Sharing Code between Blazor WebAssembly and Blazor Server



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Module overview



Introducing Blazor Server

A new architecture for maximized code-sharing



Introducing Blazor Server

Blazor Hosting Models

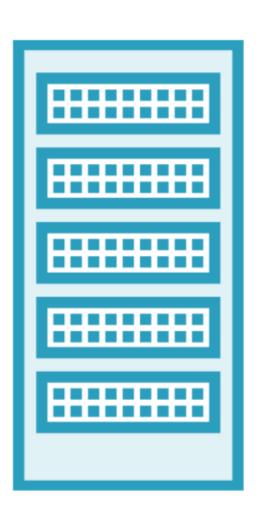




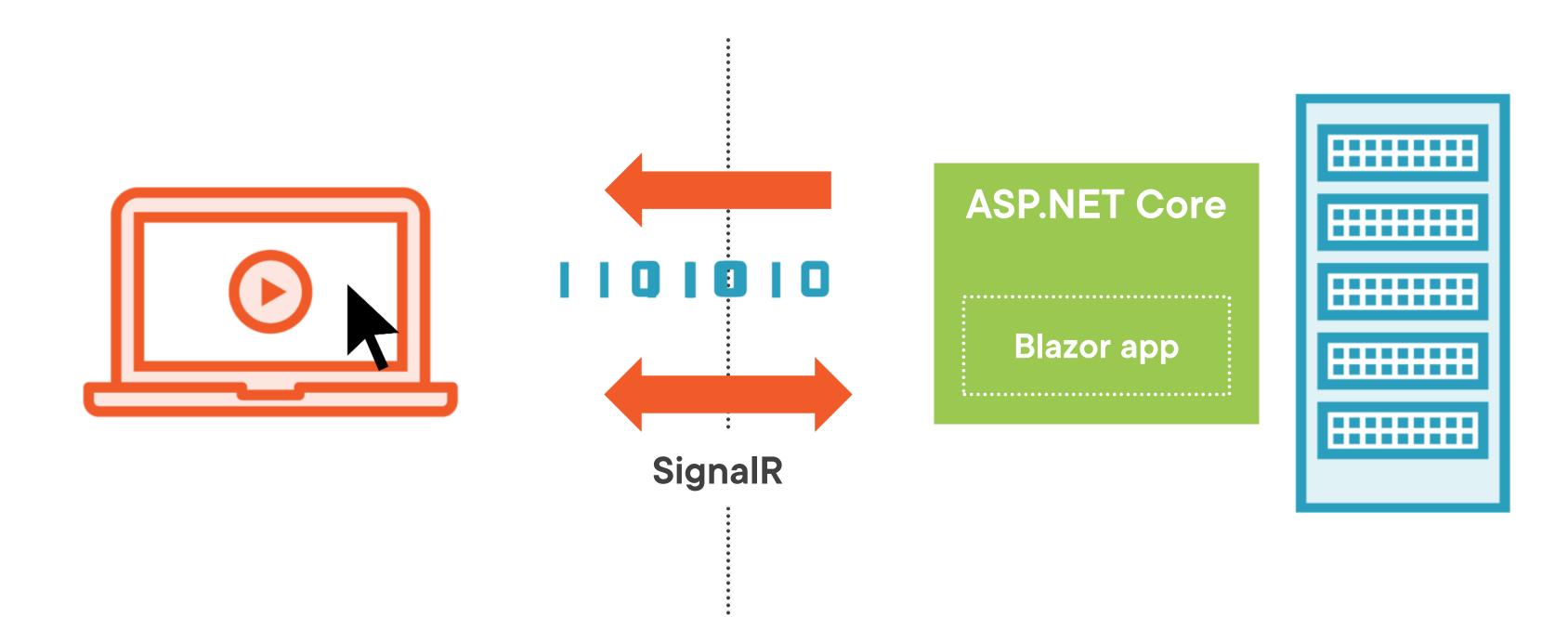
How Blazor WebAssembly Works



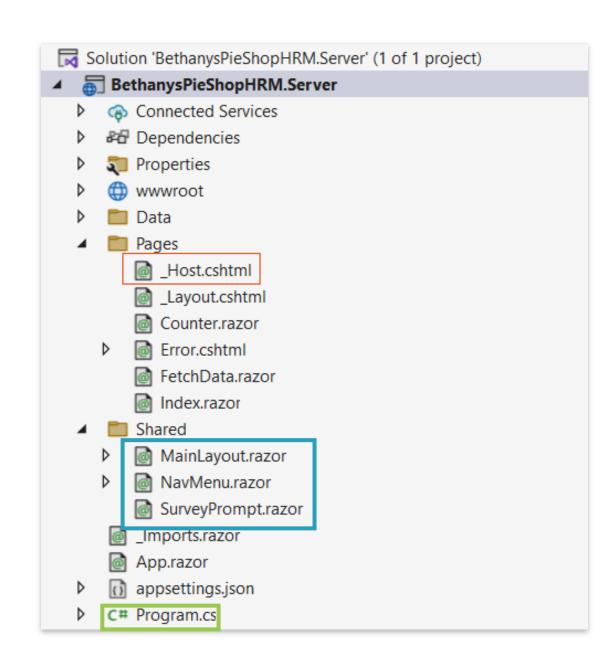
Blazor app

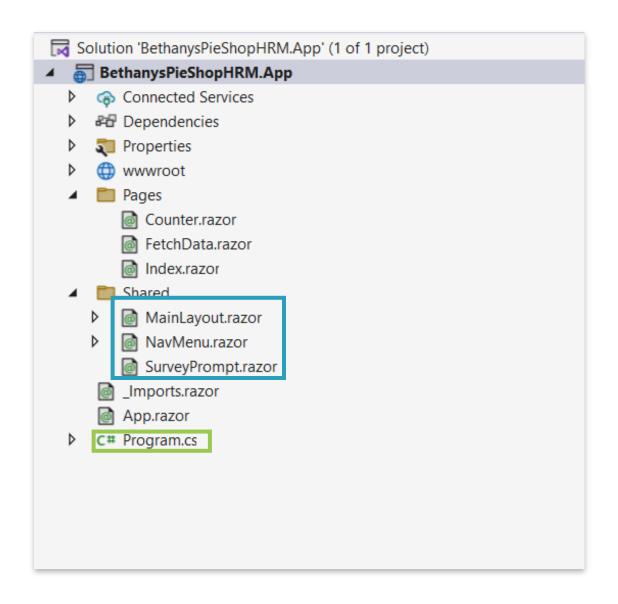


How Blazor Server Works



Comparing Server-side and Client-side Blazor







Invoking Blazor Server Through a JS file

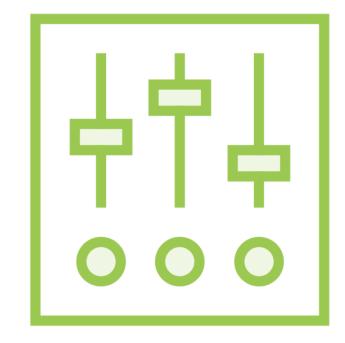
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8" />
</head>
<body>
    @RenderBody()
    <div id="blazor-error-ui">
        <environment include="Staging,Production">
            An error has occurred. This application may no longer respond until reloaded.
        </environment>
        <environment include="Development">
            An unhandled exception has occurred. See browser dev tools for details.
