Introduction to HTML5: Part.2

Introduction to Internet and Web

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HTML HEAD

What is Head?

❖ The <head> element is a container for metadata (data about data) and is placed between the <html> tag and the <body> tag.

❖ HTML metadata is data about the HTML document. Metadata is not displayed.

❖ Metadata typically define the document title, character set, styles, scripts, and other meta information.

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HTML <title> Element

❖ **The <title> element defines the title of the document. The title must be text-only, and it is shown in the browser's title bar or in the page's tab.**

❖ **The <title> element is required in HTML documents!**

❖ **The contents of a page title is very important for search engine optimization (SEO)! The page title is used by search engine algorithms to decide the order when listing pages in search results.**

❖ **The <title> element:**
  ▪ defines a title in the browser toolbar
  ▪ provides a title for the page when it is added to favorites
  ▪ displays a title for the page in search engine-results

HTML <style> Element

❖ **The <style> element is used to define style information for a single HTML page**

This is a Heading

This is a paragraph.

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4     <title>Page Title</title>
5     <style>
6       body
7   {background-color: powderblue;}
8       h1 {color: red;}
9       p {color: blue;}
10    </style>
11  </head>
12  <body>
13
14  <h1>This is a Heading</h1>
15  <p>This is a paragraph.</p>
16
17  </body>
18  </html>
19
20
21
22
23
```

HTML <link> Element

❖ **The <link> element defines the relationship between the current document and an external resource.**

❖ **The <link> tag is most often used to link to external style sheets**

This is a Heading

This is a paragraph.

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4     <title>Page Title</title>
5     <link rel="stylesheet"
6   href="mystyle.css">
7   </head>
8   <body>
9
10  <h1>This is a Heading</h1>
11  <p>This is a paragraph.</p>
12
13  </body>
14  </html>
15
16
17
18
19
20
21
22
23
```

HTML <meta> Element

❖ The <meta> element is typically used to specify the character set, page description, keywords, author of the document, and viewport settings.

❖ The metadata will not be displayed on the page, but are used by browsers (how to display content or reload page), by search engines (keywords), and other web services.

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HTML <meta> – The *name* Attribute

❖ **The *name* attribute specifies the name for the metadata.**

❖ **The "**description**" specifies a description of the page.**

- Search engines can pick up this description to show with the results of searches.

❖ **The "**keyword**" specifies a comma-separated list of keywords - relevant to the page.**

- Informs search engines what the page is about

❖ **The "**author**" specifies the name of the author of the document.**

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4     <meta name="description"
5   content="Free Web tutorials">
6     <meta name="keywords"
7   content="HTML, CSS, JavaScript">
8     <meta name="author"
9   content="John Doe">
10  </head>
11  <body>
12
13  <p>All meta information goes
14  inside the head section.</p>
15
16  </body>
17  </html>
18
19
20
21
22
23
```

HTML <meta> - The *http-equiv* Attribute

❖ **The** *http-equiv* **attribute provides an HTTP header for the information/ value of the** *content* **attribute.**

❖ **If the** *http-equiv* **attribute is set, the** *name* **attribute should not be set.**

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4    <meta http-equiv="X-UA-
5  Compatible" content="IE=edge">
6    <meta http-equiv="refresh"
7  content="30">
8  </head>
9  <body>
10
11 <p>All meta information goes
12 inside the head section.</p>
13
14 </body>
15 </html>
16
17
18
19
20
21
22
23
```

HTML <meta> - The *charset* Attribute

❖ **The *charset* attribute for <meta> tag specifies the character encoding for the HTML document.**

- ▪ The HTML5 specification encourages web developers to use the UTF-8 character set, which covers almost all of the characters and symbols in the world!

❖ **Unlike *charset* attribute,
The *lang* attribute specifies the language of the element's content.**

Ex) nuguseyo

```
1   <!DOCTYPE html>
2   <html lang="ko">
3   <head>
4     <meta charset="UTF-8">
5   </head>
6
7   <body>
8
9   …
10
11  </body>
12  </html>
13
14
15
16
17
18
19
20
21
22
23
```

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HTML <script> Element

❖ **The <script> element is used to define client-side JavaScripts.**

❖ **The following JavaScript writes "Hello JavaScript!" into an HTML element with id="demo"**

My Web Page

A Paragraph

[Try it]

My Web Page

Hello JavaScript!

