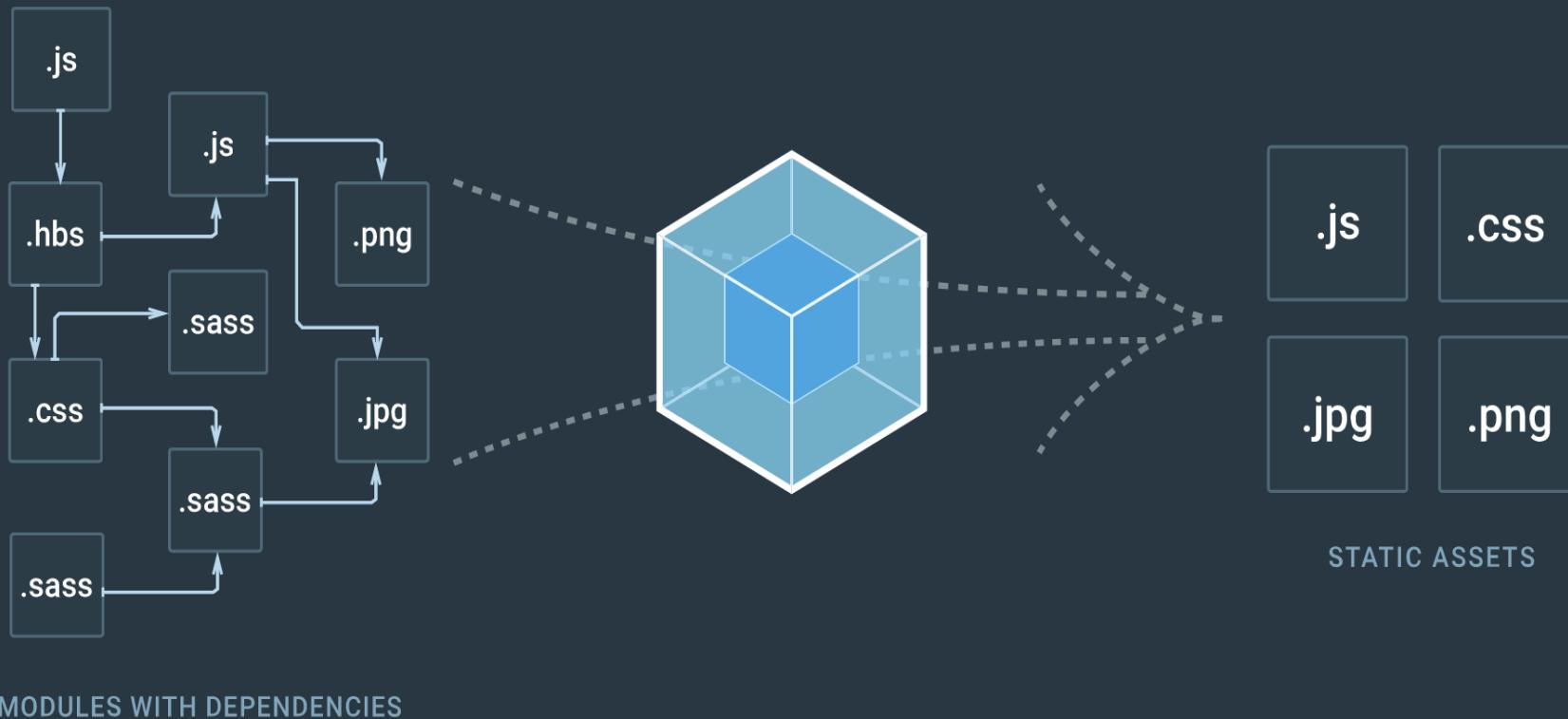
Stable: [v0.27.5](#) • Release Candidate [v0.28.4](#)

Ultra Fast.

Yarn caches every package it downloads so it never needs to download it again. It also parallelizes operations to maximize resource utilization so install times are faster than ever.

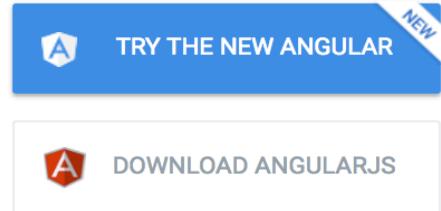


bundle your assets





Let's talk JavaScript!



[VIEW ON GITHUB](#)

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[Follow @angular](#) 241K followers

[DESIGN DOCS & NOTES](#)

Why AngularJS?

HTML is great for declaring static documents, but it falters when we try to use it for declaring dynamic views in web-applications. AngularJS lets you extend HTML vocabulary for your application. The resulting environment is extraordinarily expressive, readable, and quick to develop.

