**WD Assignment**

**Module-1 (HTML)**

1. **Are the HTML Tags and Elements the same thing?**

No, tags and elements are related concepts but they are not the same thing.

**HTML tags** are the building blocks of the HTML document. They are used to define and structure the content of webpage.

Tags are enclosed in angular brackets and they can either be opening tags or closing tags or self-closing tags.

**Elements** are made up of tags, content and attributes. An element consists of opening tag and closing tag. Some elements are self-closing tags such as the <br> tag.

1. **What are Tags and Attributes in HTML?**

**HTML tags** are the building blocks of the HTML document. They are used to define and structure the content of webpage.

**Attributes** provide additional information about HTML elements. They are always included in the opening tag and are used to modify the element's behavior or provide extra details about the element. Attributes consist of a name and a value, separated by an equal sign (=) and enclosed in double or single quotation marks.

1. **What are Void Elements in HTML?**

A void element is an element in HTML that cannot have any child nodes (i.e., nested elements or text nodes). Void elements only have a start tag, end tags must not be specified for void elements.

1. **What are HTML Entities?**

An HTML entity is a piece of text ("string") that begins with an ampersand (&) and ends with a semicolon (;). HTML entities are frequently used to display reserved characters which would otherwise be interpreted as HTML code, and invisible characters like non-breaking space.

1. **What are different types of Lists in HTML?**

HTML provides several types of lists to organize and structure content. The three main types of lists are:

1. Ordered list

* Used to create a list where the order of items is important.
* Each item is marked with a number (or another ordered marker).
* Created using the <ol> element and each list item is represented by the <li> element.

1. Unordered list

* Used to create a list where the order of items is not important.
* Each item is typically marked with a bullet point or another unordered marker.
* Created using the <ul> element and each list item is represented by the <li> element.

1. Description list

* Used to create a list of terms and their corresponding definitions.
* Consists of a series of terms (represented by the <dt> element) and their corresponding definitions (represented by the <dd> element).
* Typically used for glossaries or lists of key terms.

1. **What is the class attribute in HTML?**

The class global attribute is a space-separated list of the case-sensitive classes of the element. Classes allow CSS and JavaScript to select and access specific elements via the class selectors or functions like the DOM method.

1. **What is the difference between the ‘id’ attribute and the ‘class’ attribute of HTML elements?**

A class name can be used by multiple HTML elements and an id name must be used by one HTML element within the page.

1. **What are the various formatting tags in HTML?**

* **Text Formatting:**

<b>: Represents bold text.

<i>: Represents italicized text.

<u>: Represents underlined text.

<strong>: Represents strong importance, typically displayed as bold.

<em>: Represents emphasized text, typically displayed as italic

* **Heading Tags:**

<h1> to <h6>: Represent different levels of headings, where <h1> is the highest level and <h6> is the lowest.

* **Paragraphs:**

<p>: Represents a paragraph of text.

* **Line Breaks:**

<br>: Represents a line break.

* **Horizontal Rule:**

<hr>: Represents a thematic break or horizontal rule.

* **Preformatted Text:**

<pre>: Represents preformatted text, preserving both spaces and line breaks.

* **Quotations:**

<blockquote>: Represents a block-level quotation.

<q>: Represents an inline quotation.

* **Abbreviations and Acronyms**

<abbr>: Represents an abbreviation or acronym.

1. **How is Cell Padding different from Cell Spacing?**

Cell padding is used to create a border around the content area of a web page, whereas cell spacing is used for positioning elements (such as images or text) within that content area.

1. **How can we club two or more rows or columns into a single row or column in an HTML table?**

To merge cells from rows and columns in HTML table we can use the **rowspan** or **colspan** attributes. These attributes define how many rows or columns a cell should span.

1. **What is the difference between a block-level element and an inline element?**

**Block-Level Elements:**

**Structure:**

Block-level elements typically start on a new line and stretch across the full width of their containing element (parent).

They create a "block" of content.

**Layout:**

Block-level elements create a new block or box in the layout flow, stacking vertically on top of each other.

They often contribute to the overall structure and layout of the document.

**Inline Elements:**

**Structure:**

Inline elements do not start on a new line, and they only take up as much width as necessary.