[Try it]

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4     <title>Page Title</title>
5     <script>
6     function myFunction() {
7   document
8   .getElementById("demo").
9   innerHTML = "Hello JavaScript!";
10    }
11    </script>
12  </head>
13  <body>
14
15  <h1>My Web Page</h1>
16  <p id="demo">A Paragraph</p>
17  <button type="button"
18  onclick="myFunction()">
19  Try it
20  </button>
21
22  </body>
23  </html>
```

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HTML BLOCK & INLINE

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HTML Block-level Elements

❖ **A block-level element always starts on a new line.**

❖ **A block-level element always takes up the full width available.**

- stretches out to the left and right as far as it can

❖ **A block level element has a top and a bottom margin.**

❖ **Here are the block-level elements in HTML:**

`<address>`	`<article>`	`<aside>`
`<blockquote>`	`<canvas>`	`<dd>`
`<div>`	`<dl>`	`<dt>`
`<fieldset>`	`<figcaption>`	`<figure>`
`<footer>`	`<form>`	`<h1>-<h6>`
`<header>`	`<hr>`	`<li>`
`<main>`	`<nav>`	`<noscript>`
`<ol>`	`<p>`	`<pre>`
`<section>`	`<table>`	`<tfoot>`
`<ul>`	`<video>`	

```
 1  <!DOCTYPE html>
 2  <html>
 3  <body>
 4
 5  <div style="border: 1px solid
 6  black">Hello World</div>
 7  <p>The DIV Element is a block
 8  element.</p>
 9
10  </body>
11  </html>
12
```

Hello World

The DIV element is a block element.

HTML Inline-level Elements

❖ **An inline element does not start on a new line.**

❖ **An inline element only takes up as much width as necessary.**

❖ **A inline level element doesn't have a margin.**

❖ **Here are the inline-level elements in HTML:**

<a>	<abbr>	<acronym>
<b>	<bdo>	<big>
 	<button>	<cite>
<code>	<dfn>	<em>
<i>	<img>	<input>
<kbd>	<label>	<map>
<object>	<output>	<q>
<samp>	<script>	<select>
<small>	<span>	<strong>
<sub>	<sup>	<textarea>
<time>	<tt>	<var>

```html
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <p>This is an inline span <span
6  style="border: 1px solid
7  black">Hello World</span> element
8  inside a paragraph.</p>
9  <p>The SPAN Element is a inline
10 element.</p>
11
12 </body>
13 </html>
```

This is an inline span Hello World element inside a paragraph.

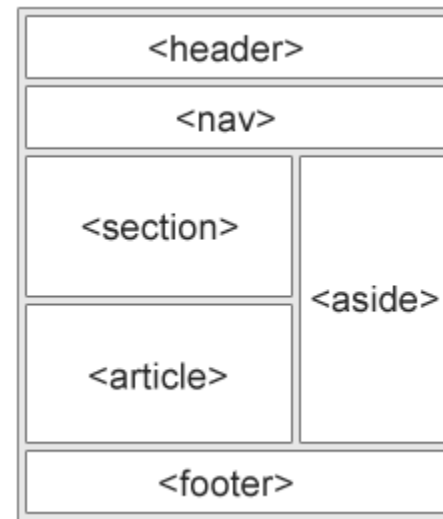The SPAN element is an inline element.

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HTML SEMANTIC ELEMENTS

What are Semantic Elements?

❖ A semantic element clearly describes its meaning to both the browser and the developer.

❖ Examples of non-semantic elements: <div> and <span> - Tells nothing about its content.

❖ Examples of semantic elements: <form>, <table>, and <article> - Clearly defines its content.

Semantic Elements in HTML

- ❖ **<article>**
- ❖ **<aside>**
- ❖ **<details>**
- ❖ **<figcaption>**
- ❖ **<figure>**
- ❖ **<footer>**
- ❖ **<header>**
- ❖ **<main>**
- ❖ **<mark>**
- ❖ **<nav>**
- ❖ **<section>**
- ❖ **<summary>**
- ❖ **<time>**

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HTML \<section> Element

❖ **The \<section> element defines a section in a document.**

❖ **According to W3C's HTML documentation: "A section is a thematic grouping of content, typically with a heading."**

❖ **A home page could normally be split into sections for introduction, content, and contact information.**

WWF

The World Wide Fund for Nature (WWF) is an international organization working on issues regarding the conservation, research and restoration of the environment, formerly named the World Wildlife Fund. WWF was founded in 1961.

WWF's Panda symbol

The Panda has become the symbol of WWF. The well-known panda logo of WWF originated from a panda named Chi Chi that was transferred from the Beijing Zoo to the London Zoo in the same year of the establishment of WWF.

