

ASP.NET Core 6: Razor Pages Fundamentals

Getting Set up to Work with Razor Pages



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Razor Pages

A server-side, paged-based framework for building dynamic web user interfaces with ASP.NET Core



Why use Razor Pages?



The Case for Razor Pages

Why should I use
Razor Pages?



Create dynamic, data driven web apps

Built on top of ASP.NET Core

Equally powerful and approachable

A great foundation for other frameworks



ASP.NET Core 6: Razor Pages Fundamentals

Version Check



Version Check



This version was created by using:

- ASP.NET Core 6.0
- C# 10
- Visual Studio 2022



Not Applicable



This course is NOT applicable to:

- ASP.NET Core 1.x or earlier
- Visual Studio 2015 or earlier



Razor Pages Core Concepts



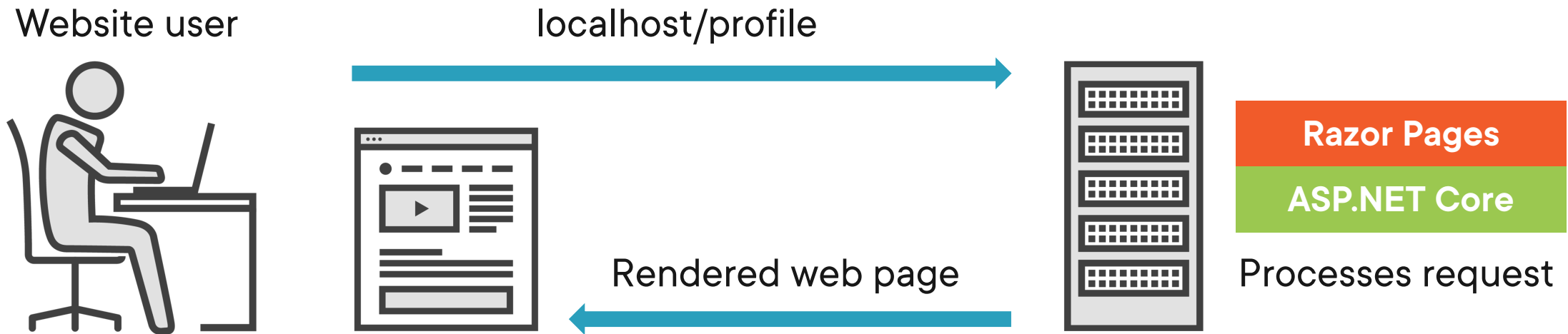
Razor Pages

A **server-side, page-based** framework for building **dynamic web user interfaces** with **ASP.NET Core**.

