HTML Overview

Web application with HTML and CSS

Lesson Objectives

- HTML Overview
- HTML Element
- Block vs Inline
- Heading & Paragraph
- Structure & Semantic

Session 1

HTML OVERVIEW

1. What is HTML?

- ***HTML*** stands for **H**yper **T**ext **M**arkup **L**anguage
  - HTML describes the structure of a Web page
  - HTML consists of a series of elements
  - HTML elements tell the browser how to display the content
  - HTML elements are represented by tags

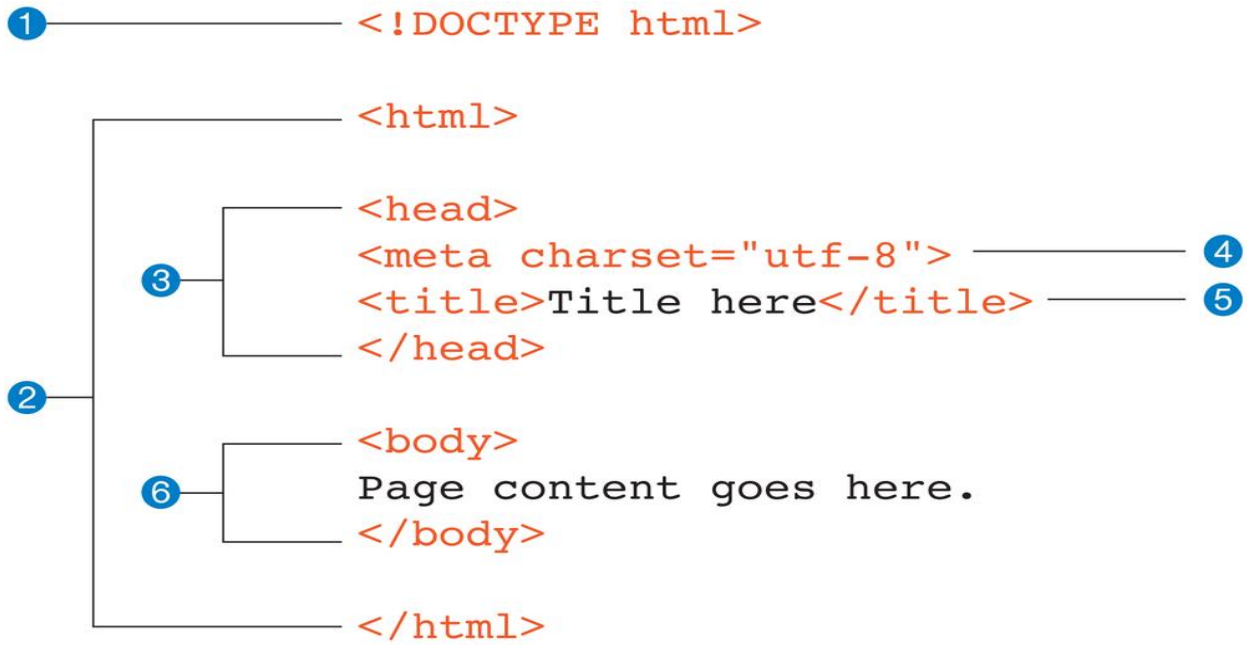
1. What is HTML?

