## Blazor: Getting Started

#### BUILDING YOUR FIRST BLAZOR APPLICATION



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#### Overview



What will you learn from this course?
Hello Blazor
The different hosting models of Blazo

The different hosting models of Blazor

Understanding File → New Project

Creating a first Blazor app

Debugging a Blazor app



#### What Will You Learn from This Course?



# This course will teach you how to build your first Blazor application.



#### How We Will Approach This Course



File → New Project...



Quite some code...



And then, a full Blazor application!



#### What I Assume You Know



HTML and CSS



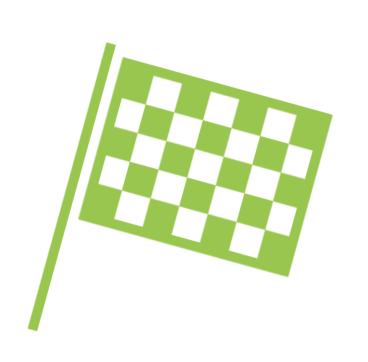
C#



Some Razor is recommended



#### What You Need to Have Installed



#### Visual Studio 2019 (16.6 or higher)

https://visualstudio.microsoft.com/vs/

#### .NET Core 3.1 SDK

https://dotnet.microsoft.com/download /dotnet-core/3.1

.NET 5 compatible

A browser





#### The Scenario: Bethany's Pie Shop HRM

- List of employees
- Detail page
- Add new employee
- Navigation



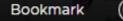
Taking a look at the finished application

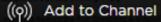


# **Blazor: Getting Started**











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Recommended





### Hello Blazor



# Blazor is a framework to build interactive web Uls using C# and HTML.



#### Hello Blazor



Based on WebAssembly or run on server



No plugin, based on web standards



Integrate with JavaScript



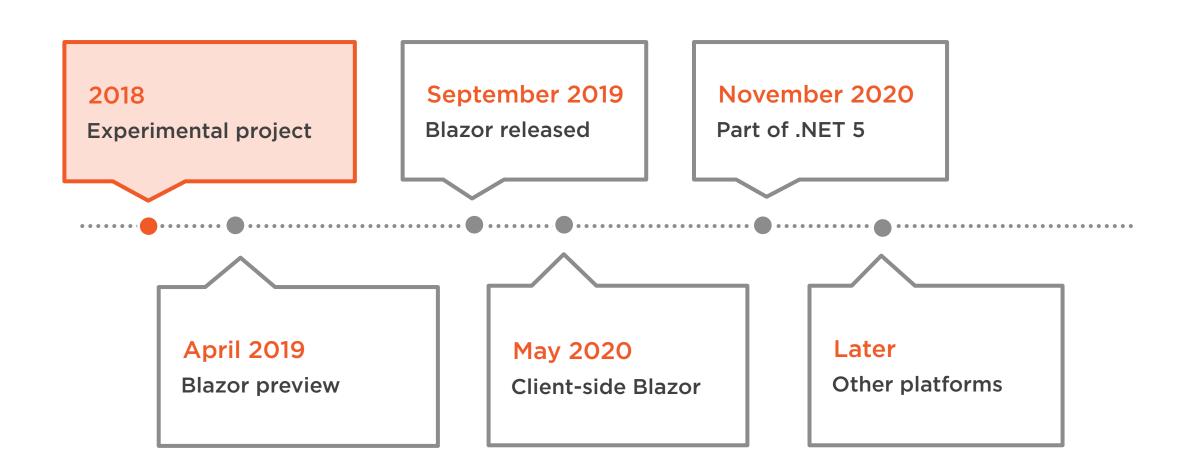
Benefits of Visual Studio and .NET including performance and libraries



