



# C# Web – MVC

PRO/PRW - C# Web 1

**DE HOGESCHOOL  
MET HET NETWERK**

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# Doel

- ASP.Net Core toepassing
  - MVC Web Application
    - TagHelper
      - SportStore
    - ViewComponent
      - SportStore

# ASP.NET CORE

MVC Web Application

MVCSportStore

- TagHelper

# MVCSportStore

- Add folder
  - TagHelpers
    - Add TagHelper class
      - PageLinkTagHelper.cs

```
namespace MVCSportStore.TagHelpers
{
    [HtmlTargetElement("page-link")]
    public class PageLinkTagHelper : TagHelper
    {
        public PagingInfo PagingInfo { get; set; }
    }
}
```

- Html
  - <page-link paging-info=""></page-link>

- Views/Shared
  - \_ViewImports.cshtml
    - addTagHelper \*, MVCSportStore

# MVCSportStore

PageLinkTagHelper.cs

```
namespace MVCSportStore.TagHelpers
{
    [HtmlTargetElement("page-link", Attributes="paging-info")]
    public class PageLinkTagHelper : TagHelper
    {
        public PagingInfo PagingInfo { get; set; }
        public override void Process(TagHelperContext context, TagHelperOutput output)
        {}
        private TagBuilder GetPaginationLinks(PagingInfo pagingInfo)
        {
            TagBuilder ul = new TagBuilder("ul");
            return ul;
        }
        private TagBuilder GetPaginationLink(int page, bool active)
        {
            string pageLinkActive = "btn border border-primary";
            string pagelink = "btn border border-secondary";
            TagBuilder li = new TagBuilder("li");
            return li;
        }
    }
}
```

# MVCSportStore

PageLinkTagHelper.cs - TagBuilder – GetPaginationLink()

```
private TagBuilder GetPaginationLink(int page, bool active)
{
    string pageLinkActive = "btn border border-primary";
    string pagelink = "btn border border-secondary";
    TagBuilder li = new TagBuilder("li");
    li.Attributes["class"] = "page-item";
    TagBuilder a = new TagBuilder("a");
    a.Attributes["class"] = (active) ? pageLinkActive : pagelink;
    a.Attributes["href"] = $"/Home/Index/{page}";
    a.Attributes["title"] = $"Click to go to page {page}";
    a.InnerHtml.Append($"{page}");
    li.InnerHtml.AppendHtml(a);
    return li;
}
```

```
<li class="page-item">
  <a class="btn border border-primary" href="/Home/Index/1" title="Click to go to page 1">1</a>
</li>
```



# MVCSportStore

PageLinkTagHelper.cs - TagBuilder – GetPaginationLinks()

```
private TagBuilder GetPaginationLinks(PagingInfo pagingInfo)
{
    TagBuilder ul = new TagBuilder("ul");
    ul.Attributes["class"] = "pagination";
    for (int page = 1; page <= pagingInfo.TotalPages; page++)
    {
        ul.InnerHtml.AppendHtml(
            GetPaginationLink(page, page == pagingInfo.CurrentPage));
    }
    return ul;
}
```

```
<ul class="pagination">
  <li class="page-item">
    <a class="btn border border-primary" href="/Home/Index/1" title="Click to go to page 1">1</a>
  </li>
  ...
</ul>
```

# MVCSPORTSTORE

PageLinkTagHelper.cs - Process()

```
public override void Process(TagHelperContext context, TagHelperOutput output)
{
    output.TagName = "div";
    output.Content.AppendHtml(GetPaginationLinks(PagingInfo));
}
```

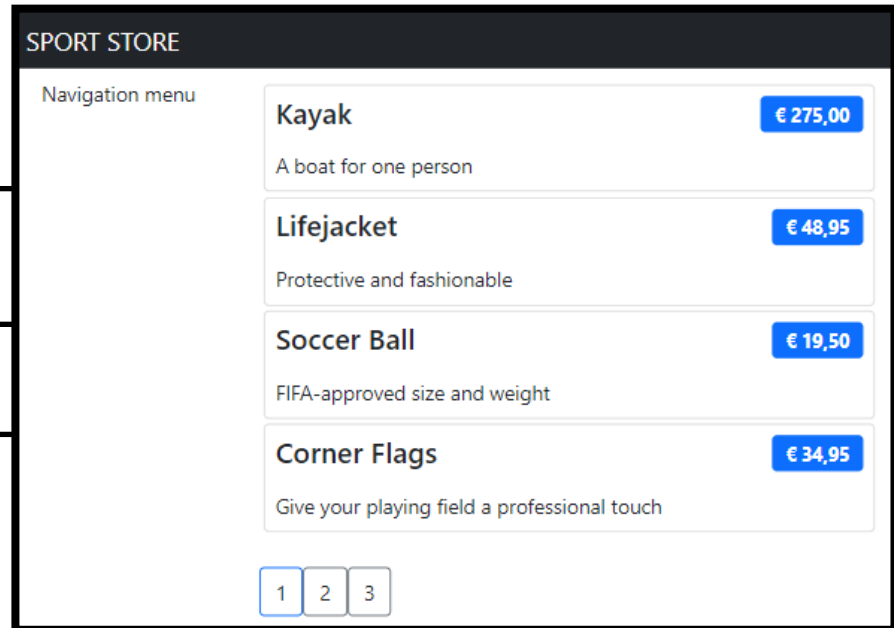
```
<div>
<ul class="pagination">
  <li class="page-item">
    <a class="btn border border-primary" href="/Home/Index/1" title="Click to go to page 1">1</a>
  </li>
  <li class="page-item">
    <a class="btn border border-secondary" href="/Home/Index/2" title="Click to go to page 2">2</a>
  </li><li class="page-item">
    <a class="btn border border-secondary" href="/Home/Index/3" title="Click to go to page 3">3</a>
  </li>
</ul>
</div>
```



