Sharing Code between Blazor WebAssembly and Blazor Server

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Module overview

Introducing Blazor Server

A new architecture for maximized code-sharing

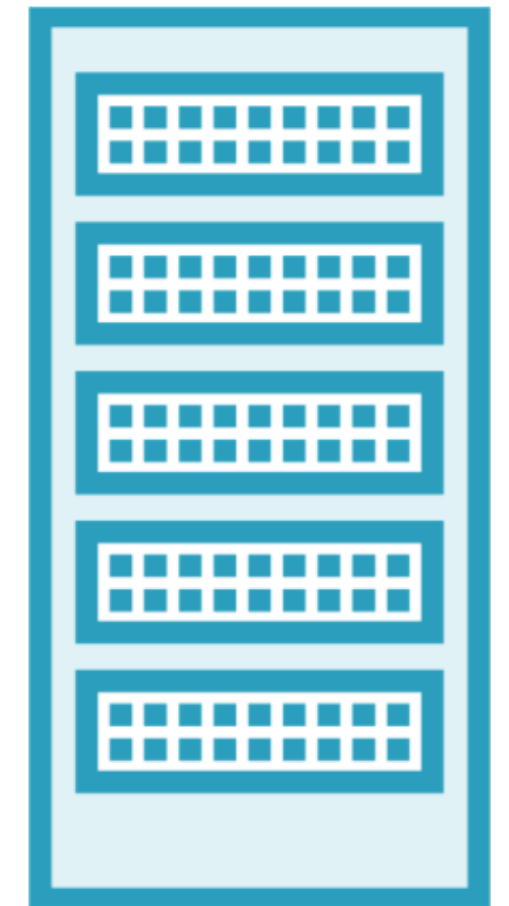# Introducing Blazor Server