They flow within the content and do not create new blocks.

**Layout:**

Inline elements do not force a new line, allowing multiple inline elements to appear on the same line.

1. **How to create a Hyperlink in HTML?**

In HTML, you create a hyperlink using the <a> (anchor) element. The <a> element allows you to link to another webpage, a file, or a specific location within the same page.

**Example:**

<a href="URL">Link Text</a>

1. **What is the use of an iframe tag?**

An inline frame (iframe) is a HTML element that loads another HTML page within the document. It essentially puts another webpage within the parent page. They are commonly used for advertisements, embedded videos, web analytics and interactive content.

1. **What is the use of span tag? Explain with example.**

The <span> tag in HTML is an inline-level element that is used to apply styles or scripting to a specific section of text within a larger block of content.

**Example:** <p>This is a <span style="color: red; font-weight:bold;">highlighted</span> word in a paragraph.</p>

1. **How to insert a picture into a background image of a web page?**

<body background = "URL or path" > Website Body </body>

1. **How are active links different from normal links?**

A normal link is just a line of code that contains a pointer to another resource. An active link is that line of code in action, opening that other resource. Normal links refer to links that point to different pages or sections of a website. These links are typically used for navigation between different parts of the site. An active link, in this context, often refers to a link that corresponds to the currently active or selected page or section.

1. **What are the different tags to separate sections of text?**Paragraph tag <p>, Headings (h1 to h6), Divisions <div>, Blockquote < blockquote>, Horizontal Rule <hr>, Lists <ul> <ol> <li>, Preformatted Tag <pre>, Abbreviation <abbr>.
2. **What is SVG?**

SVG (Scalable Vector Graphics) is an XML-based vector image format for two-dimensional graphics with support for interactivity and animation. It is widely used for creating graphics and illustrations on the web. SVG images are defined in XML text files, which means they are human-readable and can be created and modified with text editors.

1. **What is difference between HTML and XHTML?XHTML** stands for Extensible Hypertext Markup Language. It can be considered as a part of the XML markup language this is because of XHTML have features of both XML and HTML. XHTML is extended from XML and HTML. XHTML can be considered as a better version of HTML.

**HTML** is the Hypertext Markup Language which is the most widely used language over the internet. HTML is used to create web pages and link them from one to another.

**Advantages** of XHTML:

**Strict syntax:** XHTML has a stricter syntax compared to HTML5, which means that it is more structured and easier to read.

**Standardization:** XHTML follows the syntax rules of XML, which is a standardized markup language. This makes it easier to create interoperable web pages that work well with different web browsers and devices.

**Better for parsing:** XHTML is easier to parse and process than HTML5, which makes it a better choice for developers who want to create web pages that can be easily processed by other software tools.

**Disadvantages of XHTML:**

**More difficult to code:** XHTML has a stricter syntax compared to HTML5, which can make it more difficult to code.

**Not backward compatible:** XHTML is not backward compatible with older versions of HTML, which means that some older web browsers may not be able to display XHTML documents properly.

**Requires more bandwidth:** XHTML documents tend to require more bandwidth compared to HTML5 documents due to their stricter syntax and increased number of tags.

**Advantages** of HTML5:

**Easier to code:** HTML5 has a more relaxed syntax compared to XHTML, which makes it easier to code.

**Backward compatibility:** HTML5 is designed to be backward compatible with older versions of HTML, which means that it can be used with older web browsers.

**Multimedia support:** HTML5 includes support for multimedia elements such as video and audio, which makes it easier to create web pages that include multimedia content.

**Disadvantages** of HTML5:

**Non-standardization:** HTML5 is not a standardized markup language, which means that different web browsers may interpret it differently.

**Security issues:** HTML5 includes new features such as geolocation and offline storage, which can create security vulnerabilities if not implemented properly.

**Incompatibility with older web browsers:** Some older web browsers may not be able to display HTML5 documents properly, which can create compatibility issues for developers.

1. **What are logical and physical tags in HTML?**

**Logical tags** are designed to convey the meaning of the content to both browsers and developers. They provide a semantic structure that helps in accessibility, SEO, and content interpretation.

**Physical tags** were focused on the appearance of content rather than its meaning. They allowed developers to specify the visual style directly within the HTML document.