        </environment>
        <a href="" class="reload">Reload</a>
        <a class="dismiss">x</a>
    </div>
    <script src="_framework/blazor.server.js"></script>
</body>
</html>
```



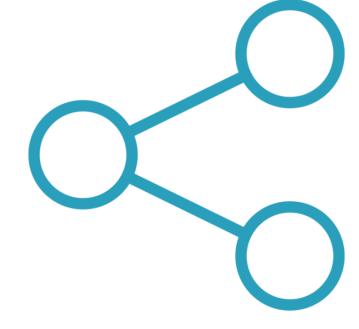
The Case for Blazor Server



No initial download, all code executes on server



All .NET Core server features become available



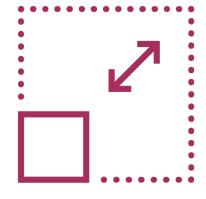
Code isn't shared with clients



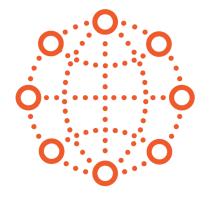
But...



No offline support

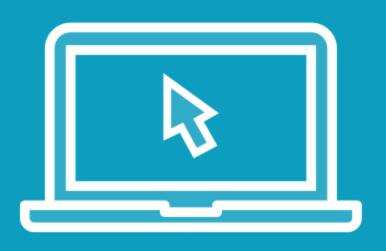


Scalability



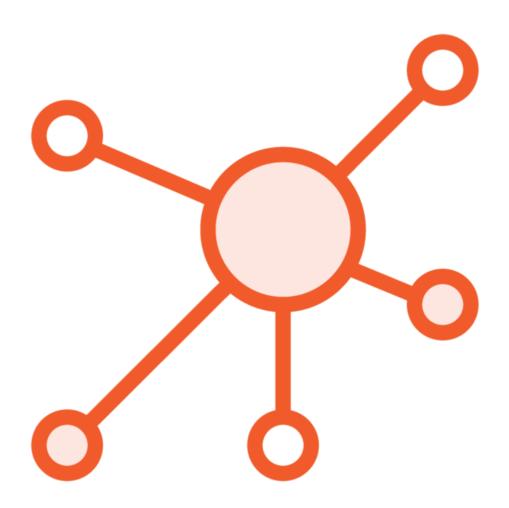
Network delay

Demo



Exploring File -> New Project for server-side Blazor

A New Architecture for Maximized Code-sharing



Sharing code

- App code is shared
- We can call the "app" from a Blazor WASM or Blazor Server project
- Extract what's different to the individual projects
- Share all the rest



Proposed Approach