```
1  <section>
2  <h1>WWF</h1>
3  <p>The World Wide Fund for Nature
4  (WWF) is an international
5  organization working on issues
6  regarding the conservation,
7  research and restoration of the
8  environment, formerly named the
9  World Wildlife Fund. WWF was
10 founded in 1961.</p>
11 </section>
12
13 <section>
14 <h1>WWF's Panda symbol</h1>
15 <p>The Panda has become the
16 symbol of WWF. The well-known
17 panda logo of WWF originated from
18 a panda named Chi Chi that was
19 transferred from the Beijing Zoo
20 to the London Zoo in the same
21 year of the establishment of
22 WWF.</p>
23 </section>
```

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HTML <article> Element

❖ **The <article> element specifies independent, self-contained content.**

❖ **An article should make sense on its own, and it should be possible to read it independently from the rest of the web site.**

❖ **Examples of where an <article> element can be used:**
- Forum post
- Blog post
- Newspaper article

Google Chrome

Google Chrome is a web browser developed by Google, released in 2008. Chrome is the world's most popular web browser today!

Mozilla Firefox

Mozilla Firefox is an open-source web browser developed by Mozilla. Firefox has been the second most popular web browser since January, 2018.

```
 1  <article>
 2  <h2>Google Chrome</h2>
 3  <p>Google Chrome is a web browser
 4  developed by Google, released in
 5  2008. Chrome is the world's most
 6  popular web browser today!</p>
 7  </article>
 8
 9  <article>
10  <h2>Mozilla Firefox</h2>
11  <p>Mozilla Firefox is an open-
12  source web browser developed by
13  Mozilla. Firefox has been the
14  second most popular web browser
15  since January, 2018.</p>
16  </article>
17
18
19
20
21
22
23
```

Nesting <article> in <section> or Vice Versa?

❖ The <article> element specifies independent, self-contained content.

❖ The <section> element defines section in a document.

❖ So, on the Internet, you will find HTML pages with <section> elements containing <article> elements, and <article> elements containing <section> elements.

❖ You will also find pages with <section> elements containing <section> elements, and <article> elements containing <article> elements.

HTML <header> Element

❖ **The <header> element specifies a header for a document or section.**

❖ **The <header> element should be used as a container for introductory content.**

❖ **You can have several <header> elements in one document.**

❖ **The following example defines a header for an article:**

What Does WWF Do?

WWF's mission:

WWF's mission is to stop the degradation of our planet's natural environment, and build a future in which humans live in harmony with nature.

```
1  <article>
2
3    <header>
4      <h1>What Does WWF Do?</h1>
5      <p>WWF's mission:</p>
6    </header>
7
8    <p>WWF's mission is to stop the
9  degradation of our planet's
10 natural environment,
11   and build a future in which
12 humans live in harmony with
13 nature.</p>
14
15 </article>
16
17
18
19
20
21
22
23
```

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HTML <footer> Element

❖ **The <footer> element specifies a footer for a document or section.**

❖ **A <footer> element should contain information about its containing element.**

❖ **A footer typically contains the author of the document, copyright information, links to terms of use, contact information, etc.**

❖ **You may have several <footer> elements in one document.**

Author: Hege Refsnes

hege@example.com

```
1   <footer>
2
3     <p>Author: Hege Refsnes</p>
4
5     <p><a href="mailto:hege@example
6   .com">hege@example.com</a></p>
7
8   </footer>
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
```

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HTML \<nav\> Element

❖ **The \<nav\> element defines a set of navigation links.**

HTML | CSS | JavaScript | jQuery

T

Notice that NOT all links of a document should be inside a ⟨nav⟩ element.

The ⟨nav⟩ element is intended only for major block of navigation links.

