**Core HTML ASSIGNMENT**

**Lesson:**

**Anchor tags:-**An anchor tag in HTML is represented by the <a> element and is used to create hyperlinks within a web page.it allows you to link to other web pages, files,sections within the same page,email addresses, and more. The anchor tag is one of the fundamental elements for navigation and linking in HTML.

Let us look at the basic syntax

**Unset**

**<a herf=”URL”>Link Text</a>**

The most commonly used attributes with the anchor tag are

* href
* target
* rel

1. **Herf (Hypertext Reference):**

It specifies the destination URL or target of the link.

**Ex: Unset**

**<a href=”**[**https://pwskills.com**](https://pwskills.com)**”>Visit PWSkills website</a>**

With this a link will be created on the text visit PWSkils website and on clicking on this text the user will be redirected to pwskills.com in the same tab.

1. **Target:**

It specifies where the linked document should be displayed.

.\_self: This is the default value if we do not specify any target attribute. This means open the link in the same window

JavaScript

**<a href=”**[**https://pwskills.com**](https://pwskills.com)**” target=”\_se;f”>visit PWSkills website</a>**

**.\_blank**: if we use\_blank this means open the link in a new tab.

**EX:**

**Unset**

**<a href=”**[**https://pwskills.com**](https://pwskills.com)**” target=”\_blank”>Visit PWSkills website</a>**

In the above code example, we have declared target=”\_blank” and whenever someone tries to open this link it will open in a new tab, unlike the previous example where it opened in the same tab.

**.\_parent:** the parent browsing context of the current one. If no parent,behaves as \_self.

**Ex:**

JavaScript

**<iframe width=”300” height=”100”**

**style=”border:3px dashed #808cf8;padding:30px 0 0 30px”**

**srcdoc=”<a target=’\_parent’**

**href=’**[**https://wikipedia.com**](https://wikipedia.com)**’ >wikipedia</a>”> </iframe>**

In the example above, we have an iframe and a target\_parent attribute, when you click on wikipedia the link will open outside the iframe, if there was no\_parent then it would open inside the iframe.

**.\_top:** the topmost browsing context(the “highest” context that’s an ancestor of the current one). If there are no ancestors, it behaves as**\_self.**

**Ex:**

**javaScript**

**<iframe width=”300” height=”100”**

**style=”border:3px dashed #808cf8;padding:30px 0 0 30px”**

**srcode=”<a target=’\_top’**

**href=’**[**https://wikipedia.com**](https://wikipedia.com)**’>Wikipedia</a>”></iframe>**

This unlike the\_parent will move to the outermost section which is the browser and replace the page. Example, if we are in an online editor where the left hand side has the editor and the right hand side has output preview,using\_top will replace the entire page with the destination URL

This is the biggest difference between\_parent and \_top, \_parent will replace the parent whereas\_top will replace from the browser window.

* **target=”framename”** attribute value on an<a> tag. Clicking the link will open the linked page in the specified <iframe>

**Ex:**

**JavaScript**

**<p>**

**Click to learn more about**

**<a target=”display-frame”**

**href=”**[**https://en.wikipedia.org/wiki/Physics\_Wallh**](https://en.wikipedia.org/wiki/Physics_Wallh)**”> >Physics Wallah</a>.**

**</p>**

**<iframe name=” display-frame”**

**style=”width:100%;height:600px;border:2px solid#4e46e5;”></iframe>**

**3.rel**

Specifies the relationship between the linked document and the current document.it provides additional information about the link.

Common values include no follow, noopener, noreferre, stylesheet, icon, and custom values.

* **rel=”nofollow”:**

Indicates to search engines that they should not follow the link or pass any ranking authority to the linked page.

**Ex:**

Unset

**<a href=”**[**https://pwskills.com**](https://pwskills.com)**” rel=”nofollow”>Visit PWSkills website</a>**

**. rel=”noopener”(or)rel=”noreferrer”:**

These values are used to enhance security when opening links in a new tab or window,preventing the newly opened page from accessing the window.opener object of the originating page.

When we use **target=”\_blank”**the default behavior for rel is noreferrer

**Ex:**

Unset

<a href=”<http://pwskills.com>” target=” \_blank”>Visit PWSkills website</a>

**.rel=”stylesheet”:-** Specifies that the linked document is a style sheet used to define the visual presentation of the current document.

This is one of the most common and important ones out there that you will see yourself using whenever you have an external stylesheet. Mostly you see this in your head tag.

**Ex:**

**Unset**

**<link href=”style.css” rel=”stylesheet”/>**

**.rel=”icon”:-** Specifies that the linked document is an icon or image to be used as the website’s favicon (a small icon displayed in the browser’s tab or bookmark).

**Unset**

**<link rel=”icon” href=”favicon.ico” type=”image/x-icon” />**

.rel=”custom value”:-it is also possible to define custom rel values to represent specific relationships or metadata associated with the link. These custom values can be used for various purposes, such as indicating authorship, licensing, or alternate language versions.