Blazor Hosting Models

WebAssembly

Server

How Blazor WebAssembly Works

Blazor app

How Blazor Server Works

SignalR

ASP.NET Core
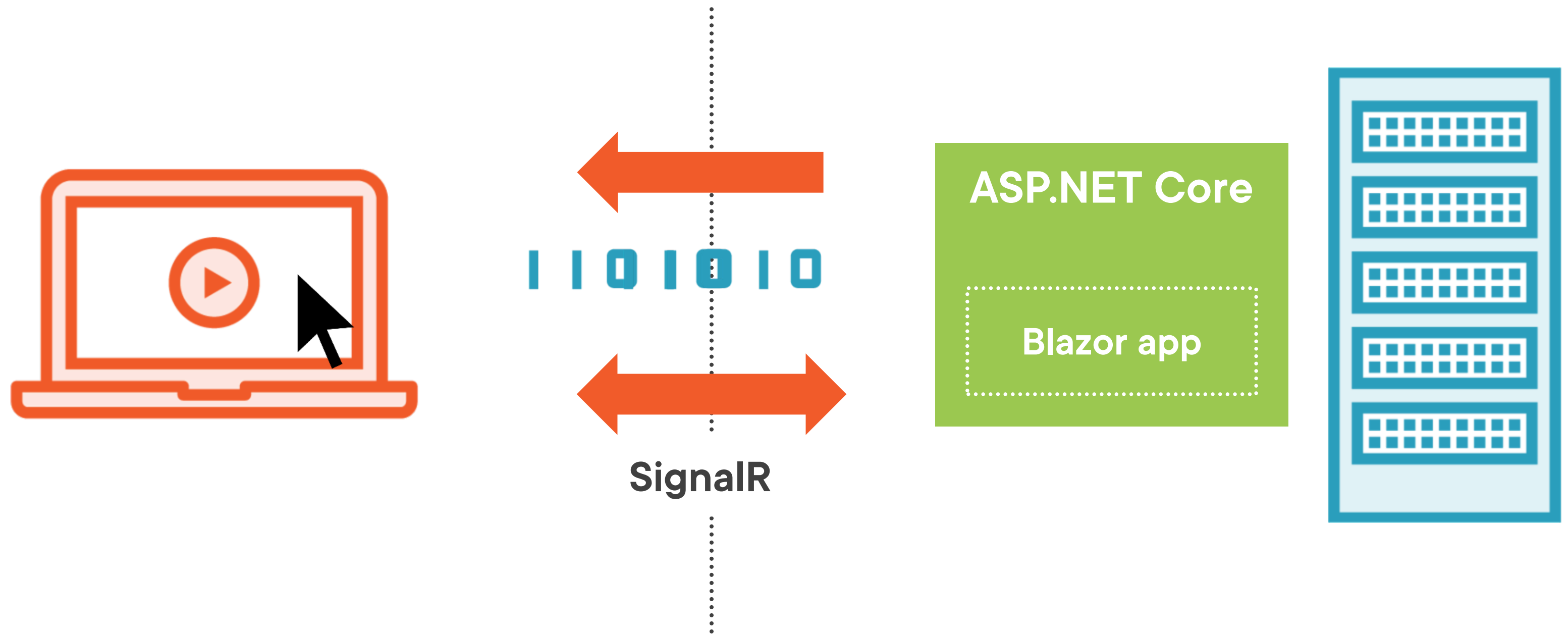
Blazor app

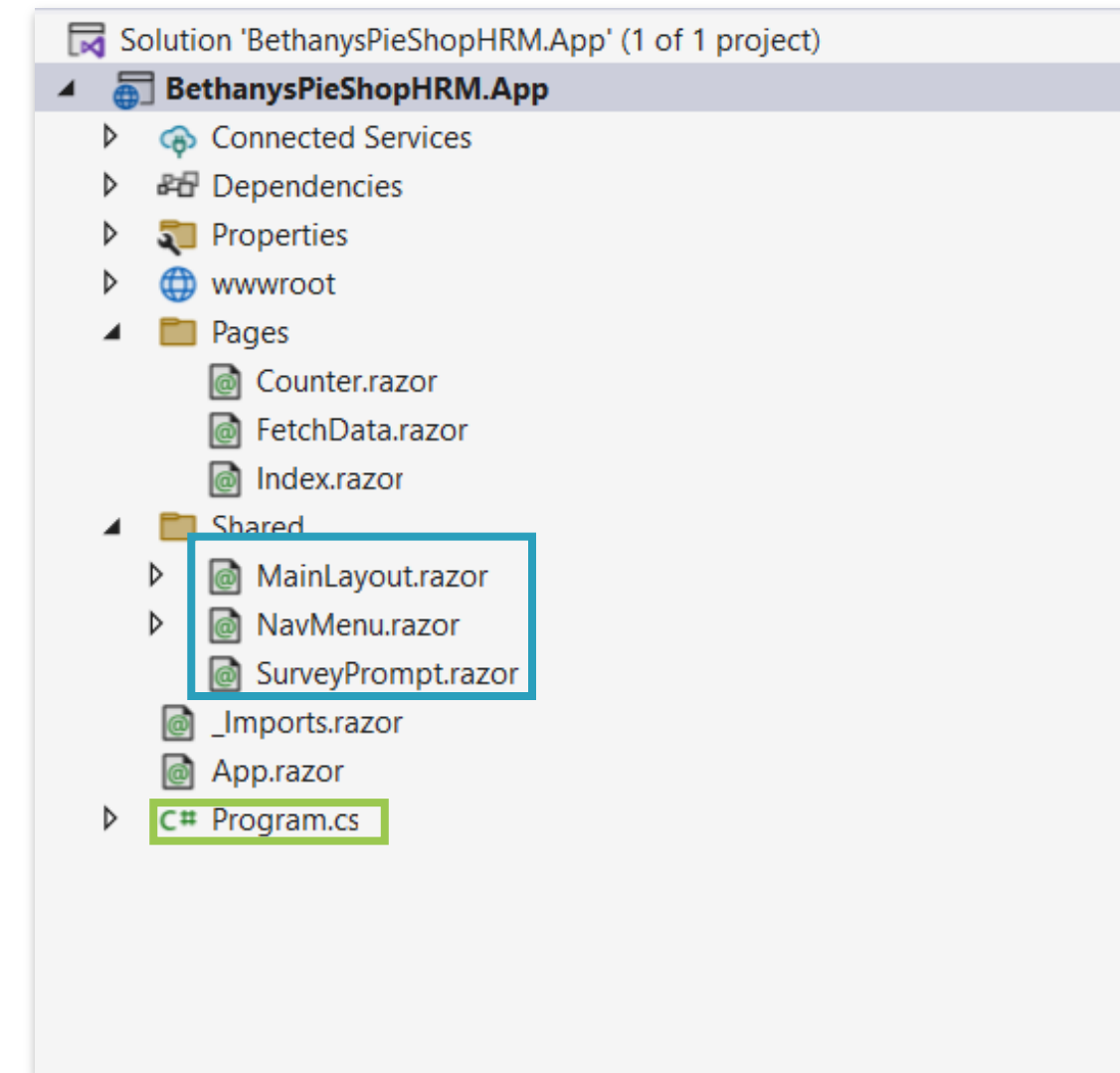# Comparing Server-side and Client-side Blazor