 Key concepts



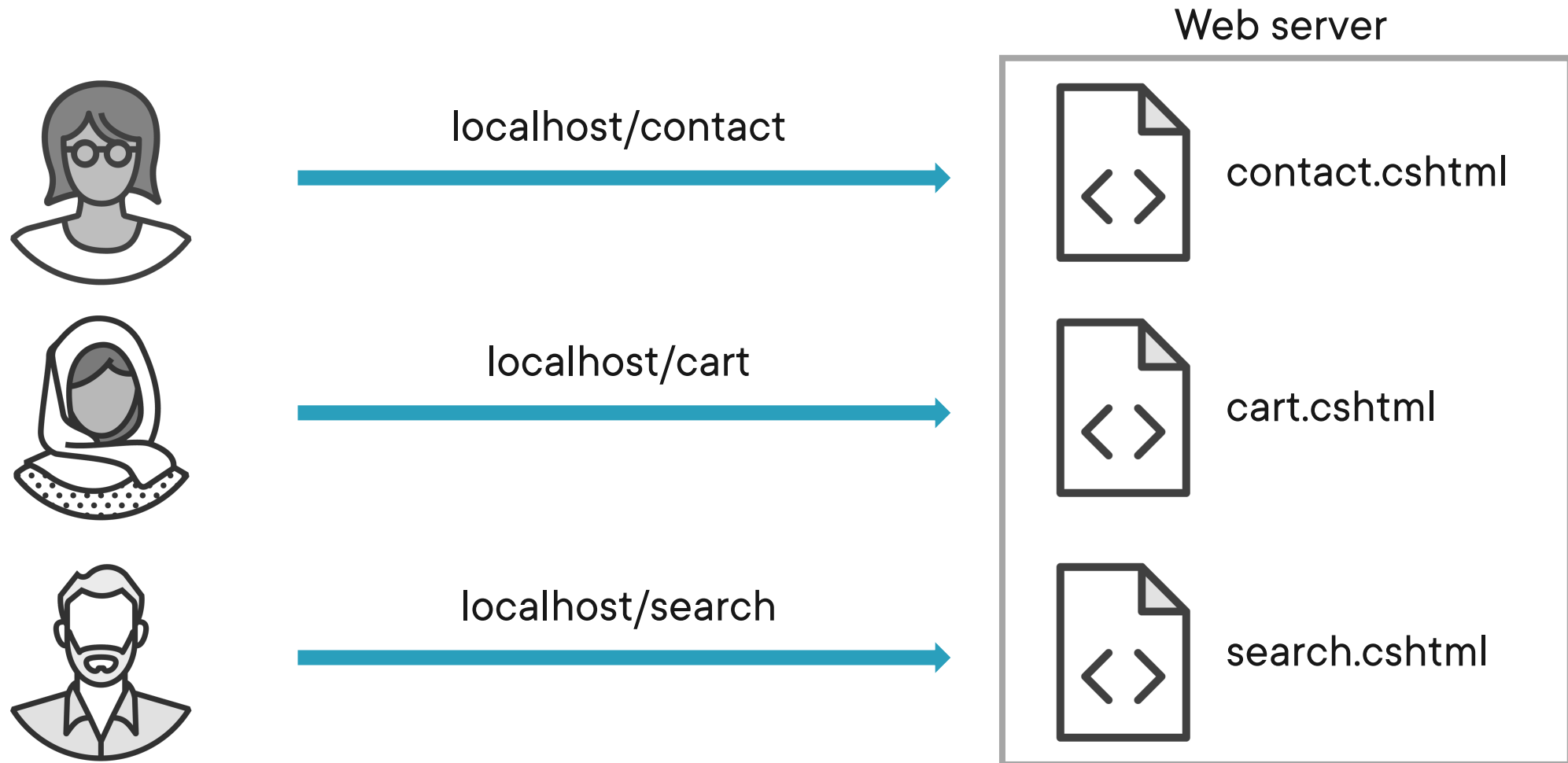
Razor Pages Is a **Server-side** Framework



