

Working with Partial Views and View Components



Alex Wolf

.NET Developer

www.thecodewolf.com



Partial Views

Reusable markup files that can be displayed on other pages.



Introducing Partial Views



Layout file



Razor page



Partial view

[Dashboard](#) [Products](#) [Orders \(Coming soon\)](#) [Help](#) Wired Brain Coffee

Welcome to Wired Brain Coffee!

Latest Products

ID #	Image	Category	Name	Short Description	Price	Edit
1		Food	Charcuterie	For indecisive food afficianados..	4.0	Edit
2		Food	Waffles	They need no introduction..	4.0	Edit
3		Food	Santa Fe Salad	Our house special - we love it..	4.0	Edit
4		Food	Caesar Salad	Classically, delicious fresh..	4.0	Edit
5		Food	Noodles	Delicious carbs on the go..	4.0	Edit

Latest Survey Results

How likely are you to recommend us?	8/10
What is your favorite food item?	Waffles
What is your favorite coffee item?	Mocha Latte
How would you rate our custome service?	9/10
Which are could we improve the most?	Deals

The Basics

Hello, today is 03/21/2022.

The current temperature is 58 degrees.

We recommend a coat until it warms up another 7 degrees!

Weekly Fun facts

Cups of Coffee Sold: 2500

Total Revenue: \$25,000

Customers Served: 1800

One Day Sales Record: \$5000

Request Help

Contact our IT Team

Having an issue with the site? Let us know!

[Request Help](#)

© 2022 - WiredBrainCoffeeAdmin

1234 Wired Brain Way
Awesome City, CA 55555
Phone: 555-123-4567
Fax: 555-123-4567



Reusing Partial Views Across Pages



```
<div class="container">

    <!-- Partial tag helper -->
    <partial name="ContactWidget" model="ContactInfo" />

</div>
```

Including Partial Views on Razor Pages

The partial tag helper can include a partial view on the page by name

Tag helpers can also accept a model as a parameter to display and manage data

Partial views do not have an associated
C# class or code-behind file.



```
// Partial View
```

```
@model Product
```

```
<h1>@Model.Name</h1>
```

```
<p>@Model.Description</p>
```

```
<div>
```

```
    <!-- Other HTML markup -->
```

```
</div>
```

◀ Model declared for the partial view

◀ Access and display properties on that model

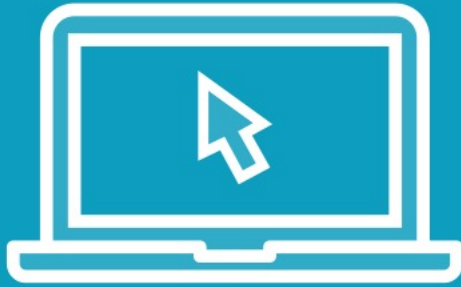
◀ Standard HTML markup

Partial View Search Locations

Search patterns
Pages/{parent-page-directory}/{partial-name}.cshtml
Pages/{partial-name}.cshtml
Pages/Shared/{partial-name}.cshtml