- Example of a basic HTML Document

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My test page</title>
  </head>
  <body>
    <img src="images/firefox-icon.png" alt="My test image">
  </body>
</html>
```

2. Anatomy of HTML document

- ***Anatomy of HTML document***



3. Head & metadata

- ***Head*** is a container for all the stuff you want to include on the HTML page that *isn't* the content you are showing to your page's viewers
  - Meta
  - Link
  - Title
  - Style
  - Script

3. Head & metadata

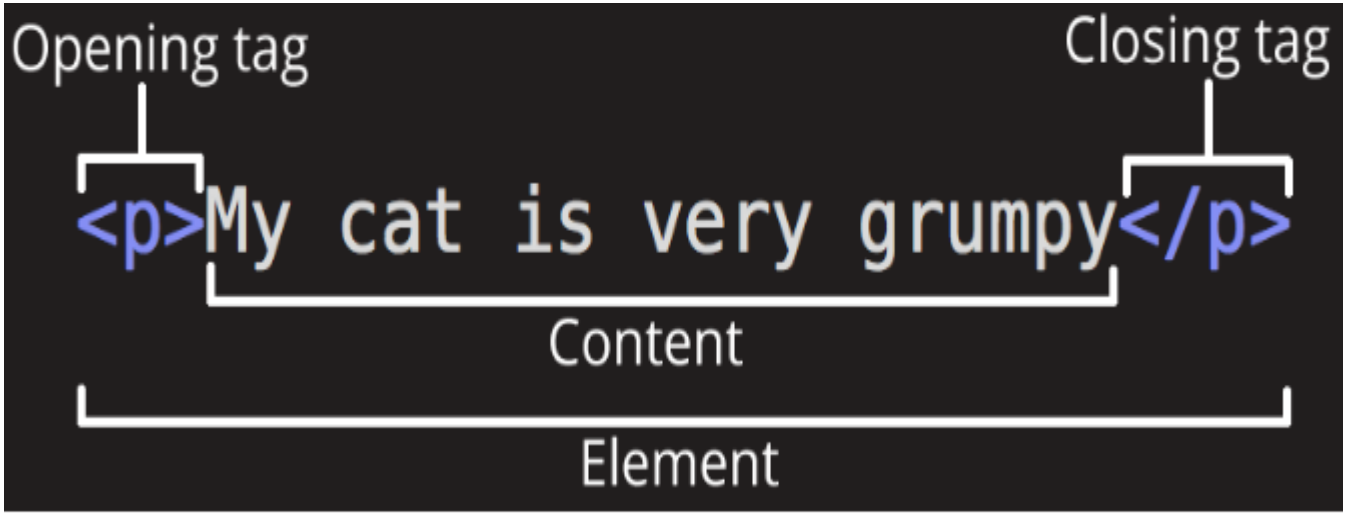
- ***Metadata*** is data about data. The **meta** tag (<meta>) is used in an HTML document to provide high level metadata about the web page, such as:
  - A page description and the keywords that describe the subject of the page.
  - Page authorship information.
  - Instructions for specific browser actions.
  - Details about the page title, description, and author to be used when the page is posted on social media or shown in SERPs.

Demo

CREATE HEAD & METADATA

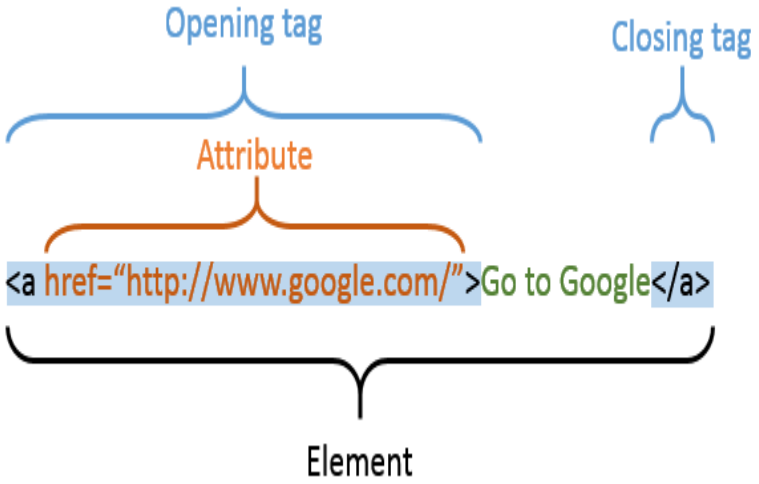
4. Anatomy of HTML Element

- ***Anatomy of HTML Element***



5. Element attribute

- Attributes are always specified in **the start tag**
- Attributes usually come in name/value pairs like: **name="value"**



- ***Id attribute:*** Specifies a unique id for an HTML element
- **Class attribute:** Define equal styles for elements with the same class name.

6. Nesting elements

- ***Nesting elements***
  - HTML elements can be nested (elements can contain elements).
  - All HTML documents consist of nested HTML elements

❖ ***Note:*** Make sure that your elements are properly nested