Invoking Blazor Server Through a JS file

```html
<!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">✖</a>
    </div>

    <script src="_framework/blazor.server.js"></script>
</body>
</html>
```
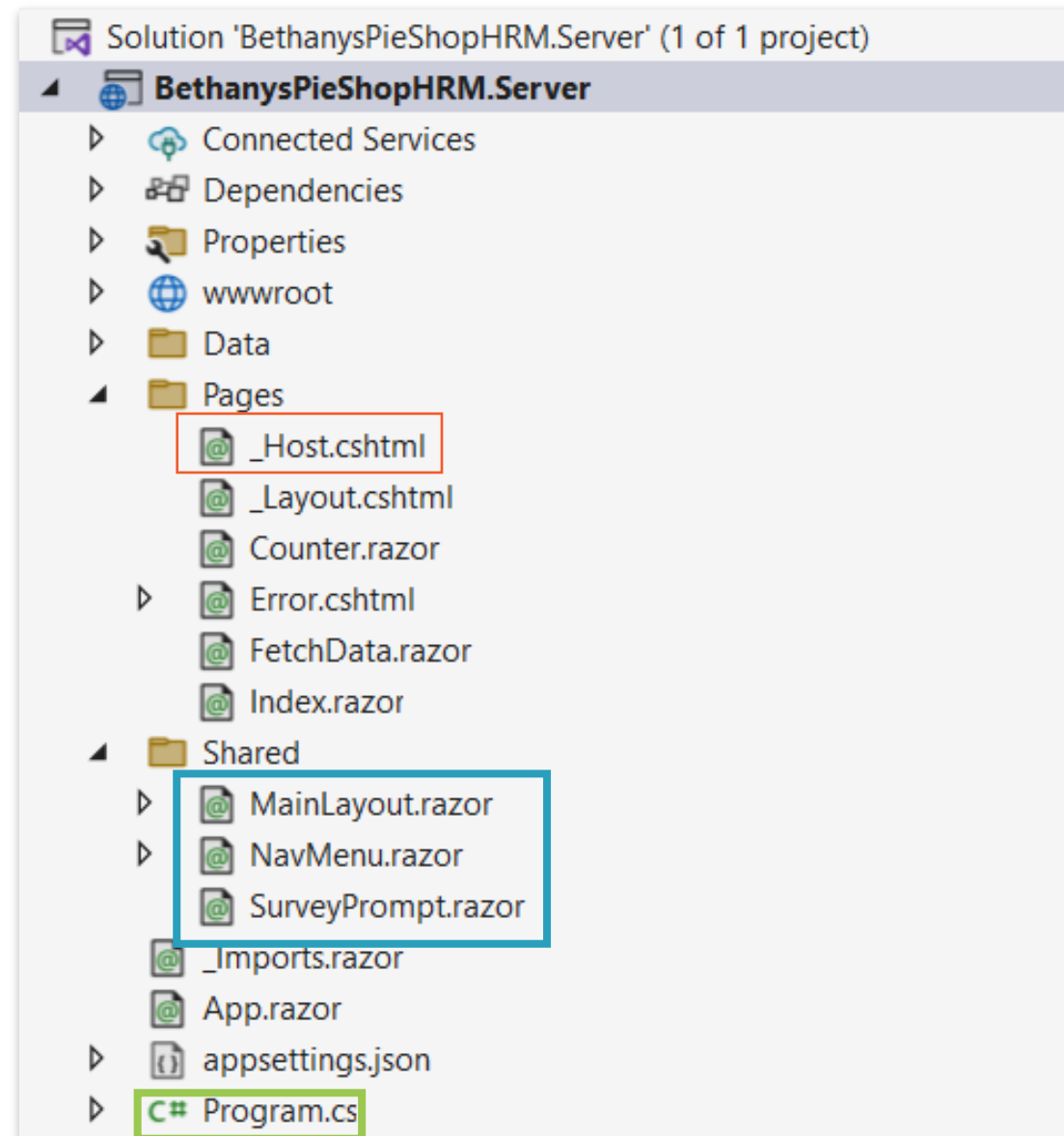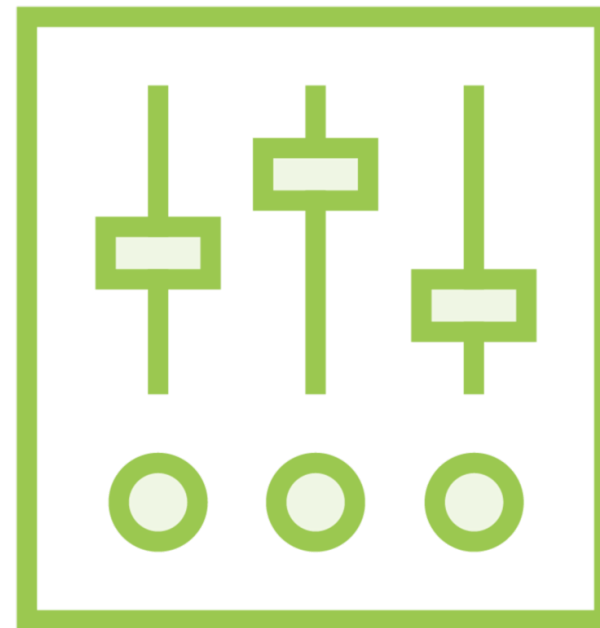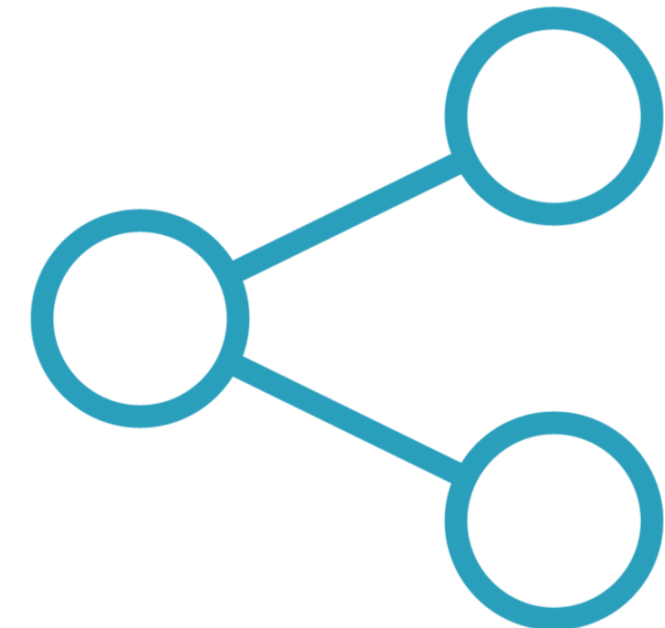
The Case for Blazor Server

