ELEMENT, ATRIBUT, HEADING, PARAGRAF, FORMAT TEXT, FONT

Week 2

Static Web Programming

Semester 1

HTML ELEMENT

○ HTML Element is everything from the **Start Tag** to the **End Tag.**

Start Tag	Element Content	End Tag
<p>	This is a paragraph	</p>
	This is a link	

SYNTAX ELEMENT HTML

○ An HTML element is written with a start tag, with an end tag, with the content in between.

○ HTML elements can be nested (elements can contain elements).

○ The <html> element defines the whole document.

○ Some HTML elements have no content, called as empty element.

○ Empty elements can be "closed" in the opening tag like this: <br/>.

○ Most HTML elements have attributes.

EXAMPLE OF HTML DOCUMENT

```
<html>

<body>
<p>This is my first paragraph.</p>
</body>

</html>
```

○ The example above contains 3 HTML elements.

EXPLANATION

○ **Element <p>**

```
<p>This is my first paragraph.</p>
```

- Element <p> defines a paragraph in HTML document.
- The element has a start tag <p> and an end tag </p>.
- Content of element: "This is my first paragraph."

EXPLANATION

○ **Element <body>**

```
<body>
<p>This is my first paragraph.</p>
</body>
```

- Element <body> defines the body of HTML document.
- The element has a start tag <body> and an end tag </body>.
- The content of the element is another HTML element (element p).

EXPLANATION

○ **Element <html>**

```
<html>
<body>
<p>This is my first paragraph.</p>
</body>
</html>
```

- Element <html> defines the whole HTML document.
- The element have a start tag <html> and an end tag </html>.
- The content of the element is two other HTML elements (element body and element p).

END TAG

- Some HTML elements will display correctly, even if you forget the **end tag**.

  ```
  <p>This is a paragraph.
  ```

  ```
  <p>This is another paragraph.
  ```

- The example above works in all browsers, because the closing tag is considered optional.

- Never rely on this. It might produce unexpected results and/or errors if you forget the end tag.

EMPTY HTML ELEMENTS

○ HTML elements with no content are called Empty Elements.

○ Example:

```
<br> is an empty element without end tag.
```

○ The <br> tag defines a line break.

○ Empty elements can be "closed" in the opening tag like this:

HTML ATTRIBUTES

HTML Attributes

- HTML elements can have attributes.
- Attributes provide additional information about HTML elements.
- Attributes are always specified in the **start tag.**
- Attributes come in name/value pairs like: **name="value"**

HTML ATTRIBUTES

- Link in HTML is defined with the <a> tag.
- Link address is written using **href attribute.**
- Example:

```
<a href="http://www.google.com">
this is a link</a>
```

- The attribute value should written in quotes.
- Double quotes (") is the most common used, eventhough single quote (') is allowed.
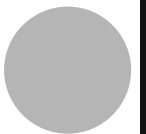- Example: `name='Michael "Jacko" Jackson'`

HTML ATTRIBUTES

○ Below is an alphabetical list of some attributes often used in HTML

Atribut	Value	Description
alt	text	Specifies an alternate text for an image
href	the URL	Specifies the URL (web address) for a link
class	classname	Specifies class name in element
id	id	Specifies a unique id for an element
style	style_definition	Specifies an *inline style* for an element
title	tooltip_text	Specifies extra information about an element (displayed as a tooltip)

HTML HEADINGS And PARAGRAPHS

HTML HEADINGS

- Headings are defined with the <h1> to <h6> tags.
- <h1> defines the most important heading, while <h6> defines the least important heading.
- Example:

```
<h1>This is a heading</h1>
<h2>This is a heading</h2>
<h3>This is a heading</h3>
```

- Browser automatically add some empty space (a margin) before and after each heading.

HEADINGS ARE IMPORTANT

○ Use HTML Headings for heading only. Don't use headings to make text **BIG** or **bold.**

○ Search engine use your headings to index the structure and content of your web pages.

○ Users skim your pages by its headings. It is important to use headings to show the document structure.

HTML HORIZONTAL RULES

- The <hr/> tag creates a horizontal line in an HTML page.
- The hr element can be used to separate content.
- Example:

```
<p>This is a paragraph</p>
<hr/>
<p>This is a paragraph</p>
<hr/>
<p>This is a paragraph</p>
```

COMMENTS IN HTML

o Comments are sometimes written in an HTML document to show the information of the document.

o Comments are not displayed by the browser, but the can help document your HTML.

o Example:

```
<!--this is a comment-->
```

o There is an exclamation point (!) in the opening tag, but not in the closing tag.

HTML LINE BREAKS

○ The <br/> tag is used to break line without any new paragraph.

○ Example:

```
<p>this is <br/>a paragraph
<br/>with line breaks</p>
```

○
 is an empty HTML element without **end tag**.

○ In XHTML, XML, elements without **end tag** are not allowed. Thus, although <br> works in all browsers, <br/> is better in XHTML and XML applications.

TEXT FORMAT And HTML FONT

HTML Text Formatting

This text is bold

This text is big

This text is italic

This is an output in computer

This is $_{subscript}$ and ^{superscript}

HTML Text Formatting Tags

- HTML uses <b> , <i> and <u> tags to for formatting output like **bold,** *italic* and <u>underlined</u>.

- <b> tag is often replaced by <strong>, and <i> tag is often replaced by <em> to show users as "very important" text.

- However, there is a difference in the meaning of these tags: <b> and <i> defines bold and italic text, but <strong> and <em> means that the text is "important".

HTML Text Formatting Tags

- `<mark>` tag is used to highlight text.
- `<del>` tag is used to show that the text have been deleted.
- `<ins>` tag defines the inserted text (underlined).

FONT TAGS IN HTML

- <font> tag defines font format in HTML documents.
- <font> tags need additional attribute.
- Font element attribute :

Font Attribute	Value	Description
Size	"1-7"	To change the font size (7 is the biggest)
Color	"rgb, name, or hexadesimal"	To change font color
Face	"font type"	To change the type of font (Default = TNR)

SUBSCRIPT AND SUPERSCRIPT

- <sub> tag is written to make subscript
- <sup> tag is written to make superscript
- Example:

```
<p>This is a <sub>subscript</sub>
<p>This is a <sup>superscript</sup>
```