```
1 <p>My cat is <strong>very</strong> grumpy.</p>
```

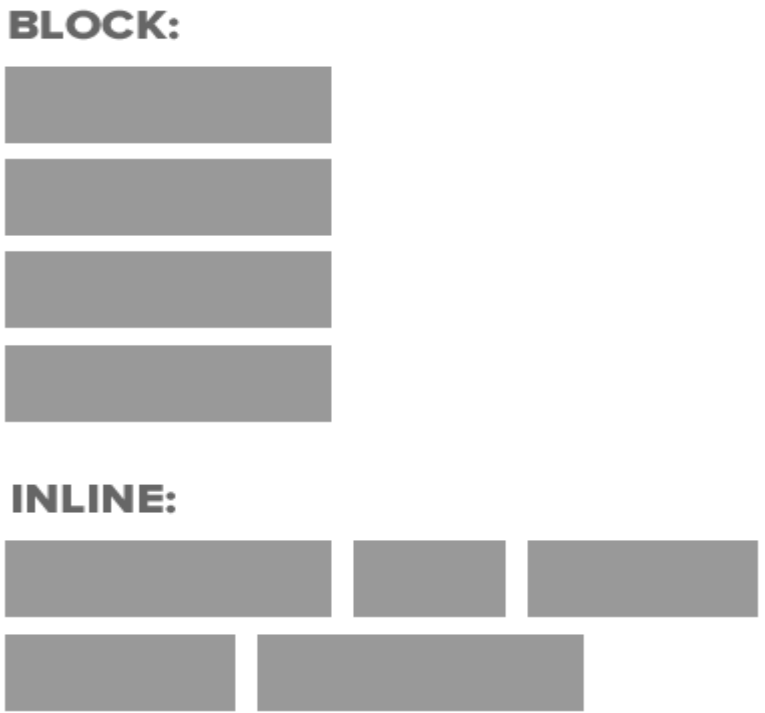
=> Correct

```
1 <p>My cat is <strong>very grumpy.</p></strong>
```

=> Incorrect

7. Block & Inline

Take a look



7. Block & Inline

- ***Block elements***:
  - Always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).
  - Block elements in HTML

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

7. Block & Inline

- ***Inline elements***:
  - Does not start on a new line and only takes up as much width as necessary.
  - Inline elements in HTML

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

Demo

CREATE HTML ELEMENTS

8. HMTL Comments

- ***HTML comments***:
  - Comment tags are used to insert comments in the HTML source code
  - An HTML comment begins with <!– – and the comment closes with – –>

- You can add comments to your HTML source by using the following syntax:

```
<!-- Write your comments here -->
```

HTML Entities

- Reserved characters in HTML must be replaced with character entities.
- Some Useful HTML Character Entities

HTML Entities

Result	Description	Entity Name	Entity Number
	non-breaking space		
<	less than	&lt;	&#60;
>	greater than	&gt;	&#62;
&	ampersand	&amp;	&#38;
"	double quotation mark	&quot;	&#34;
'	single quotation mark (apostrophe)	&apos;	&#39;
©	copyright	&copy;	&#169;
®	registered trademark	&reg;	&#174;

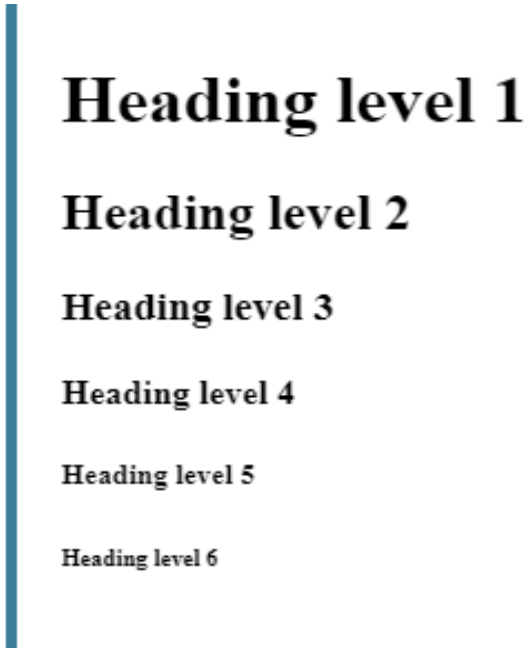
Section 2

HEADING AND PARAGRAPH

1. Heading

- **Heading:** There are six heading elements — <h1>, <h2>, <h3>, <h4>, <h5>, and <h6>.

```
1 <h1>Heading level 1</h1>
2 <h2>Heading level 2</h2>
3 <h3>Heading level 3</h3>
4 <h4>Heading level 4</h4>
5 <h5>Heading level 5</h5>
6 <h6>Heading level 6</h6>
```



1. Heading

- **Heading:** Each element represents a different level of content in the document; <h1> represents the main heading, <h2> represents subheadings, <h3> represents sub-subheadings, and so on.

- **Purpose of Heading:**
  - Search engines use the headings to index the structure and content of your web pages.
  - Users often skim a page by its headings. It is important to use headings to show the document structure.

Note: Use HTML headings for headings only. Don't use headings to make text **BIG** or **bold**.

1. Heading

- **Usage notes:**
  - Avoid using heading tags to resize text. Instead, use the CSS font-size property.
  - Avoid skipping heading levels: always start from <h1>, next use <h2> and so on.
  - You should only use one <h1> per page.

2. Paragraph

- **Paragraph:** <p> element represents a paragraph. HTML paragraphs can be any structural grouping of related content, such as images or form fields.