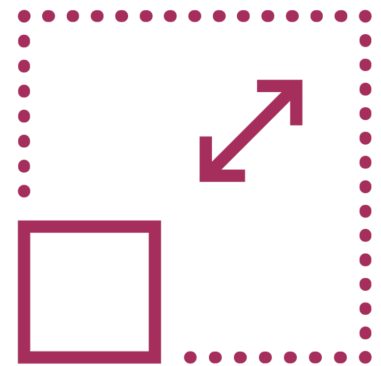**No initial download, all code executes on server**

All .NET Core server features become available
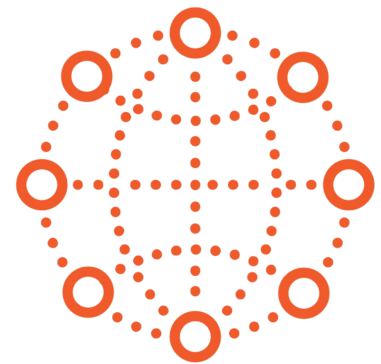
Code isn't shared with clients

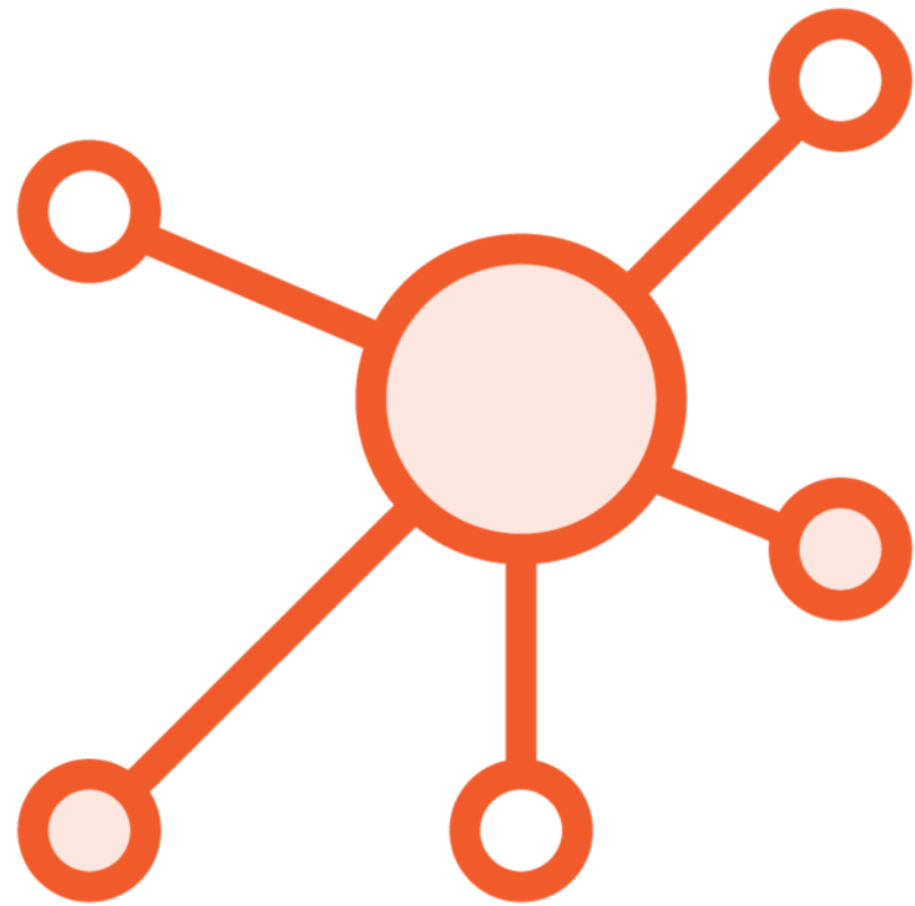# But...