Solution 'BethanysPieShopHRM' (7 of 7 projects) BethanysPieShopHRM.App BethanysPieShopHRM.App BethanysPieShopHRM.App.Tests BethanysPieShopHRM.ComponentsLibrary BethanysPieShopHRM.ServerApp BethanysPieShopHRM.Shared BethanysPieShopHRM.WebAssembly



Blazor Server App

- BethanysPieShopHRM.ServerApp
 - Connected Services
 - ▶ ₽₽ Dependencies
 - Properties
 - www.root
 - Pages
 - _Imports.razor
 - appsettings.json
 - ▶ C# Program.cs



Blazor WebAssembly App

■ BethanysPieShopHRM.WebAssembly

Connected Services

Dependencies

Properties

www.root

Imports.razor

r# Program.cs



BethanysPieShopHRM.App ▶ ₽₽ Dependencies Properties Components Helper Models Pages Services Shared State wwwroot CSS images ample-data appsettings.json favicon.ico icon-192.png _Imports.razor App.razor

Shared project

- index.html is removed
- Project is a Razor Class Library
- All code in here can be reused

Demo



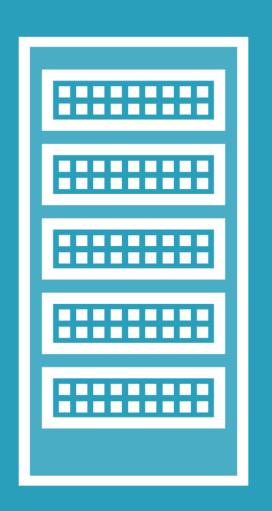
Exploring the new architecture

Summary



Blazor code can be shared between WASM and Server projects





Up next:

Deploying our application to Azure