# MVCSPORTSTORE

PageLinkTagHelper.cs  
Views/Home/Index.cshtml

```
@model ProductModel
@foreach (var p in Model.Products)
{
    <div>
        <h3>@p.Name</h3>@p.Description
        <h4>@p.ProductPrice.ToString("c")</h4>
    </div>
}
<br>
<page-link paging-info="@Model.PagingInfo"></page-link>
```



# MvcSportStore – styling

**SPORT STORE**

Navigation menu

**Kayak**  
A boat for one person

€ 275,00

**Lifejacket**  
Protective and fashionable

€ 48,95

**Soccer Ball**  
FIFA-approved size and weight

€ 19,50

**Corner Flags**  
Give your playing field a professional touch

€ 34,95

1

2

3

# MvcSportStore – styling

```
@model ProductModel
```

```
@foreach (var p in Model.Products)
{
```

```
    <div class="card card-outline-primary m-1 p-1">
```

```
        <div class="bg-faded p-1">
```

```
            <h4>
```

```
                @p.Name
```

```
                <span class="badge bg-primary" style="float:right">
```

```
                    <small>@p.ProductPrice.ToString("c")</small>
```

```
                </span>
```

```
            </h4>
```

```
        </div>
```

```
        <div class="card-text p-1">@p.Description</div>
```

```
    </div>
```

```
}
```

## SPORT STORE

Navigation menu

Kayak

€ 275,00

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1 2 3

# ASP.NET CORE

MVC Web Application

MVCSportStore

- Partial View

# Partial View - ProductSummary

Views/Shared

- Add empty razor view
  - ProductSummary.cshtml

# Partial View - ProductSummary

```
_ViewImports.cshtml  X
@using MVCSportStore
@using MVCSportStore.Models
@using MVCSportStore.Models.Data
@addTagHelper *, Microsoft.AspNetCore.Mvc.TagHelpers
@addTagHelper *, MVCSportStore
```

## Views/Shared

- Add empty razor view
  - ProductSummary.cshtml

```
@model Product
<div class="card card-outline-primary m-1 p-1">
  <div class="bg-faded p-1">
    <h4>
      @Model.Name
      <span class="badge bg-primary" style="float:right">
        <small>@Model.ProductPrice.ToString("c")</small>
      </span>
    </h4>
  </div>
  <div class="card-text p-1">@Model.Description</div>
</div>
```

# Partial View - ProductSummary

Views/Home/Index.cshtml

```
@model ProductModel

@foreach (var p in Model.Products)
{
    <partial name="ProductSummary" model="p" />
}
<br />
<page-link paging-info="@Model.PagingInfo"></page-link>
```

# ASP.NET CORE

MVC Web Application

MVCSportStore

- ViewComponent



# Navigation menu - ViewComponent

## Navigation Menu

- Project - Add folder: **Components**
  - Folder Components - Add Class: **NavigationMenuViewComponent**
- Views/Shared
  - Nieuwe folder: Components/NavigationMenu  
(Views/Shared/Components/NavigationMenu)
    - Add empty razor view
      - Default.cshtml

# Navigation menu - ViewComponent

```
namespace MVCSportStore.Components
{
    public class NavigationMenuViewComponent : ViewComponent
    {
        private StoreDbContext _context;
        public NavigationMenuViewComponent(StoreDbContext context)
        {
            _context = context;
        }
        public IViewComponentResult Invoke()
        {
            return View(_context.Products
                .Select(x => x.Category)
                .Distinct()
                .OrderBy(x => x));
        }
    }
}
```

# Navigation menu - ViewComponent

Navigation Menu - Views/Shared

- Views/Shared/Components/NavigationMenu/Default.cshtml

```
@model IEnumerable<string>
@foreach (string category in Model)
{
    <a class="btn btn-outline-secondary btn-block m-2"
      asp-action="Index"
      asp-controller="Home"
      asp-route-id="1">
        @category
    </a>
    <br>
}
```

# Navigation menu - ViewComponent

Navigation Menu - Views/Shared

- Views/Shared/\_Layout.cshtml

```
<body>
  <div class="bg-dark text-white p-2">
    <span class="navbar-brand ml-2">SPORTS STORE</span>
  </div>
  <div class="row m-1 p-1">
    <div id="categories" class="col-3">
      <vc:navigation-menu />
    </div>
    <div class="col-9">
      @RenderBody()
    </div>
  </div>
</body>
```

## SPORT STORE

Chess

Soccer

Watersports

### Kayak

€ 275,00

A boat for one person

### Lifjacket

€ 48,95

Protective and fashionable

### Soccer Ball

€ 19,50

FIFA-approved size and weight

### Corner Flags

€ 34,95

Give your playing field a professional touch

1

2

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# Navigation menu - ViewComponent

