HTML Validator

Use <https://validator.w3.org/#validate_by_input>

Test Whether Which Browsers – and Which Versions of These Browsers - Support HTML Features

Use [Can I use... Support tables for HTML5, CSS3, etc](https://caniuse.com/#home).

<head> Element

In the <head> section of an HTML document one often sees a reference to a style-sheet.

<link rel=”stylesheet” type=”test.css” href=”main.css” />

Other common sections – inside <head> are <title>, <script>, <style>, and <base>.

<meta> within <head>

For the purpose of documentation lines of text within <head> . . . </head>

<meta name="description" content="example of how to render text" />

<meta name="author" content="Stephen Cole" />

would probably be good practice.

THE FOLLOWING - <article>, <header>, <section>, and <footer> RENDER THE PAGE IN THE SAME WAY THAT WOULD BE DONE BY <div>, BUT THEY ARE MORE CONCISE, AND IMPROVE THE READABILITY OF THE HYPERTEXT.

<article>

Wraps hypertext markup that is self contained. An article should make sense on its own and it should be possible to distribute it independently from the rest of the site. It might, for example, be used to refer to the main portion of a web page. Example – see <header> below.

<header>

Wraps hypertext that consists mostly of header elements. It might, for example, be used to refer to elements that would be appropriate at the top of the page. Example –

<article>

<header>

<h1>Wired Brain Coffee</h1>

<h2>Coffee to keep your brain wired</h2>

</header>

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.

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</article>

<section>

Wraps a major section of a page. It might be used with an “id” qualifier, e.g. <section id=”block1”>.

<footer>

Wraps hypertext that would probably be appropriate at end of a page.

<pre>

Introduces a section of code that is preformatted. The browser is instructed not to change spacing nor line breaks.

Link to a target page in a new tab or a new window

Within the anchor tag, use

target=”\_blank”

If you want the browser to open the target page in a new tab or a new window. This feature works with a local page (part of the same web application) or an external page. If you use this feature when the target page is not part of the same web application, it is good practice to include

rel=”noreferrer noopener”

as a defense against a malicious practice that might be performed by the target site (which might have been hijacked).

Displaying an image

In the section [Inluding Images].[Understanding Images in HTML] the instructor placed a logo of “Wired Brain Coffee” near the top of default.html. To resize the image to a more modest size he appended

height=”150px” width=”150px”

(where “px” is an abbreviation of “pixels”. In Visual Studio 2019 when I followed his example, Visual Studio displayed the logo with the smaller dimensions, but it also indicated a warning under both instances of “150px”. Investigating farther, I found that Visual Studio preferred “150” instead. Evidently the more-recent practice is to omit “px” from the width attribute of an image file. Refer to “width=” in

<http://w3c.github.io/html-reference/img.html>; it indicates that pixels are assumed.

Maintaining Hypertext and Images on same row

In the section [Inluding Images].[Understanding Images in HTML] the intent – in default.html - is to place the logo at the left edge of a line followed by the header text. One way to do this uses

float:left – in two places

margin-left:15px – to separate the logo from the header text

and

clear:both – to discontinue the float:left pattern

The 1st instance of float:left is essential; without it the header text goes to the top left, and the logo is next on the row. clear:both is essential; without it some of the remaining body material continues to the left of the header text. “px” in “margin-left:15px” is essential; without it Visual Studio displays a warning.

Using Alternating image files depending upon the width of the viewport

In the section [Inluding Images].[Understanding Images in HTML] the intent – in default.html - is to use a larger image when the viewport is wide and a smaller image when the viewport is narrow. This is expressed by specifying that the larger image be used when of the viewport width is big enough; if the viewport is narrow, then the browser must revert to the smaller image. Also, when the larger image is used, it should occupy x% of the width; and when the smaller image is used, it should occupy y% of the width.

The required markup information is

* The file location of the smaller image and its width.
* The file location of the larger image and its width.
* The percentages of the viewport width that the 2 images should occupy.
* The threshold for the viewport size; if the viewport width is less than the threshold, the viewport is narrow, and the narrower image file should be used; if the viewport width is greater than the threshold, then the wider image file may be used.

srcset="./wired-brain-coffee-logo.png 500w, ./wired-brain-coffee-logo-250.png 250w"

expresses the file locations and widths of the 2 images. 500w and 250w are the intrinsic widths of the images of the .png files on the computer. (The 1st image file has twice as many pixels as the 2nd image file. If the 2 image files were displayed without stretching or shrinking, the 1st would be twice as wide as the 2nd.)

sizes="(max-width: 500px) 25vw, 50vw"

“(max-width: 500px)” tells the browser to use the narrower image file when the viewport width is 500 pixels or less. The browser responds, and calculates which of the image files to use when the viewport width is <= 500 pixels. “25vw” tells the browser that the narrower image file should occupy 25% of the viewport’s width. “50vw” tells the browser that when the wider image is used, it should occupy 50% of the viewport’s width.

The order of the two parts of the **srcset** ingredients is immaterial. The order of the two parts of the **sizes** ingredients must be as shown above – with the **max-width** condition in the 1st ingredient.

To test markup that contains **srcset** and **sizes** statements, it is convenient to simulate narrow viewports with the browser. Refer to the section Toggling Between Viewports with Different Widths in [C:\Users\sncole\Documents\Current Pixel\Pluralsight\NotesAboutUsingChrome.docx](file:///C:\Users\sncole\Documents\Current%20Pixel\Pluralsight\NotesAboutUsingChrome.docx).