Alternatives

Other frameworks deal with HTML's shortcomings by either abstracting away HTML, CSS, and/or JavaScript or by providing an imperative way for manipulating the DOM. Neither of these address the root problem that HTML was not designed for dynamic views.

Extensibility

AngularJS is a toolset for building the framework most suited to your application development. It is fully extensible and works well with other libraries. Every feature can be modified or replaced to suit your unique development workflow and feature needs. Read on to find out how.



One framework.
Mobile & desktop.

[GET STARTED](#)

ANGULAR MIX

Join us at our newest event, October 2017

[LEARN MORE](#)



DEVELOP ACROSS ALL PLATFORMS

Learn one way to build applications with Angular and reuse your code and abilities to build apps for any deployment target. For web, mobile web, native mobile and native desktop.

React

A JAVASCRIPT LIBRARY FOR BUILDING USER INTERFACES

[Get Started](#)[Take the Tutorial](#)

Declarative

React makes it painless to create interactive UIs. Design simple views for each state in your application, and React will efficiently update and render just the right components when your data changes.

Declarative views make your code more predictable and easier to debug.

Component-Based

Build encapsulated components that manage their own state, then compose them to make complex UIs.

Since component logic is written in JavaScript instead of templates, you can easily pass rich data through your app and keep state out of the DOM.

Learn Once, Write Anywhere

We don't make assumptions about the rest of your technology stack, so you can develop new features in React without rewriting existing code.

React can also render on the server using Node and power mobile apps using [React Native](#).

A Simple Component

React components implement a `render()` method that takes input data and returns what to display. This example uses an XML-like syntax called JSX. Input data that is passed into the component can be accessed by `render()` via `this.props`.

JSX is optional and not required to use React. Try clicking on "Compiled JS" to see the raw JavaScript code produced by the JSX compiler.



★ Star 10,011

Support Consulting Training Team

Doc HUB Blog

Aurelia is a JavaScript client framework for mobile, desktop and web leveraging simple conventions and empowering creativity.

Get Started

aurelia.io
build your imagination



04:56





The Progressive JavaScript Framework

[GET STARTED](#)[GITHUB](#)

Approachable

Already know HTML, CSS and JavaScript? Read the guide and start building things in no time!

Versatile

Simple, minimal core with an incrementally adoptable stack that can handle apps of any scale.

Performant

20kb min+gzip Runtime
Blazing Fast Virtual DOM
Minimal Optimization Efforts

PROUDLY SPONSORED BY



FAME BROKER

Component IO

TO V2EXER

Holy SPA Templates!



Who needs Build Automation?



GRUNT

The JavaScript Task Runner

Latest Version

- Stable: [v1.0.1](#) (npm)
- Development: [master](#) (GitHub)

Ads by [Bocoup](#).

Latest News

[Grunt 1.0.0 released](#)
April 04, 2016

[Grunt 1.0.0 rc1 released](#)
February 11, 2016

[Grunt 0.4.5 released](#)
May 12, 2014

Getting Started

Read the [Getting Started](#) guide for instructions on using Grunt in your projects. Once you've done that, check out a [Sample Gruntfile](#) and learn more about [Configuring Tasks](#).



Why use a task runner?

In one word: automation. The less work you have to do when performing repetitive tasks like minification, compilation, unit testing, linting, etc, the easier your job becomes. After you've configured it through a [Gruntfile](#), a task runner can do most of that mundane work for you—and your team—with basically zero effort.

Why use Grunt?

The Grunt ecosystem is huge and it's growing every day. With literally hundreds of plugins to choose from, you can use Grunt to automate just about anything with a minimum of effort. If someone hasn't already built what you need, authoring and publishing your own Grunt plugin to npm is a breeze. See how to [get started](#).

Available Grunt plugins

Many of the tasks you need are already available as Grunt Plugins, and new plugins are published every day. While the [plugin listing](#) is more complete, here's a few you may have heard of.



Automate and enhance your workflow

```
$ npm install gulp-cli -g  
$ npm install gulp -D  
$ touch gulpfile.js  
$ gulp --help
```

gulp is a toolkit for automating painful or time-consuming tasks in your development workflow, so you can stop messing around and build something.

[GET STARTED](#)

Microsoft.Build (MSBuild)

The Microsoft Build Engine is a platform for building applications. This engine, which is also known as MSBuild, provides an XML schema for a project file that controls how the build platform processes and builds software. Visual Studio uses MSBuild, but MSBuild *does not* depend on Visual Studio. By invoking msbuild.exe on your project or solution file, you can orchestrate and build products in environments where Visual Studio isn't installed.

For more information on MSBuild, see the [MSBuild documentation](#) on docs.microsoft.com.