```
 1  <nav>
 2
 3    <a href="/html/">HTML</a> |
 4    <a href="/css/">CSS</a> |
 5    <a href="/js/">JavaScript</a> |
 6    <a href="/jquery/">jQuery</a>
 7
 8  </nav>
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
```

HTML <aside> Element

❖ **The <aside> element defines some content aside from the content it is placed in (like a sidebar).**

❖ **The <aside> content should be related to the surrounding content.**

My family and I visited The Epcot center this summer. The weather was nice, and Epcot was amazing! I had a great summer together with my family!

Epcot Center

Epcot is a theme park at Walt Disney World Resort featuring exciting attractions, international pavilions, award-winning fireworks and seasonal special events.

```
1   <p>My family and I visited The
2   Epcot center this summer. The
3   weather was nice, and Epcot was
4   amazing! I had a great summer
5   together with my family!</p>
6
7   <aside>
8   <h4>Epcot Center</h4>
9   <p>Epcot is a theme park at Walt
10  Disney World Resort featuring
11  exciting attractions,
12  international pavilions, award-
13  winning fireworks and seasonal
14  special events.</p>
15  </aside>
16
17
18
19
20
21
22
23
```

HTML <figure> and <figcaption> Elements

❖ **An image and a caption can be grouped together in a <figure> element.**

❖ **The purpose of a caption is to add a visual explanation to an image.**

Fig.1 - Trulli, Puglia, Italy.

```
1   <figure>
2
3     <img src="pic_trulli.jpg" alt="
4   Trulli">
5     <figcaption>
6       Fig1. - Trulli, Puglia, Italy.
7     </figcaption>
8
9   </figure>
10
11
12
13
14
15
16
17
18
19
20
21
22
23
```

Why Semantic Elements?

❖ **Many web sites contain HTML code like:** <div id="nav"> <div class="header"> <div id="footer"> **to indicate navigation, header, and footer.**

❖ **According to the W3C: "A semantic Web allows data to be shared and reused across applications, enterprises, and communities."**

HTML ENTITIES

HTML Entities

❖ **Some characters are reserved in HTML.**

❖ **If you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags.**

❖ **Character entities are used to display reserved characters in HTML.**

  ▪ Reserved characters in HTML must be replaced with character entities.

❖ **A character entity looks like this:**

```
&entity_name;

OR

&#entity_number;
```

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <p>&apos;Entity&apos; &amp;
6  &lt;Symbol&gt;</p>
7
8  </body>
9  </html>
```

'Entity' & <Symbol>

Non-breaking Space

❖ **A common character entity used in HTML is the non-breaking space: **

❖ **A non-breaking space is a space that will not break into a new line.**

❖ **Two words separated by a non-breaking space will stick together (not break into a new line). This is handy when breaking the words might be disruptive.**

❖ **Another common use of the non-breaking space is to prevent browsers from truncating spaces in HTML pages.**

❖ **If you write 10 spaces in your text, the browser will remove 9 of them. To add real spaces to your text, you can use the   character entity.**

HTML Symbol

❖ **Many mathematical, technical, and currency symbols, are not present on a normal keyboard.**

❖ **To add such symbols to an HTML page, you can use the entity name or the entity number (a decimal or a hexadecimal reference) for the symbol.**

