**HTML & CSS Documentation**

**1. Introduction**

This document serves as a summary of newly learned HTML and CSS concepts, providing explanations and insights into their usage. At the end, you will find practical exercises to reinforce your understanding.

**2. HTML Semantic Tags**

Semantic tags provide meaning to the web page content, helping browsers and developers understand the structure better.

**Common Semantic Tags:**

* <header>: Represents the introductory section of a page.
* <main>: The primary content of the page. Only one <main> should exist per page.
* <section>: Defines a thematic grouping of content.
* <article>: Represents an independent, self-contained piece of content (e.g., blog post, news article).
* <footer>: Defines the footer of a section or an entire document.
* <nav>: Contains navigation links.
* <aside>: Represents secondary content, often used for sidebars.

**Example Usage:**

<header>

<h1>My Website</h1>

</header>

<nav>

<ul>

<li><a href="#">Home</a></li>

<li><a href="#">About</a></li>

</ul>

</nav>

<main>

<article>

<h2>Blog Post</h2>

<p>This is an example of an article element.</p>

</article>

</main>

<footer>

<p>&copy; 2025 My Website</p>

</footer>

**3. Forms & Input Elements**

Forms are used to collect user input, which is then sent to a server for processing.

**Common Form Elements:**

* <form>: Encapsulates all input elements.
* <label>: Provides a label for an input field.
* <input>: Various types such as text, radio, and checkbox.
* <fieldset>: Groups related form controls.
* <legend>: Provides a title for a <fieldset>.

**Example Usage:**

<form action="/submit" method="post">

<fieldset>

<legend>Choose Your Favorite Movie</legend>

<label><input type="radio" name="movie" value="matrix"> Matrix</label>

<label><input type="radio" name="movie" value="inception"> Inception</label>

</fieldset>

<input type="submit" value="Submit">

</form>

**4. HTML Tables**

Tables organize data in rows and columns.

**Common Table Elements:**

* <table>: Defines a table.
* <tr>: Table row.
* <td>: Table data (cell).
* <th>: Table header.

**Example Usage:**

<table border="1">

<tr>

<th>Name</th>

<th>Age</th>

</tr>

<tr>

<td>John</td>

<td>25</td>

</tr>

</table>

**5. HTML Multimedia & Quotes**

**Important Tags:**

* <blockquote>: A section of quoted text.
* <cite>: Provides a reference to a source.
* <figure> & <figcaption>: Used to group and label images or quotes.

**Example Usage:**

<figure>

<blockquote>

<p>"The way to get started is to quit talking and begin doing."</p>

</blockquote>

<figcaption>Walt Disney - <cite>blog.hubspot.com</cite></figcaption>

</figure>

**6. CSS Styling**

CSS is used to style HTML elements, improving the visual presentation of a web page.

**Common CSS Properties:**

* color: Sets text color.
* background-color: Sets background color.
* font-size: Defines text size.
* border: Sets border styles.
* width & height: Defines element dimensions.

**Example Usage:**

p {

color: aquamarine;

background-color: azure;

font-size: 30px;

border: 5px solid black;

}

**Selectors:**

* .class: Targets elements with a specific class.
* #id: Targets elements with a specific ID.
* [attribute]: Targets elements with a specific attribute.

.text { color: violet; }

#text-id { color: blanchedalmond; }

[type="button"] { width: 100px; height: 50px; }

**7. Practical Exercises**

Try implementing the following tasks to test your understanding:

**Exercise 1: Create a Simple Web Page**

* Include <header>, <nav>, <main>, <article>, <footer>.
* Add a form with radio buttons, text input, and submit button.
* Include an image with a caption using <figure> & <figcaption>.

**Exercise 2: Style a Button**

* Create a button with:
  + background-color: blue;
  + color: white;
  + border-radius: 10px;
  + hover effect (change color on hover).

**Exercise 3: Create a Table with CSS Styling**

* Add borders, background color, and text alignment.
* Style alternate rows differently using nth-child selector.

table tr:nth-child(even) {

background-color: lightgray;

}

By completing these exercises, you will solidify your knowledge of HTML & CSS!