No offline support

Scalability

Network delay

Demo

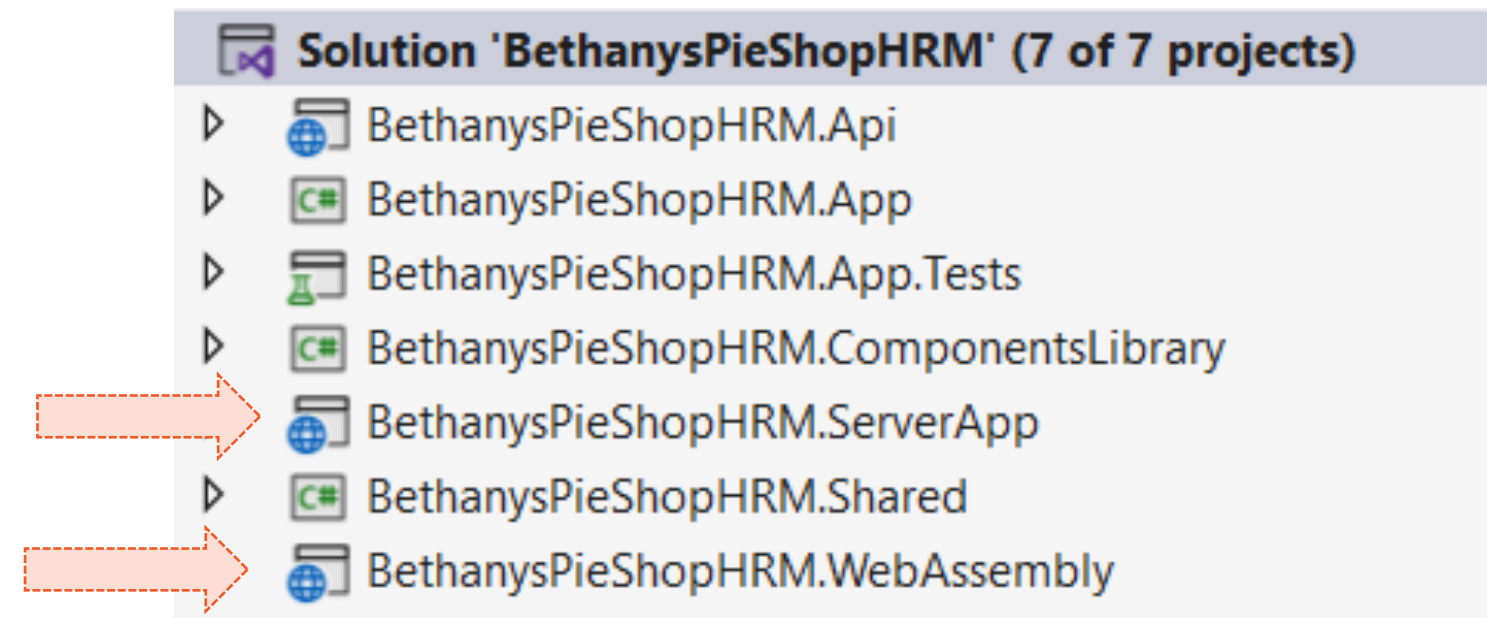**Exploring File → New Project for server-side Blazor**

A New Architecture
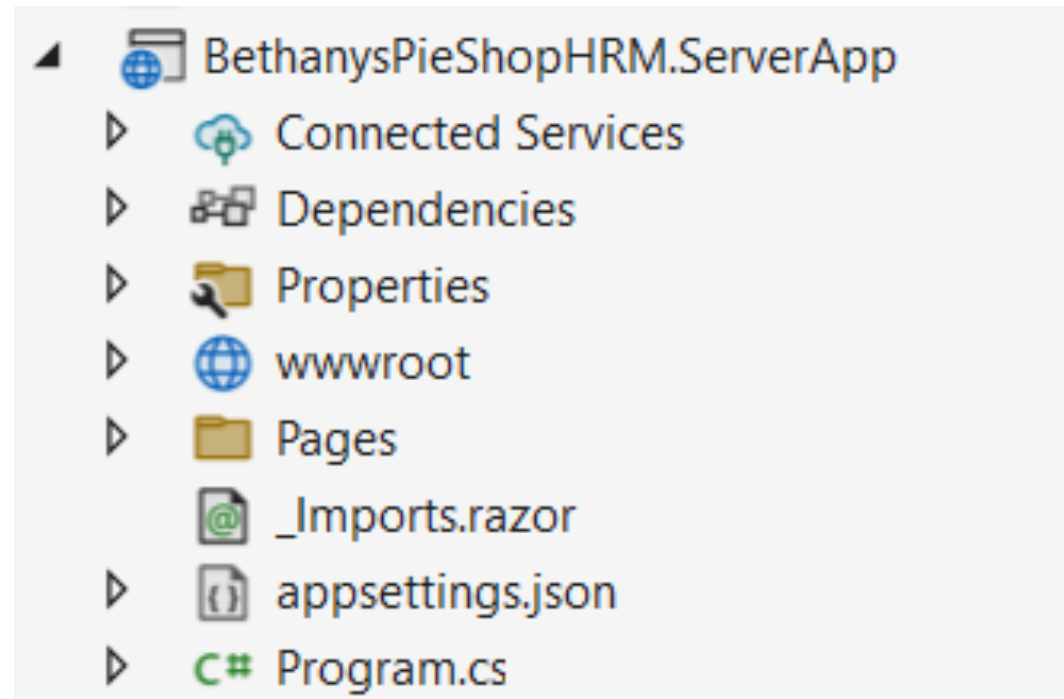# for Maximized Code-sharing