I will display ‰

I will display ‰

I will display ‰

I will display €

I will display €

I will display €

```
 1  <!DOCTYPE html>
 2  <html>
 3  <body>
 4
 5  <p>I will display &permil;</p>
 6  <p>I will display &#8240;</p>
 7  <p>I will display &#x2030;</p>
 8
 9  <p>I will display &euro;</p>
10  <p>I will display &#8364;</p>
11  <p>I will display &#x20AC;</p>
12
13  </body>
14  </html>
15
16
17
18
19
20
21
22
23
```

Some Other Useful HTML Character Entities

Result	Description	Entity Name	Entity Number
	non-breaking space		
<	less than	<	<
>	greater than	>	>
&	ampersand	&amp	&
"	double quotation mark	"	"
'	single quotation mark (apostrophe)	'	'
¢	cent	¢	¢
£	pound	£	£
¥	yen	¥	¥
€	euro	€	€
©	copyright	©	©
®	registered trademark	®	®

HTML FILE PATHS

HTML File paths

❖ **A file path describes the location of a file in a web site's folder structure.**

❖ **File paths are used when linking to external files like:**

- Web pages
- Images
- Style sheets
- JavaScripts

Path	Description
`<img src="picture.jpg">`	picture.jpg is located in the same folder as the current page
`<img src="images/picture.jpg">`	picture.jpg is located in the images folder in the current folder
`<img src="/images/picture.jpg">`	picture.jpg is located in the images folder at the root of the current web
`<img src="../picture.jpg">`	picture.jpg is located in the folder one level up from the current folder

Absolute File Paths

❖ **An absolute file path is the full URL to an internet file:**

Using a Full URL File Path


```
1   <!DOCTYPE html>
2   <html>
3   <body>
4
5   <h2>Using a Full URL File
6   Path</h2>
7
8   <img
9   src="https://www.w3schools.com/im
10  ages/picture.jpg" alt="Mountain"
11  style="width:300px">
12
13  </body>
14  </html>
15
16
17
18
19
20
21
22
23
```

Relative File Paths

❖ **A relative file path points to a file relative to the current page.**

❖ **In this example, the file path points to a file in the images folder located at the root of the current web:**

Using a Relative File Path

```
1   <!DOCTYPE html>
2   <html>
3   <body>
4
5   <h2>Using a Relative File
6   Path</h2>
7
8   <img src="/images/picture.jpg"
9   alt="Mountain"
10  style="width:300px">
11
12  </body>
13  </html>
14
15
16
17
18
19
20
21
22
23
```

HTML LINKS

HTML Links

❖ HTML links are hyperlinks.

❖ You can click on a link and jump to another document.

❖ When you move the mouse over a link, the mouse arrow will turn into a little hand.

HTML Links - Syntax

❖ **Hyperlinks are defined with the HTML <a> tag.**

❖ **The href attribute specifies the destination address (https://www.w3schools.com/html/) of the link.**

❖ **The link text is the visible part (Visit our HTML tutorial).**

❖ **Clicking on the link text will send you to the specified address.**

HTML Links

Visit W3Schools.com!

```
1   <!DOCTYPE html>
2   <html>
3   <body>
4
5   <h1>HTML Links</h1>
6
7   <p><a
8   href="https://www.w3schools.com/"
9   >Visit W3Schools.com!</a></p>
10
11  </body>
12  </html>
13
14
15
16
17
18
19
20
21
22
23
```

HTML Links - The Target Attribute

❖ **The target attribute specifies where to open the linked document.**

❖ **The target attribute can have one of the following values:**

- ▪ _blank - Opens the linked document in a new window or tab

- ▪ _self - Opens the linked document in the same window/tab as it was clicked (this is default)

- ▪ _parent - Opens the linked document in the parent frame

- ▪ _top - Opens the linked document in the full body of the window

- ▪ framename - Opens the linked document in a named frame

The target Attribute

Visit W3Schools!