# Leverage your C# skills to build interactive web applications.



#### Blazor Roadmap

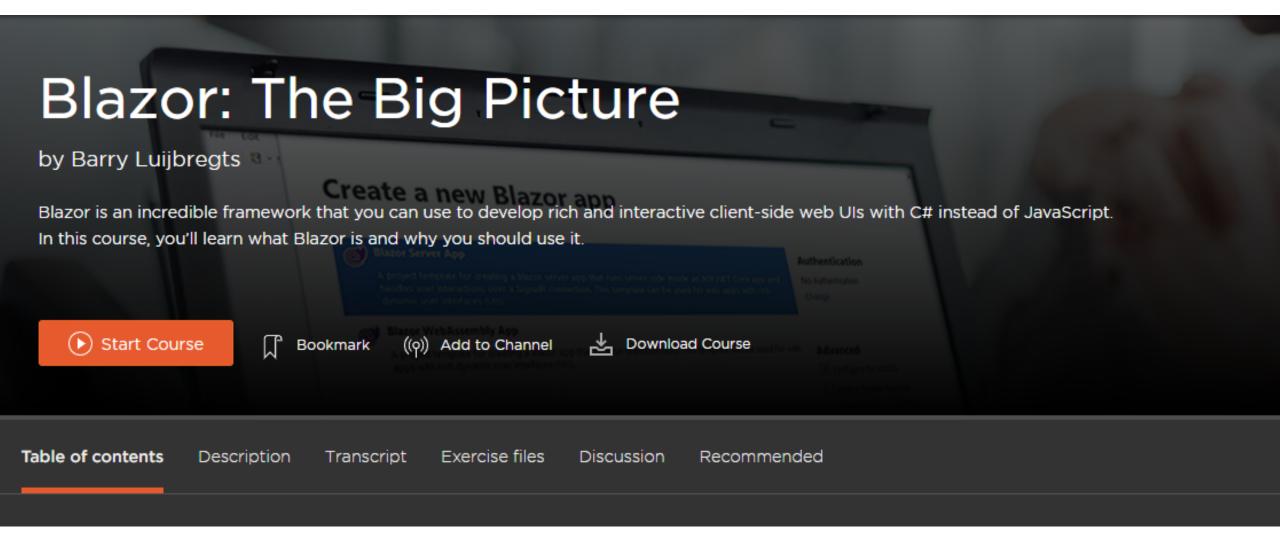




Demos are built using .NET Core 3.1

All code is compatible with .NET 5

.NET 5 module at the end of this course







### The Different Hosting Models of Blazor



#### Different Flavors of Blazor

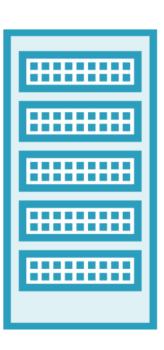
Client-side Server-side



#### Client-side Blazor











Runs on all modern browsers

No .NET required on server

SPA user experience

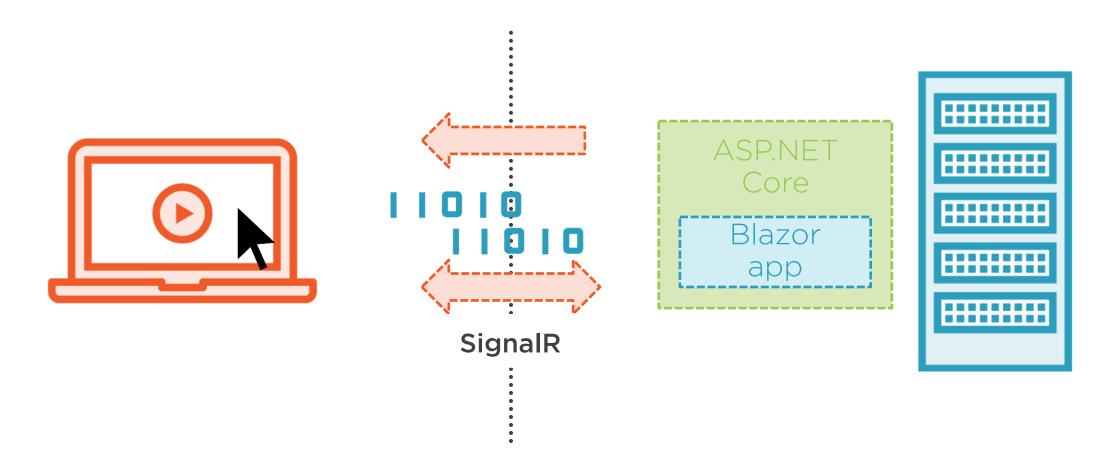
Older browsers might not be supported

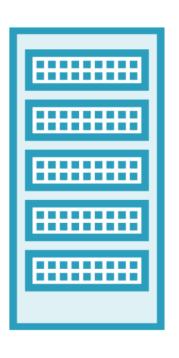
Initial app download is larger

**Debugging support** 



#### Server-side Blazor





Small download

Works with all server-side APIs

Full debugging support

Blazor apps in non-supported browsers

No offline support

**Network delay** 

Scalability, although not a big problem



# We'll use client-side Blazor and convert to server-side later.





# Let's now dive into Blazor code!



### Understanding File → New Project



#### Visual Studio Templates

Client-side WebAssembly

Standalone

Client-side WebAssembly

**ASP.NET Core Hosted** 

Server-side

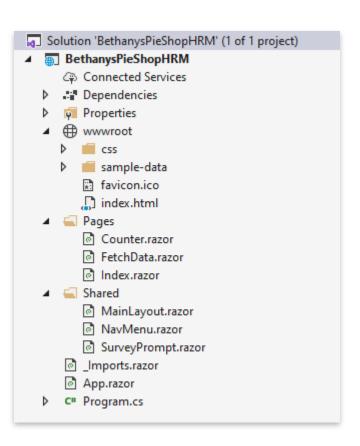


#### New Project

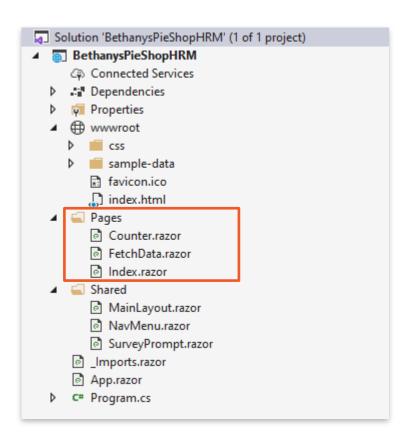
C# and .razor files

Structure similar to ASP.NET Core project

- Program.cs







\*.razor files

Components are building blocks