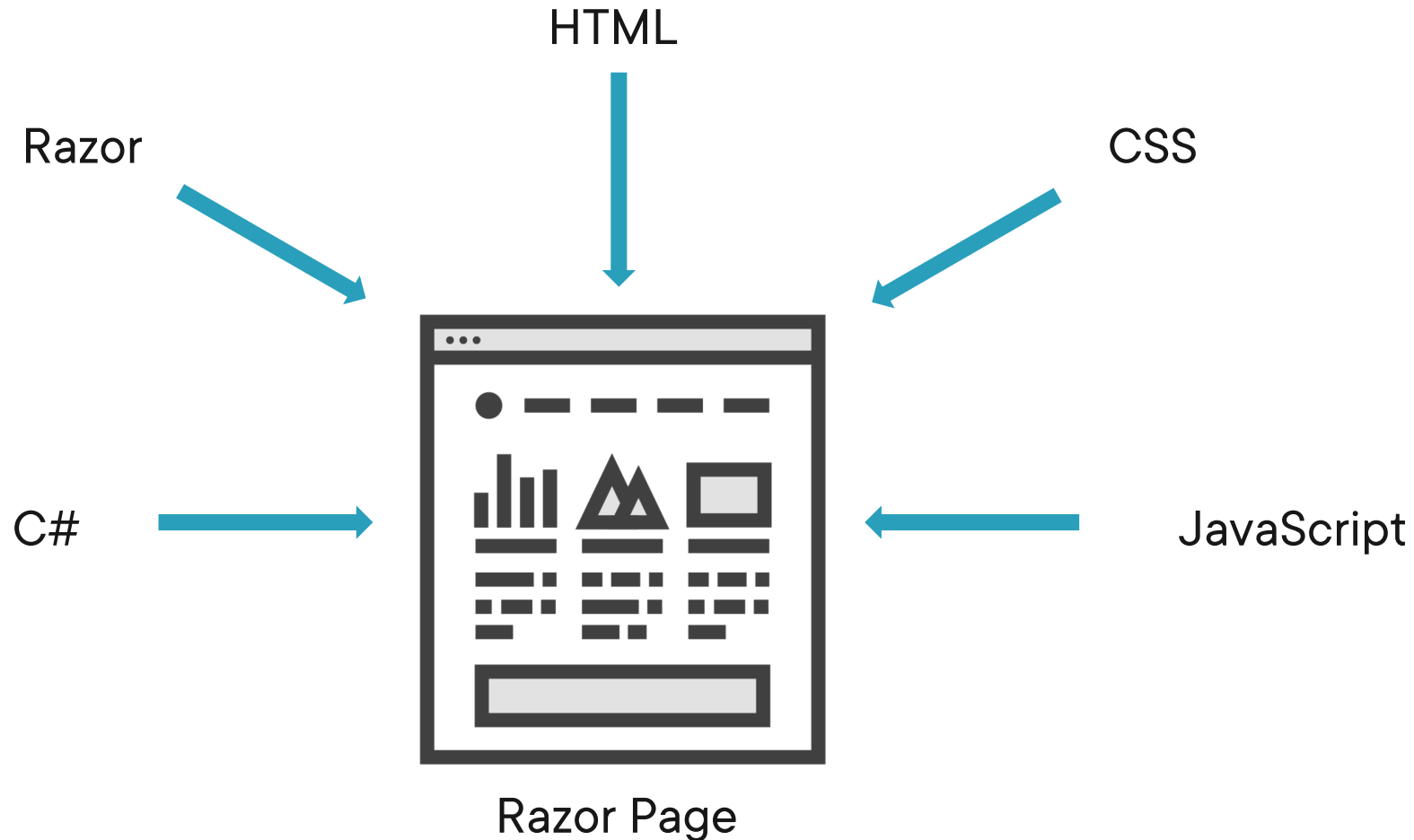
Comparing Client-side Frameworks



Razor Pages Is a Paged-based Framework



Razor Pages Build Web User Interfaces



```
<h1>Reminders</h1>
```

```
@{  
    var day = DateTime.Today.Day;  
}
```

```
@if (day == "Friday")  
{  
    <p>Today is payday!</p>  
}  
else  
{  
    <p>Today is a normal day.</p>  
}
```

```
<p>Take care!</p>
```

◀ Standard HTML

◀ Razor code block for C# logic

◀ Razor if/else statement

◀ Conditionally rendered HTML

◀ Automatic transition back to HTML

Razor Pages Is Built on [ASP.NET Core](#)

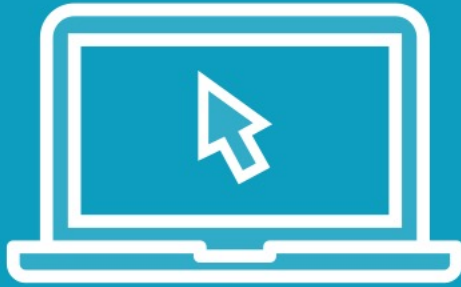
Razor Pages:
User interface features



ASP.NET Core:
Foundational features



Demo



Installing and setting up Razor Pages



Installing Razor Pages and ASP.NET Core 6.0

Install Visual Studio 2022

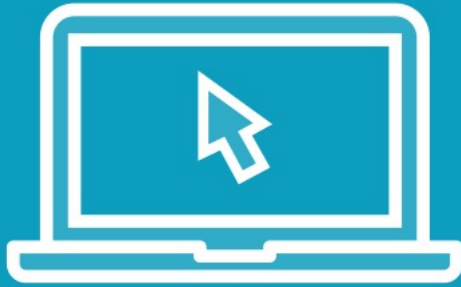
**Razor Pages and ASP.NET 6.0
come bundled with it**

Install ASP.NET Core 6.0 Directly

**A great option when using
VS Code or other IDEs**



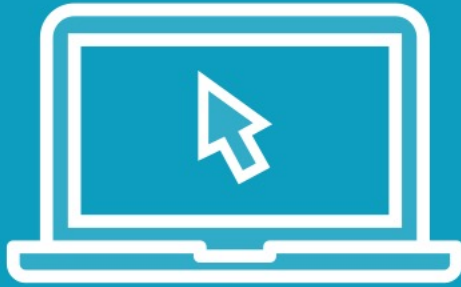
Demo



Creating and exploring a Razor Pages project



Demo



Handling requests with Razor Pages



Exploring Razor Pages and ASP.NET Core



ASP.NET Core

A foundational framework for building cross platform, high performance, modern web applications.