If target="_blank", the link will open in a new browser window or tab.

```
1   <!DOCTYPE html>
2   <html>
3   <body>
4
5   <h2>The target Attribute</h2>
6
7   <a
8   href="https://www.w3schools.com/"
9   target="_blank">Visit
10  W3Schools!</a>
11
12  <p>If target="_blank", the link
13  will open in a new browser window
14  or tab.</p>
15
16  </body>
17  </html>
18
19
20
21
22
23
```

HTML <iframe> element

❖ **An iframe is used to display a web page within a web page.**

  ▪ Attributes: src, name, height, width

❖ **Syntax :**

```
<iframe src="url" title="description">
```

Iframe - Target for a Link

This page is displayed in an iframe

W3Schools.com

When the target attribute of a link matches the name of an iframe, the link will open in the iframe.

```
1   <h2>Iframe - Target for a
2   Link</h2>
3
4   <iframe src="demo_iframe.htm"
5   name="iframe_a" height="300px"
6   width="100%" title="Iframe
7   Example"></iframe>
8
9   <p><a
10  href="https://www.w3schools.com"
11  target="iframe_a">
12  W3Schools.com</a></p>
13
14  <p>When the target attribute of a
15  link matches the name of an
16  iframe, the link will open in the
17  iframe.</p>
18
19
20
21
22
23
```

HTML Links - Bookmark

❖ **HTML bookmarks are used to allow readers to jump to specific parts of a Web page.**

❖ **Bookmarks can be useful if a webpage is very long.**

❖ **To create a bookmark - first create the bookmark, then add a link to it.**

❖ **When the link is clicked, the page will scroll down or up to the location with the bookmark.**

Create a Bookmark

❖ **First, create a bookmark with the id attribute:**

```
<h2 id="C4">Chapter 4</h2>
```

❖ **Then, add a link to the bookmark ("Jump to Chapter 4"), from within the same page:**

```
<a href="#C4">Jump to Chapter 4</a>
```

❖ **You can also add a link to a bookmark on another page:**

```
<a href="html_demo.html#C4">Jump to Chapter 4</a>
```

```
1   <p><a href="#C4">Jump to Chapter
2   4</a></p>
3
4   <p><a href="#C2">Jump to Chapter
5   2</a></p>
6
7   <h2>Chapter 1</h2>
8   <p>This chapter explains ba bla
9   bla</p>
10
11  <h2 id="C2">Chapter 2</h2>
12  <p>This chapter explains ba bla
13  bla</p>
14
15  <h2>Chapter 3</h2>
16  <p>This chapter explains ba bla
17  bla</p>
18
19  <h2 id="C4">Chapter 4</h2>
20  <p>This chapter explains ba bla
21  bla</p>
22
23
```

HTML RESPONSIVE

What is Responsive Web Design?

❖ **Responsive Web Design is about using HTML and CSS to automatically resize, hide, shrink, or enlarge, a website, to make it look good on all devices (desktops, tablets, and phones)**

Setting The Viewport

❖ **The viewport is the user's visible area of a web page. It varies with the device - it will be smaller on a mobile phone than on a computer screen.**

❖ **You should include the following <meta> element in all your web pages:**

<meta name="viewport" content="width=device-width, initial-scale=1.0">

❖ **This gives the browser instructions on how to control the page's dimensions and scaling.**

❖ **The width=device-width part sets the width of the page to follow the screen-width of the device (which will vary depending on the device).**

❖ **The initial-scale=1.0 part sets the initial zoom level when the page is first loaded by the browser.**

❖ **In mobile browsers, viewport has a default width of 980px.**

- ▪ This allows you to view the entire web page naturally on your mobile.
- ▪ However, there is a problem with the page content looking too small.

Without the viewport meta tag

Without the viewport meta tag

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4
5  </head>
6
7  <body>
8
9  <img
10 src="https://www.w3schools.com/cs
11 s/img_chania.jpg" alt="Chania"
12 width="460" height="345">
13
14 …
15
16
17 </body>
18 </html>
19
20
21
22
23
```

With the viewport meta tag

With the viewport meta tag

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4
5   <meta name="viewport"
6   content="width=device-width,
7   initial-scale=1.0">
8
9   </head>
10
11  <body>
12
13  <img
14  src="https://www.w3schools.com/cs
15  s/img_chania.jpg" alt="Chania"
16  width="460" height="345">
17
18  …
19
20  </body>
21  </html>
22
23
```