Sharing code

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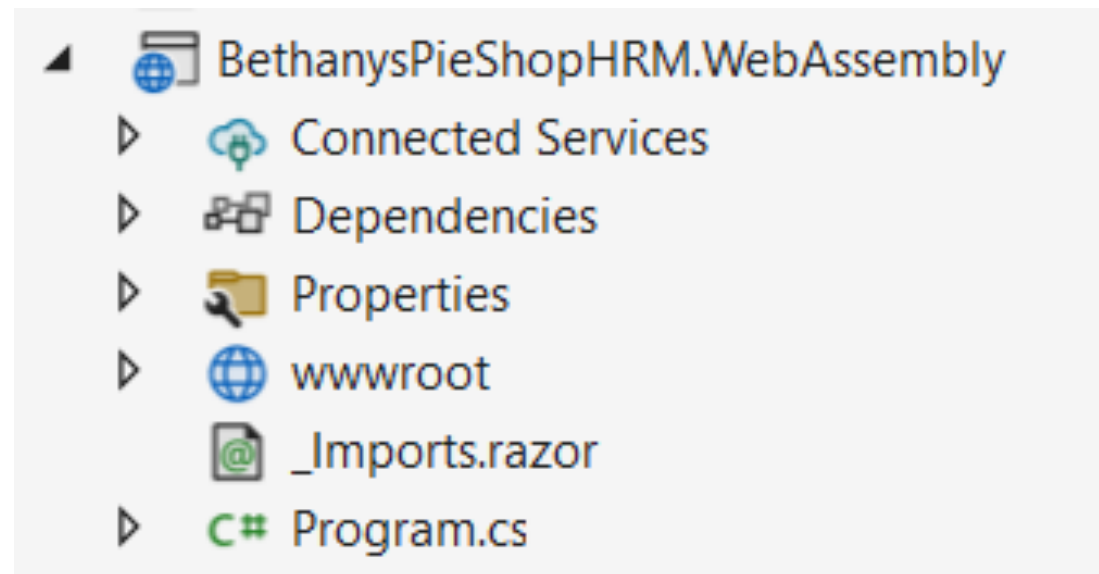- Extract what's different to the individual projects
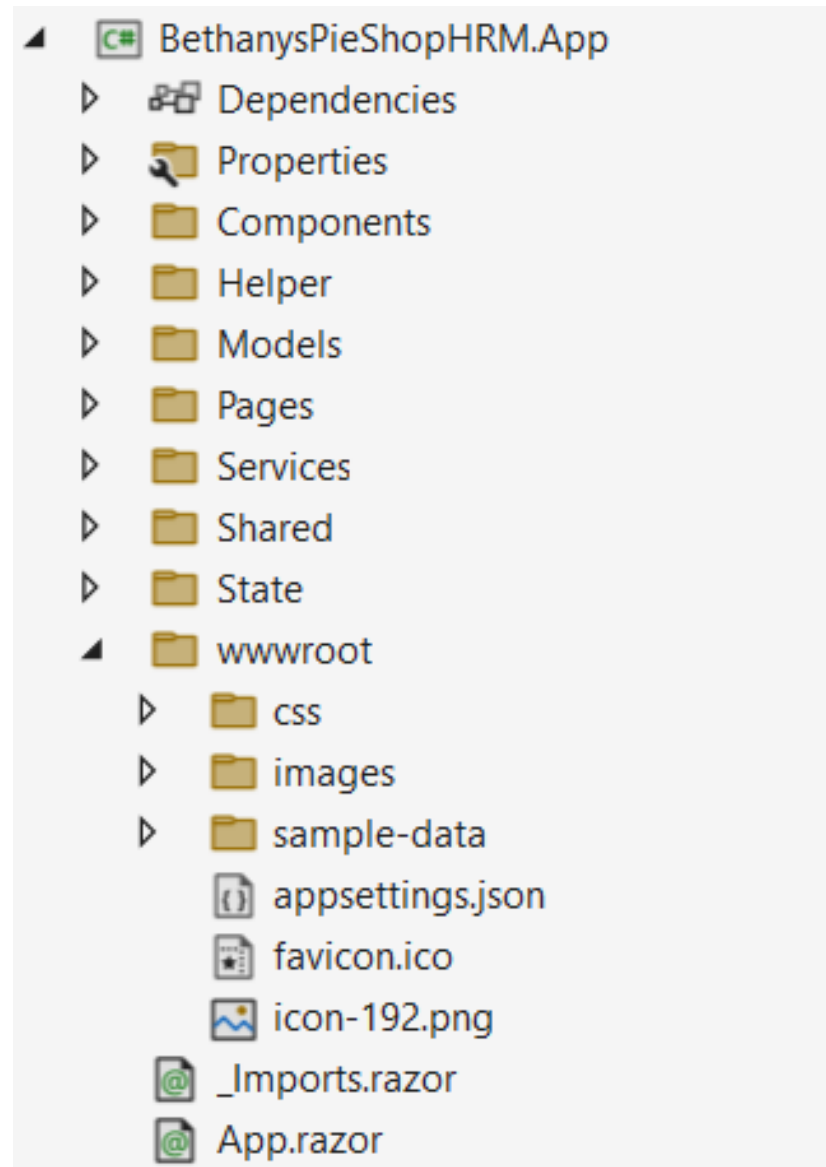- Share all the rest