Build Status

The current development branch is `master`. It builds for .NET Core and the full desktop .NET framework. Changes in `master` will go into the next "major" update of MSBuild.

Runtime\OS	Windows	Ubuntu 14.04	Ubuntu 16.04	Mac OS X
Full Framework	build passing	N/A	N/A	N/A
.NET Core	build passing	build passing	build passing	build passing
Mono	returning soon			

We have entered stabilization for the 15.3 release (corresponding to Visual Studio 15.3) in the `vs15.3` branch.

Runtime\OS	Windows	Ubuntu 14.04	Ubuntu 16.04	Mac OS X
Full Framework	build passing	N/A	N/A	N/A
.NET Core	build passing	build passing	build passing	build passing

[chat on gitter](#)

Source code

- Clone the sources: `git clone https://github.com/Microsoft/msbuild.git`



Need some UI?



Your donations help fund the continued development and growth of **jQuery**.

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Lightweight Footprint

Only 32kB minified and gzipped. Can also be included as an AMD module



CSS3 Compliant

Supports CSS3 selectors to find elements as well as in style property manipulation



Cross-Browser

Chrome, Edge, Firefox, IE, Safari, Android, iOS, and more



Download jQuery v3.2.1

The 1.x and 2.x branches no longer receive patches.

[View Source on GitHub →](#)

[How jQuery Works →](#)

What is jQuery?

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

Corporate Members



Support from our corporate members makes it possible for the jQuery Foundation to continue our work on our JavaScript libraries and pushing the open web forward with events and participation in the standards process. View our [members page](#) for a full list of corporate and individual members.

Other jQuery Foundation Projects



Learn jQuery in your browser!

Resources

- [jQuery Core API Documentation](#)
- [jQuery Learning Center](#)
- [jQuery Blog](#)
- [Contribute to jQuery](#)
- [About the jQuery Foundation](#)
- [Browse or Submit jQuery Bugs](#)

Bootstrap

Build responsive, mobile-first projects on the web with the world's most popular front-end component library.

Bootstrap is an open source toolkit for developing with HTML, CSS, and JS. Quickly prototype your ideas or build your entire app with our Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful plugins built on jQuery.

[Get started](#)[Download](#)

Currently v4.0.0-beta





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Kendo UI®

The Most Complete UI Library for Data-Rich Web Applications

✓ Create beautiful data-rich desktop, tablet and mobile web apps with over 70 customizable UI components.

✓ Speed up development time by 50 percent with responsive layout, powerful data-binding, cross-browser compatibility and ready-to-use themes.

✓ Get started fast with easy integration into your existing stack, comprehensive documentation, large developer community and hands-on training courses.



Kendo UI for jQuery

Kendo UI for Angular

[Download Free Trial](#)[Get Started](#)[Learn more](#)[Learn more](#)

BLOGS 

React and Vue Support Coming to Kendo UI



by Carl Bergenhem

| August 29, 2017

| Mobile, Web, Kendo UI

| 0 Comments



We are announcing official support for React and Vue, and are supporting a pre-release program for customers who want advanced access to the React library.

We're pleased to announce that [Kendo UI](#), the premiere UI component library for web development, is gaining support for the React and Vue frameworks. This expands our current technology support that already includes jQuery and [Angular](#) versions.

These React components are wrapped around the jQuery edition of our components and will serve as a way for fans of Kendo UI to also quickly enhance their React apps with the large set of components already offered with Kendo UI. Our support for React is currently in pre-release availability, with Vue pre-release coming shortly and the official release for both coming in September. We are now making the React components available for developers that are interested participating in our pre-release program.

TOPICS[.NET](#)[Cloud](#)[Mobile](#)[Web](#)[Testing & ALM](#)[Company News](#)search the blogs... **LATEST UPDATES** IN YOUR INBOXSubscribe