Name must start with uppercase

Class generated upon compilation

#### Looking at a the First Component

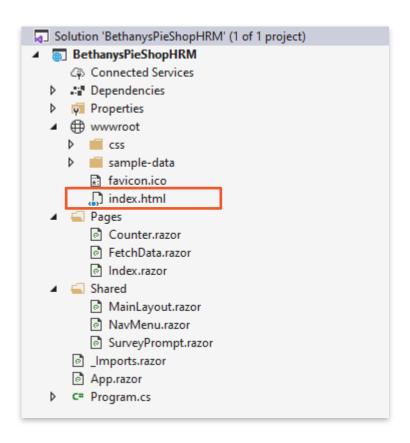
```
@page "/counter"
<h1>Counter</h1>
Current count: @currentCount
<button class="btn btn-primary" @onclick="IncrementCount">Click me</button>
@code {
   int currentCount = 0;
   void IncrementCount()
       currentCount++;
```



```
@page "/"
<h1>Hello, world!</h1>
Welcome to your new app.
<Counter />
```

#### Using a Component





Hosting page

Plain HTML

Trigger loading of your Blazor app

- blazor.webassembly.js





Creating a new project

Looking at the created files



# New to ASP.NET Core? Take a look at the ASP.NET Core Learning Path!



### Creating Your First Blazor App



### Using Code

Mixed approach using @code

"Code behind" using partial



#### Mixed Approach

```
@page "/counter"
<h1>Counter</h1>
Current count: @currentCount
<button class="btn btn-primary" @onclick="IncrementCount">Click me</button>
@code {
    int currentCount = 0;
    void IncrementCount()
       currentCount++;
```



```
public partial class EmployeeOverview
{
}
```

Using Partial Classes





Creating your first app





Adding your own layout





Debugging a Blazor app in Visual Studio



#### Summary



Blazor allows creating rich experiences in the browser using C# and HTML

Server-side and client-side

Components are a building block





## Up next: Working with data