```
<p>This is the first paragraph of text.
  This is the first paragraph of text.
  This is the first paragraph of text.
  This is the first paragraph of text.</p>
<p>This is the second paragraph.
  This is the second paragraph.
  This is the second paragraph.
  This is the second paragraph.</p>
```

This is the first paragraph of text. This is the first paragraph of text. This is the first paragraph of text. This is the first paragraph of text.

This is the second paragraph. This is the second paragraph. This is the second paragraph. This is the second paragraph.

Section 3

STRUCTURE AND SEMANTIC

3. Structure hierarchy

- **Structure hierarchy:**
  - Should just use a single <h1> per page — this is the top level heading, and all others sit below this in the hierarchy.
  - Make sure you use the headings in the correct order in the hierarchy.
  - Of the six heading levels available, you should aim to use no more than three per page, unless you feel it is necessary.

4.Why structure hierarchy is important?

- **Why structure hierarchy is important?**
  - Users looking at a web page tend to scan quickly to find relevant content, often just reading the headings to begin.
  - Search engines indexing your page consider the contents of headings as important keywords for influencing the page's search rankings.
  - To style content with CSS, or make it do interesting things with Javascript, you need to have elements wrapping the relevant content, so CSS/JavaScript can effectively target it.

5. Semantics

- **Semantics:** 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.

5. Semantics

➢ Compare Semantics and Non-Semantics

```
<header></header>
<section>
    <article>
        <figure>
            <img>
            <figcaption></figcaption>
        </figure>
    </article>
</section>
<footer></footer>
```

VS

```
<div id="header"></div>
<div class="section">
    <div class="article">
        <div class="figure">
            <img>
            <div class="figcaption"></div>
        </div>
    </div>
</div>
<div id="footer"></div>
```

5. Semantics

- **Compare Semantics and Non-Semantics**
  - The semantics is much **easier to read.**
  - The semantics has **greater accessibility**: Well-support for Search Engine.
  - The semantics lead to more **consistent code**.

5. Semantics

➢ Some semantics elements in HTML5

Tag	Description
<article>	Defines an article
<aside>	Defines content aside from the page content
<details>	Defines additional details that the user can view or hide
<figcaption>	Defines a caption for a <figure> element
<figure>	Specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.
<footer>	Defines a footer for a document or section
<header>	Specifies a header for a document or section
<main>	Specifies the main content of a document
<mark>	Defines marked/highlighted text
<nav>	Defines navigation links
<section>	Defines a section in a document
<summary>	Defines a visible heading for a <details> element
<time>	Defines a date/time

Section 3

HTML 5 SEMANTIC TAGS

HTML5 Semantic

Element	Description
<header>...</header>	Indicates the header information on the webpage. Header content typically consists of a business name or logo and is commonly positioned immediately after the opening <body> tag.
<nav>…</nav>	Indicates the start and end of a navigation area within the webpage. The nav element contains hyperlinks to other webpages within a website and is commonly positioned immediately after the closing </header> tag.
<main>...</main>	Indicates the start and end of the main content area of a webpage. Contains the primary content of the webpage. Only one main element can appear on a page.
<footer>…</footer>	Indicates the start and end of the footer area of a webpage. Contains the footer content of the webpage.
<section>…</section>	Indicates the start and end of a section area of a webpage. Contains a specific grouping of content on the webpage.
<article>…</article>	Indicates the start and end of an article area of a webpage. Contains content such as forum or blog posts.
<aside>…</aside>	Indicates the start and end of an aside area of a webpage. Contains information about nearby content and is typically displayed as a sidebar.

- Create HTML page with:
  - ✓ header,
  - ✓ nav,
  - ✓ main,
  - ✓ section,
  - ✓ article,
  - ✓ footer

Create HTML page

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Formaggio $15.50

Four cheeses (morzzarella, parmesan, percorino, jarlberg

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Fresh tomatos, mozzarella, chicken, onions

Pineaapple'o'clock $16.50

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Meat Town Hot! $20.00

Fresh tomatos, mozzarella, hot pepporoni, hot sause, beef, chicken

Parma New $21.50

Fresh tomatos, mozzarella, parma, bacon, fresh arugula

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content.txt

Lesson Summary

Thank you