

ASP.NET Core Tag Helpers

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About Me

- Web developer since 1995
- Pluralsight Author
- 3rd Degree Black Belt, Tae Kwon Do
- Microsoft MVP
- Telerik Developer Expert - Fiddler

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ASP.NET Core

- Open source and cross platform
 - Full .NET Framework, .NET Core (Windows, Mac, Linux)
- No more System.Web.dll!
- MVC/Web API unified (no Web Forms)
- Modular
- wwwroot folder
- **Tag Helpers**

Razor

- View engine for ASP.NET MVC
- HTML with server side code fragments
 - @ prefix for code blocks
- Visual Studio IntelliSense
- .cshtml (C#), .vbhtml (VB)

Tag Helpers

- “Enable server-side code to participate in creating and rendering HTML elements in Razor files”
- Goal is to look much more like HTML
- *Pascal-cased class and property names for tag helpers are translated into their “lower kebab” case*

Built In Tag Helpers

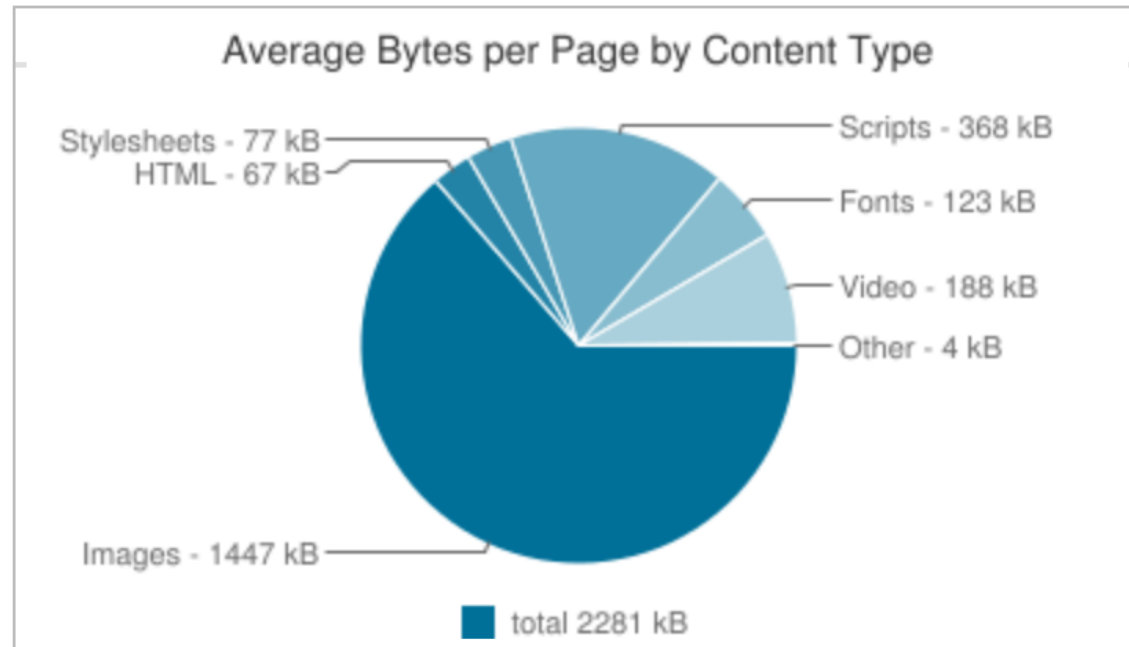
- <environment>
- <cache>
- <distributed-cache>

- Attributes
 - Form
 - Link and script
 - Image
 - Anchor

Custom Tag Helpers

- Derive from TagHelper
 - Implement ITagHelper,
- Target elements based on element name or attributes
- Visual Studio “Razor Tag Helper” template

Images



<http://httparchive.org/interesting.php#bytesperpage>

Lazy Load Images

- jQuery plugin and modified HTML to request images as scroll down
 - data-original – set to image URL
 - src – set to 1x1 clear pixel image
- Pages with lots of images only load those “above the fold”
- <http://www.appelsiini.net/projects/lazyload>

Multiple Tag Helpers

- Multiple tag helpers can apply to the same element
- Order – runs applicable tag helpers lowest to highest value
- Code as if previous tag helper may have already modified...

Responsive Image Goals

- Avoid images if possible
 - CSS 3 (gradients, rounded corners, etc.)
 - Web Fonts
 - Icon Fonts
- Vector images if possible (SVG)
- Want to **efficiently** provide the most appropriate image for the design and device

Responsive Image Techniques

- CSS 3 Media Queries
- JavaScript
- Server Image Adaptation
- *New Image Format?*
- ...

- **<picture>**
- **<img srcset...**

- Client Hints

<picture>

- <http://tinyurl.com/j5zsmf2>
- Use Cases (<http://usecases.responsiveimages.org>)
 - “Art Direction”
 - Image Formats
- *Want specific control over what is loaded...*

<img srcset...

- <http://tinyurl.com/m894jsw>
- Use Cases (<http://usecases.responsiveimages.org>)
 - Resolution/Viewport
 - Device-pixel-ratio
 - *Rest*
- *Inform browser about image widths and let it do what is “best”...*

Picturefill

- <http://scottjehl.github.io/picturefill/>

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			29						
			49					4.3	
			50					4.4	
8	13	47	51			9.2		4.4.4	
11	14	48	52	9.1	39	9.3	all	51	51
		49	53	10	40				
		50	54	TP	41				
		51	55						

<http://caniuse.com/#search=srcset>

Miscellaneous

- @tagHelperPrefix
- Opt out using “!”
- Can change how they look (Tools > Options > Environment > Fonts and Colors)
- 3rd party tag helpers (Telerik, DevExpress, Component One, ...)

Resources

- github.com/aspnet
- www.asp.net/core
- <https://docs.asp.net/en/latest/mvc/views/tag-helpers/index.html>
- <https://www.pluralsight.com/courses/responsive-web-images>

Questions

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