ASP.NET Core Capabilities

**Dependency
injection**

Routing

Authentication

Data access

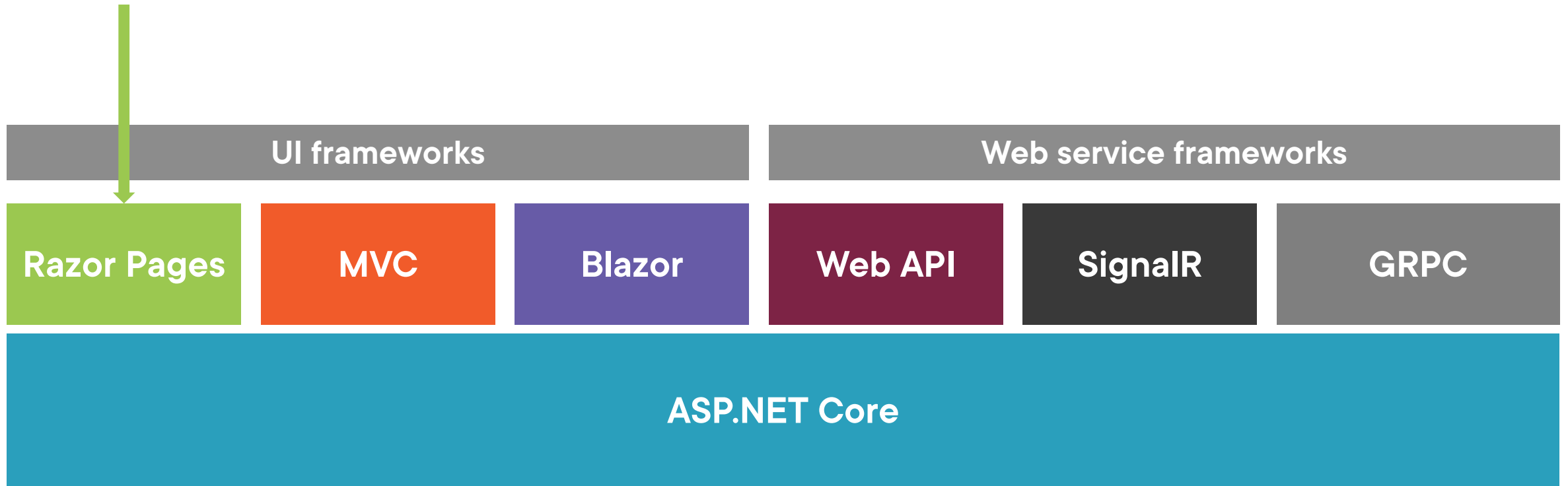
**Cross-platform
support**

Caching



Razor Pages Is One of Many ASP.NET Core Tools