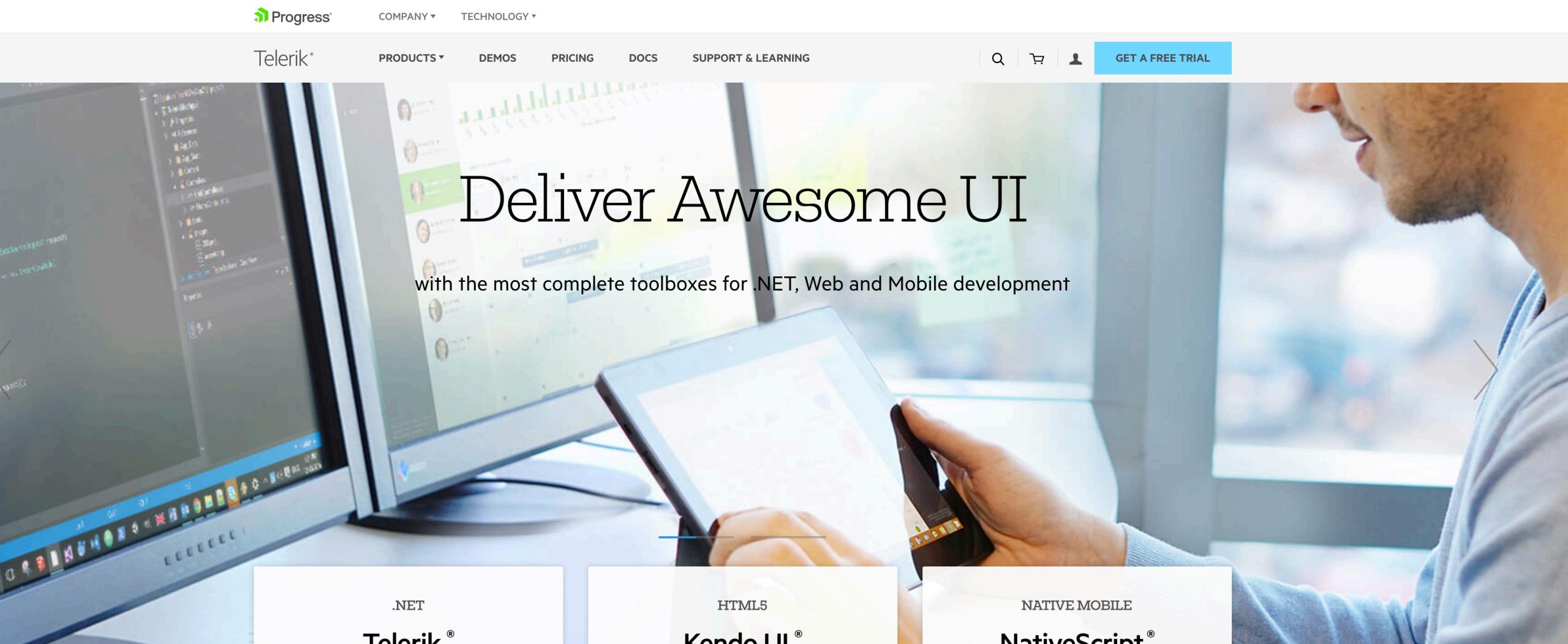
Telerik[®]
by  Progress

The Telerik logo consists of the word "Telerik" in a large, bold, dark gray sans-serif font, with a registered trademark symbol (®) at the top right. Below it, the word "by" is followed by the Progress logo, which is a green stylized arrow icon.

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Any App | Any Platform

Deliver Awesome UI

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.NET tools for .NET Ninjas—UI controls, reporting and developer productivity tools

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Build Web Forms apps for any browser and device in half the time

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Build rich and responsive web apps for any device twice as fast

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Telerik UI for ASP.NET Core

The most complete UI toolset for cross-platform responsive web and cloud development

Try now

.NET Application Architecture

Application Architecture Guidance

Practical advice, best practices, and sample applications for using .NET with microservices, Docker containers, Kubernetes, Xamarin, ASP.NET, Azure, Service Fabric, and more.

Got suggestions or feedback?

[Provide Feedback](#)



Architecture Guides



Microservices and Docker Containers

Microservices are small, modular, and independently deployable services. Docker containers (for Linux and Windows) simplify deployment and testing by bundling a service and its dependencies into a single unit, which is then run in an isolated environment.

[Architecture eBook: PDF | Web](#)

[DevOps eBook: PDF](#)

[Video](#)

[Sample App](#)

[Patterns](#)



Web Applications with ASP.NET

ASP.NET Core allows you to build high-performance, cross-platform web applications. Patterns like MVC and built-in support for Dependency Injection allow you to build applications that are easier to test and maintain.

[Architecture eBook: PDF | Web](#)

[Sample App](#)



Deploying to the Cloud with Azure

Production ready cloud applications need to be built for scalability, monitoring, management, security, resiliency, and more. The patterns covered in this guidance include example implementations for Microsoft Azure.

[Reference Architectures](#)

[Best Practices](#)

[Patterns](#)

[Free Course](#)



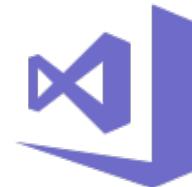
Mobile Applications with Xamarin

Xamarin allows you to build native Android, iOS, and Windows applications using .NET. Common patterns, such as MVVM, combined with good application layering, will maximize code sharing and result in an application that is easier to understand, test and maintain.

[Architecture eBook: PDF | Web](#)

[Sample App](#)

[Patterns](#)



Thank You!

Let's keep chatting .. [@samidip.](https://twitter.com/samidip)