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Responsive Images

❖ **Responsive images are images that scale nicely to fit any browser size.**

❖ **Using the width Property**

- If the CSS width property is set to 100%, the image will be responsive and scale up and down

- The image can be scaled up to be larger than its original size

❖ **Using the max-width Property**

- If the max-width property is set to 100%, the image will scale down if it has to, but never scale up to be larger than its original size

```
<img src="img_girl.jpg" style="max-width:100%;">
```

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4   <meta name="viewport"
5   content="width=device-width,
6   initial-scale=1.0">
7   </head>
8   <body>
9
10  <h2>Responsive Image</h2>
11  <p>When the CSS width property is
12  set in a percentage value, the
13  image will scale up and down when
14  resizing the browser window.
15  Resize the browser window to see
16  the effect.</p>
17
18  <img src="img_girl.jpg"
19  style="width:100%;">
20
21  </body>
22  </html>
23
```

Result of Responsive Images

Show Different Images Depending on Browser Width

❖ **The HTML <picture> element allows you to define different images for different browser window sizes.**

❖ **Resize the browser window to see how the image below change depending on the width**

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4   <meta name="viewport"…
5   </head>
6   <body>
7   <h2>Show Different Images Depending
8   on Browser Width</h2>
9   <p>Resize the browser width…</p>
10
11  <picture>
12    <source srcset="img_smallflower
13  .jpg" media="(max-width: 600px)">
14    <source srcset="img_flowers.jpg"
15  media="(max-width: 1500px)">
16    <source srcset="flowers.jpg">
17    <img src="img_flowers.jpg"
18  alt="Flowers" style="width:auto;">
19  </picture>
20
21  </body>
22  </html>
23
```

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Result of Show Different Images Depending on Browser Width

Responsive Text Size

❖ **The text size can be set with a "vw" unit, which means the "viewport width".**

❖ **That way the text size will follow the size of the browser window**

  ▪ 1vw = 1% of viewport width

  ▪ If the viewport width is 980px, 1vw is 9.8px

```
1
2   <h1 style="font-
3   size:10vw;">Responsive Text</h1>
4
5   <p style="font-size:5vw;">Resize
6   the browser window to see how the
7   text size scales.</p>
8
9   <p style="font-size:5vw;">Use the
10  "vw" unit when sizing the text.
11  10vw will set the size to 10% of
12  the viewport width.</p>
13
14  <p>Viewport is the browser window
15  size. 1vw = 1% of viewport width.
16  If the viewport is 50cm wide, 1vw
17  is 0.5cm.</p>
18
19
20
21
22
23
```

Responsive Text

Resize the browser window to see how
the text size scales.

Use the "vw" unit when sizing the text.
10vw will set the size to 10% of the
viewport width.

Viewport is the browser
window size. 1vw = 1% of
viewport width. If the viewport
is 50cm wide, 1vw is 0.5cm.

Responsive Text

Resize the browser window to see how
the text size scales.

Use the "vw" unit when sizing the text.
10vw will set the size to 10% of the
viewport width.

Example in the Textbook

Assignments

❖ **Create a web page to introduce yourself.**

- 자기 소개 페이지 작성
  - 시맨틱 태그를 사용하여 문서 작성
  - 개인정보
    - 사진은 본인 사진을 이미지 폴더를 지정하여 저장한 후 상대경로를 이용하여 표시
  - 학력사항
    - 출신학교 이미지를 이미지 폴더에 저장한 후 사용
    - 출신학교로 하이퍼링크를 이용하여 이동
  - 자기소개
    - 이전에 작성한 SWOT분석 페이지로 이동

➢ **The <head> element is a container for metadata (data about data) and is placed between the <html> tag and the <body> tag.**

➢ **HTML Semantic Elements**
  ▪ According to the W3C: "A semantic Web allows data to be shared and reused across applications, enterprises, and communities."

➢ **HTML Entities : Some characters are reserved in HTML.**

➢ **HTML File Paths : A file path describes the location of a file in a web site's folder structure.**

➢ **HTML Links: Clicking on the link text will send you to the specified address.**

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