Our focus

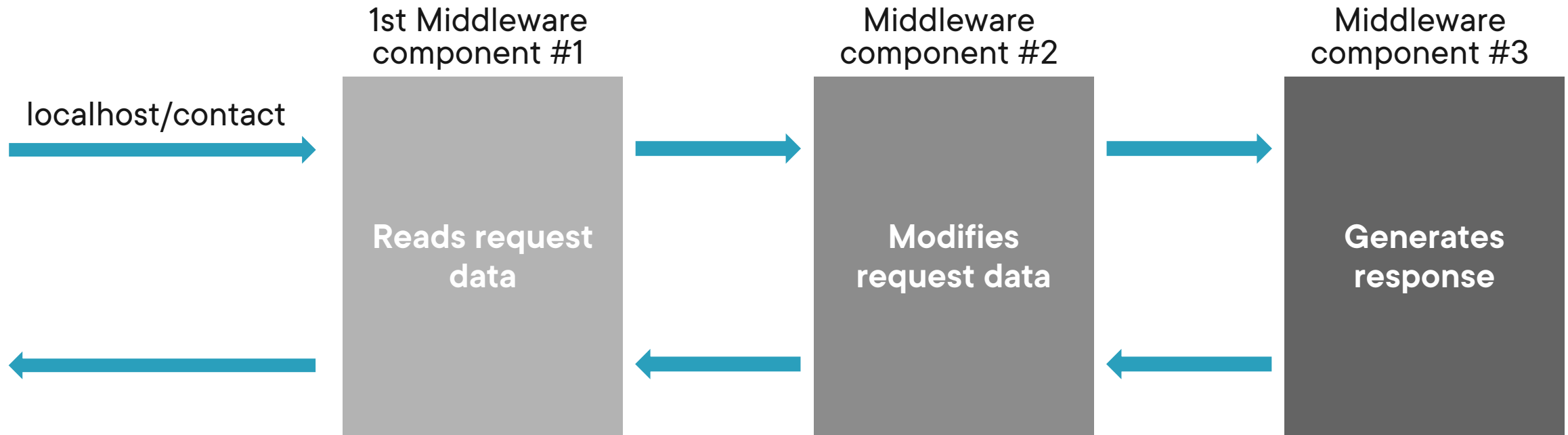


ASP.NET Core Middleware

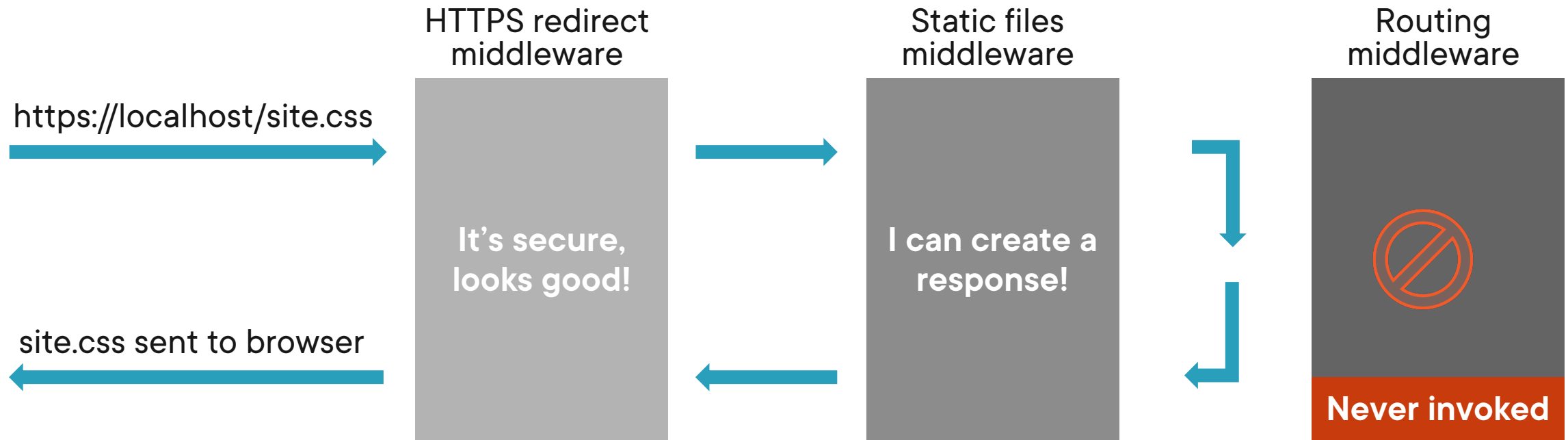
A series of components that form the application request pipeline.