Let us now look at how we can link to a different section in the same page

**Ex**

**Unset**

**<!DOCTYPE html>**

**<html lang=”en”>**

**<head>**

**<meta charset=”UTF-8”/>**

**<meta name=”viewport” content=”widh=device-width,initial-scale=1.0”/>**

<title>Home</title>

<style>.section{height:100vh;} </style>

</head>

<body>

<ul>

<li><a href=”#section-1”>section 1</a></li>

<li><a href=”#section-2”>section 2</a></li>

</ul>

<div class=”section” id=”section-1”>

<h1>Section 2</h1>

</div>

</body>

</html>

In the example code above, we can see I have 2 sections with **section-1** and **section -2 id** respectively (if you do not know what ID and classes are do not worry, we will learn them later in the course). I have given these **ids** to the href attribute in the anchor tag. Now when we click on the anchor tag they will jump down to the respective section matching the **id.**

Let us now see how we can link another page of our website using anchor tag

**Ex**

**<!DOCTYPE html>**

**<html lang=”en”>**

**<head>**

**<meta charset=”UTF-8”/>**

**<meta name=”viewport” content=”width=device-width, initial-scale=1.0”/>**

**<title>Home</title>**

**</head>**

**<body>**

**<a href=”about.html”>About</a>**

**</body>**

**</html>**

In the code example above,we can see we have an anchor tag with href value about ,html. We need to make sure we have a file called about,html in our path similar to our root document. If the file name matches then on clicking the link we will be redirected to that page, in our case it is about,html.

You can check the html code that I have in my about. Html in my html file.

Unset

<!DOCTYPE html>

<html lang=”en”>

<head>

<meta charset=”UTF-8”/>

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

<title>About page</title>

</head>

<body>

<h1>About page</h1>

</body>

</html>

Lesson

HTML classes and ID

**Anchor Tag:-** HTML classes and IDs are attributes used to identify or group elements within an HTML document uniquely. They provide a way to target and style specific elements or apply JavaScript functionality. Here’s an overview of HTML classes and IDs:

**HTML Classes:**

* The class attribute assigns one or more class names to an HTML element.
* Classes allow multiple elements to share the same styling or behavior.
* Multiple classes can be assigned to an element by separating them with spaces.
* Classes are defined in CSS stylesheets to apply specific styles to the elements with those class names.

**Ex:**

Example-1

Unset

<**div class=”container”>**

**<h1 class=”heading”>PWSkills!</h1>**

**<p class=”content”>pure hardwork, No Shortcuts!</p>**

**</div>**

Example-2

Unset

**<div class=”container”>**

**<h1 class=”heading”>PWSkills!</h1>**

**<span class=”content”>Pure Hardwork</span>**

**<span class=”content”>, No shortcuts!</span>**

**</div>**

The example code above shows how to add class names to the HTML tags.

Note:-We can write any class name but it is better to write meaningful class names that represent the use case of that class.

Notably, we can give any number of classes to an element and the order of the classes basically does not matter.

**Ex:**

**Unset**

**<div class=”containr”>**

**<h1 class=”heading”>PWSkills!</h1>**

**<span class=”content primary”>Pure Hardwork</span>**

**<span class=”content secondary”>, No shortcuts!</span>**

**</div>**

**HTML IDS:**

* The id attribute is used to give a unique identifier to an HTML element.
* Each ID must be unique within the HTML document.
* IDs are primarily used for targeting specific elements with CSS or JavaScript.
* IDs are often used when you want to apply specific styling or perform target action on a single element.+

**Unset**

**<div id=”container”>**

**<h1 id=”heading”>PWSkills!</h1>**

**<p id=”content”>Pure Hardwork, No shortcuts!</p>**

**</div>**

Similar to classes, we can give any number of IDs to an element and the order of the IDs basically does not matter but make sure they are unique.

**EX:**

**Unset**

**<div id=”container”.**

**<h1 id=” heading”>PWSkills!</h1>**

**<p id=”content tagline”>Pure Hardwork, No Shortcuts!</p>**

**</div>**

**Tips:**

* Use ID for uniquely targeting the element via JavaScript, or giving the element some uniques style, since ID must not be reused
* Use classes when you want to give a generic style to elements since classes can be reused.

Writing a Hello World program in HTML

**Introduction to HTML:-**It stands for HyperText Markup Language and it helps set the structure of the content in our web pages



**Structure Of HTML Document**

**1. <!DOCTYPE html>**

**2. html lang="en"**

**3. <head>**

**4. <title>**

**5. <body>**

**6. <h1>**

**7. <p>**

**<!DOCTYPE html>**

**<html lang=”en”>**

**<head>**

**<titile> Hello, World!</title>**

**</head>**

**<body>**

**<h1>Hello, World!</h1>**

**<p>This is my first HTML page.</p>**

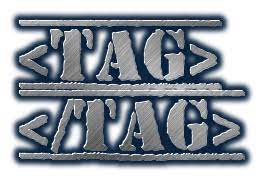
**</body>**

**</html>**

**Useful VS code extensions**

**Topics Covered:-**

**Auto rename tag**

****

**Live server**

****

**ESLint**

****

**Prettier**

****

**Material icon theme**

****

**HTML comments**

**Topics Covered :-**

**● Single line comment**

**● Multi line comment**

**Single Line Comment**

**<!-- This is a comment in HTML—>**

**Multi Line Comments**

**<!-- This is a comment in HTML with multiple lines—>**

**Grouping of HTML elements**

**Div tags**

**<div>**

**<p>This is a text</p>**

**<p>This is another text</p>**

**</div>**

**Element and Tag in HTML**

**What is a tag:-** Tags are the building blocks of HTML documents and consist of angel brackets enclosing specific keywords. These tags provide instructions to web browsers on how to display the content.

Opening tag <tag> content that is affected by this tag</tag>closing tag

**Types of Tags**

**HTML tags can be broadly categorized into two types:**

1. **Paired Tags(or container tags)**
2. **Singular Tags(or void tags)**

**What is an element:**

HTML elements consist of a start tag, an end tag(if applicable), and content in between the tags.

**Opening tag**  **Closing tag**

<p> My cat is very grumpy</p>

(content)

………………………………………………………

Element

**Some common Tags**

1. **Heading(h1,h2,h3,h4,h5,h6)**
2. **Paragraph(<p>)**
3. **<hr> tag**
4. **<br> tag**
5. **<span>**