Proposed Approach

Blazor Server App

Blazor WebAssembly App

BethanysPieShopHRM.App
  ▷ Dependencies
  ▷ Properties
  ▷ Components
  ▷ Helper
  ▷ Models
  ▷ Pages
  ▷ Services
  ▷ Shared
  ▷ State
  ▲ wwwroot
    ▷ css
    ▷ images
    ▷ sample-data
      appsettings.json
      favicon.ico
      icon-192.png
  _Imports.razor
  App.razor

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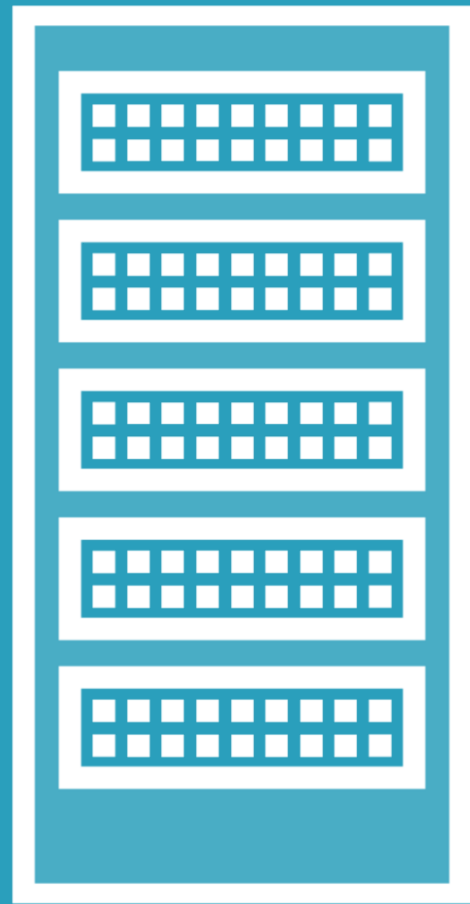 – All code in here can be reused

Demo

Exploring the new architecture

Summary

Blazor code can be shared between WASM and Server projects

Up next:
Deploying our application to Azure