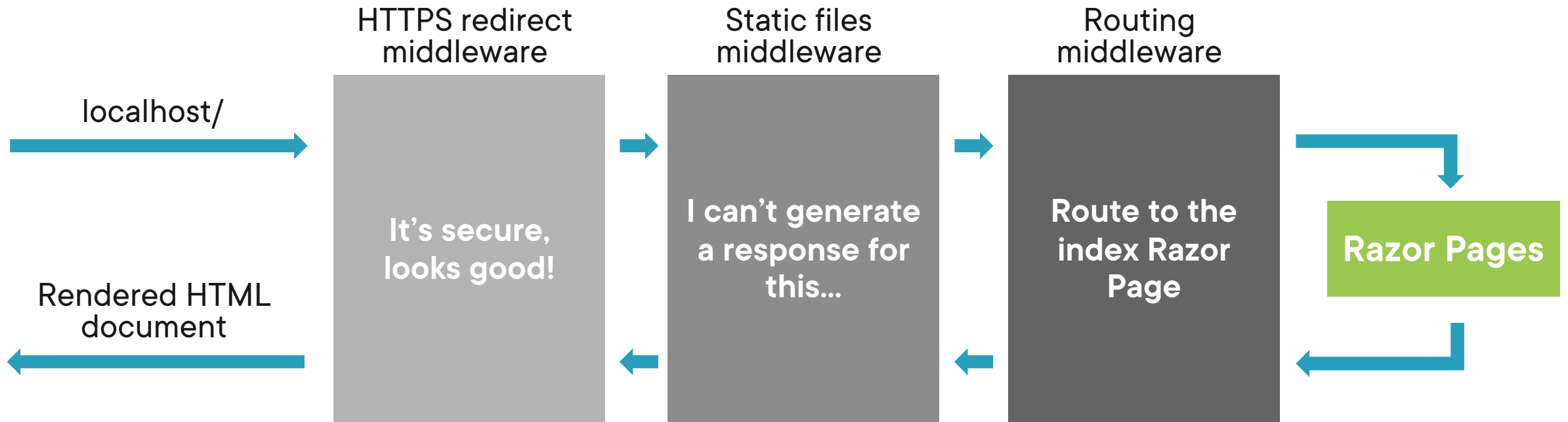
Understanding the Middleware Pipeline



Handling a Request with Middleware



Handling a Request with Middleware and Razor Pages





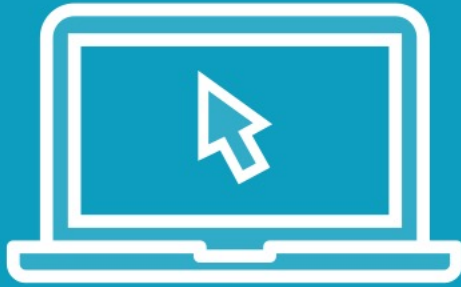
More Information

ASP.NET Core 6 Fundamentals

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Demo



Working with middleware



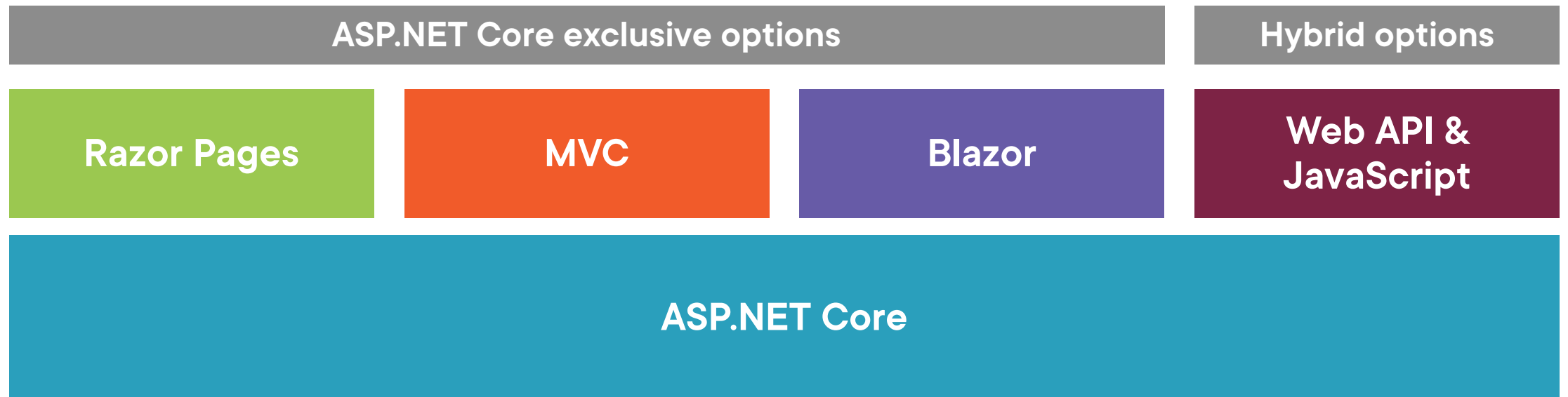
Comparing Razor Pages



Our focus remains on Razor Pages.