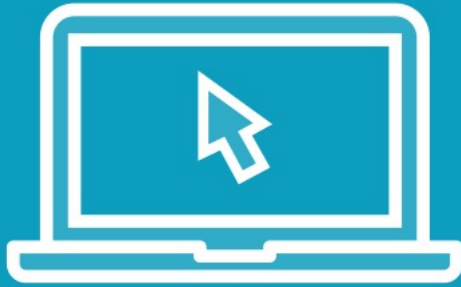
Demo



Creating reusable markup with partial views



Demo



Improving the forms with partial view models



Introducing View Components

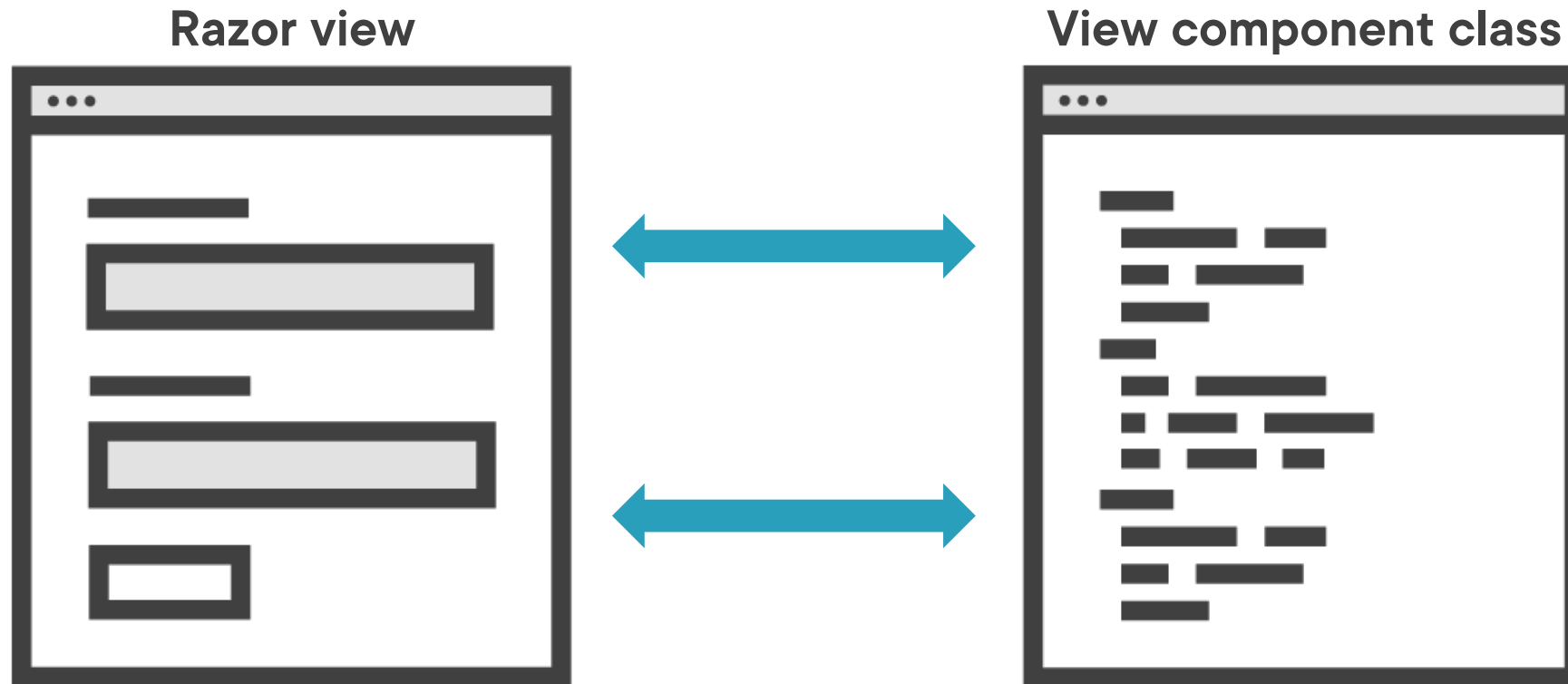


View Components

Provide a way to create reusable pieces of markup that depend on complex logic.



Empowering Partial Views with Logic



Example View Component Scenarios

Blog tag cloud

Shopping cart

Contextual navbar

User login panel



```
class CartViewComponent : ViewComponent
{
    public CartViewComponent(IProductRepo
productRepo)
    {
        // Constructor logic
    }
    public IViewComponentResult Invoke()
    {
        // Build list of products in cart
        return View(productList);
    }
}
```

◀ Inherit from ViewComponent

◀ Inject service or repository using dependency injection

◀ Define Invoke or InvokeAsync method

◀ Return a view, optionally passing in a model

View components support scenarios beyond just rendering Razor views.




```
<div id="widgets">
    <div class="widget-wrapper">
        @await Component.InvokeAsync("ProductListWidget", new { count = 1 })
        <vc:product-list count="1" />
    </div>
</div>
```

Including View Components on Razor Pages

View components can be invoked inside pages and layouts and accept parameters

They can also be rendered using tag helpers

View Component Search Paths

ProductList.cs

```
public IViewComponentResult Invoke()  
{  
    return View()  
}
```



View search pattern

**Shared/Components/
{ ComponentName }/{ ViewName }**



**Shared/Components/
ProductList/Default.cshtml**

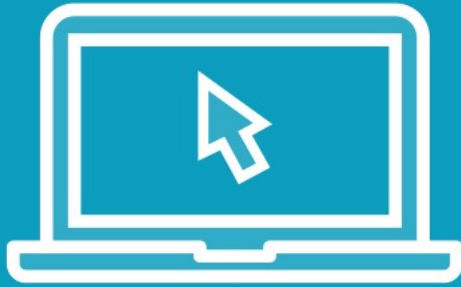


View Components vs. Razor Pages

Razor Page	View Component
Render full app page	Render small sections of markup
Handle incoming HTTP requests	Only accessible internally
Parent view	Child view
One per route	Multiple per route



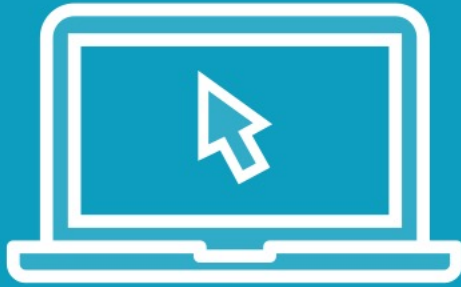
Demo



Creating a product list view component



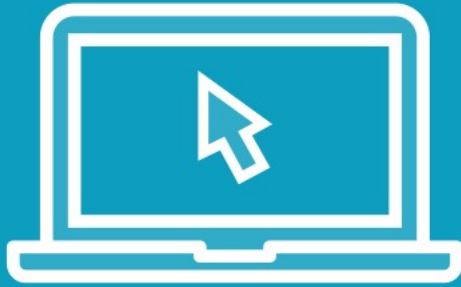
Demo



Working with view component parameters



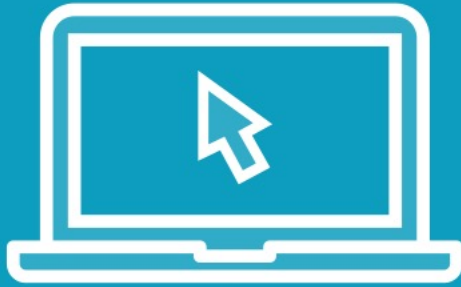
Demo



**Rendering view components using
tag helpers**



Demo



CSS isolation with view components



Summary



Partial views are primarily intended for reusing markup and very simple display logic

Partial views can also define a model to manage data

View components provide a way to create reusable pieces of markup that depend on complex logic

View components inherit from the ViewComponent base class and define a method called Invoke

We can pass parameters to view components to modify their behavior through the Invoke method

View Components can also be rendered using tag helpers after they are registered with the app

CSS isolation can be applied to view components and Razor Pages to control styling scope