UI Framework Options with ASP.NET Core



Exploring ASP.NET Core UI Options

Razor Pages

Simple, approachable
framework for page-
oriented workflows

MVC

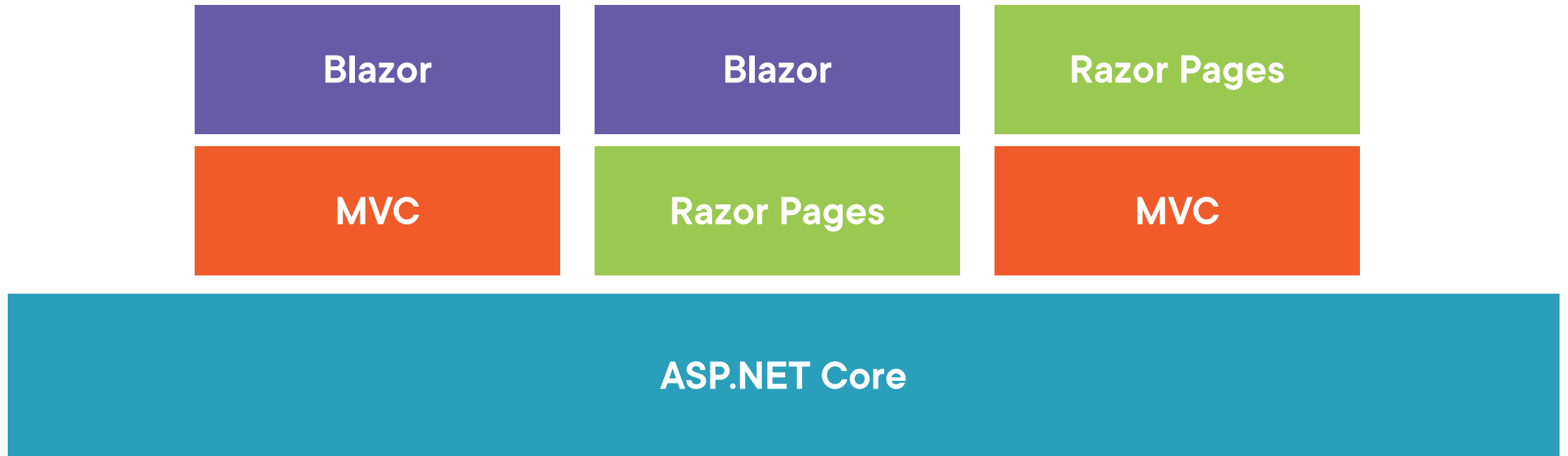
Utilizes the Model View
Controller pattern for
building complex apps

Blazor

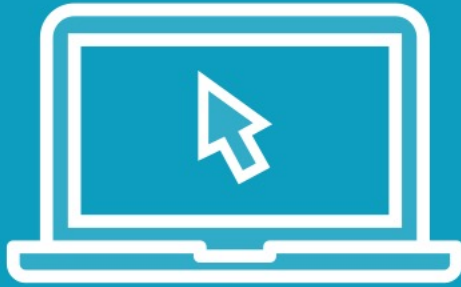
A component driven
framework for building
highly dynamic UIs



Combining ASP.NET Core UI Tools



Demo



Setting up the sample project





Introducing the Wired Brain Coffee app

- Manage menu items
- View order data or reports
- Submit help tickets



GitHub Links

<https://github.com/alex-wolf-ps/aspnet6-razor-pages-fundamentals>



Summary



Razor Pages is a server-side, paged-based framework for building web UIs with ASP.NET Core

Razor Pages dynamically generate full page responses on the server to send to the browser

Page templates physically live on the server and correspond directly to application URLs

Razor templating syntax allows us to dynamically generate data-driven markup

ASP.NET Core provides many powerful foundational features of Razor Pages

Many ASP.NET Core features are implemented through Middleware

Other ASP.NET Core tools such as MVC and Blazor can also be used to build web UIs

