**Module (HTML) -1**

**(1) Are the HTML tags and element the same thing ?**

 No html tags and elements are releted consept,but they are not exactly the same thing.

1. HTML Tags:

• An HTML tag is a keyword or code that defines how the browser should format and display the content.

• Tags are used to Structure and markup the content within an html document.

• Tags are composed of an opening tag , This is a paragraph, is the content,and ‘</p>’ is the closing tag.

2. HTML Elements :

• An HTML element consists of an opening tag,content,and closing tag (if applicable). it may also include attributes within the opening tag.

It represents specific sturecture or semantic meaning on a webpage.for example the

• <P> element is used to define a paragraph ,and everything between the opening

• <p> tag and the closing </P> tag is the content of that paragraph.

**(1) What are tags and attributes in HTML?**

1. HTML Tags:

• Defination: Tags are the fundamental building blockes of HTML.They are used to define element on a webpage.

• Format: Tags are enclosed in angle brackets (< >), and they typically come in pairs-an opening tag and a closing tag.

2. HTML Attributes:

• Definition:Attributes Provides addition about HTML elements.They are always included in the opening tag and are used to modifiy the behavior or apperance of the element.

 Format: Attributes consist of a name and a value, separated by an equal sign (‘=’) and enclosed in double or single quotes.

**(2) What are void elements in HTML?**

 In HTML, void element are elements that do not have any content or closing tag.They are self-closing and typically represent empty elements.void element are used to embed media,create line breaks,and various other purposes.These elements are defined in the html specification,and their usage is standardized.

 Void elements :

1. <img>: Represents an image.

2. <br> : Represents a link break.

3. <input> : Represents an input field.

4. <hr> : Represents a horizontal rule (line).

 void elements don’t have a closing tag, and any attempt to add content between the opening and closing tags will be ignored.

**(3) What are HTML Entities?**

 HTML entities are special codes or sequences used to represent reserved characters, symbols,or entities in html markup.These entities are used to ensure that browser

correctly render and display characters that might otherwise be interpreter as HTML code. for example, the less-than sign (<

) and the greater-than sign (>) have special meanings in html

,and if you want to display them as regular characters on a webpage, you use HTML entitites.

 HTML Entities :

1. &lt : Represents the less-than sign ‘<’.

2. &gt : Represents the greater-than sign ‘>’.

3. &amp : Represents the ampersand sign ‘&’.

4. &quot : Represents the double quotation mark “ .

5. &apos or &#39 : Represents the single quotation mark (apostrophe) ‘ .

• Using HTML entities is important when you want to include characters that have special meanings in HTML, ensuring that they are treated as plain text rather than being interpreted as part of the HTML markup.

**(4) What are different types of lists in HTML?**

 Three main taypes of list in HTML

1. Ordered List ( <ol> ):

• An oedered list is used to represent a list of item in a specific order or sequence.

• Each item in the list is marked with a number (or another type of ordered marker).

• The <ol> elements is used to define the ordered list

,and each item is wrapped in <li> (list item) tags.

2. Unordered List (<ul> ) :

• An unordered list is used to represent a list of items without any particular order.

• Each item in the list is typically marked with a bullet point or another type of unordered marker.

• The <ul> element is used to define the unordered list,and each item is wrapped in <li> tags.

3. Description List (<dl> ) :

• A description list is used to represent a list of terms and their corresponding descriptions.

• The <dl> elements is used to define the description list. Each term is wrapped in <dt> (tern) tags , and each description is wrapped in <dd> (description) tags.

**(5) What is the ‘class’ attribute in HTML?**

The HTML class attribute is used to specify a single or multiple class names for an HTML element. The class name can be used by CSS and JavaScript to do some tasks for HTML elements. You can use this class in CSS with a specific class, write a period (.) character, followed by the name of the class for selecting elements.

• A class attribute can be defined within <style> tag or in separate file using the (.) character.

• In an HTML document, we can use the same class attribute name with different elements.

**(6) What is the difference between the ‘id’ attribute and the ‘class’ attribute of HTML elements?**

1. Uniqueness:

• Id : The id attribute must be unique within a page.It is used to identify a specific Html element on the page.

• Class : The class Attribute,on the other hand, is not required to be unique.you can apply the same class to multiple elements on a page.

2. Styling and Selecting :

• ID : it is often used for styling a specific element or for selecting that element using javascript. css styles for an id can be applied using the # sector (e.g #myElement).

• class : classes are commony used to apply styles or select multiple elements that share the same class. css style for a class can be applied using the ‘.’ selector (e.g. ‘myClass’).

3. Semantics :

• ID : it is often used for unique,significant element on a page. it’s meant to uniquely identify a specific element.

• Class : Classes are used for grouping elements that share similar characteristics, such as styling or behavior.

**(7) What are the various formatting tags in HTML?**

1. Bold :

• <b> This is a physical tag, which is used to bold the text written between it.

2. Strong :

• <strong> This is a logical tag, which tells the browser that the text is important.

3. Italic :

• <i> This is physical tag which is used to make text italic.

4. Mark :

• <mark> This tag is used to highlight text.

5. Underline :

• <u> This tag is used to underline text written between it.

6. Superscript :

• <sup> It display the content slightly above the normal line.

7. Subscript :

• <sub> It display the content slightly below the normal line.

8. delete :

• <del> This tag is used to display the deleted content.

9. Big :

• <big> This tag is used to increase the font size by one conventional unit.

10. Small :

• <small> This tag is used to decrease the font size by one unit from base font size.

**(8) How is Cell Padding different from Cell Spacing?**

 The cellpadding and cellspacing are two distinct notions in the world of HTML, CSS, and XHTML. The cellpadding and cellspacing characteristics are used to format table cells, and both attributes are utilized to insert the whitespaces in the cells of the table. The distance between cells in a grid layout is known as cellspacing. In contrast, the space around each cell is referred to as cell padding. Cellpadding

and cellspacing are two ways to enhance the appearance of your website.

• The primary distinction between these techniques is that cellpadding is utilized to define the width between the cell content and its e dge. In contrast, cellspacing determines the distance between single cells, and these attributes' width may be measured in pixels or percentages. Cellpadding and cellspacing characteristics are utilized to modify the distance between text and the surrounding cell wall, cells,

and cells within a table element.

• In this article, you will learn about the difference between Cellpadding and Cellspacing. But before discussing the differences, you must know about Cellpading and Cellspacing with their features.

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

 In HTML tables,you can merge two or more rows or columns into a single row or column using the ‘rowspan’ and ‘colspan’ attributes ,respectively. These attributes are applied to <td> (table data) or <th> (table header) elements to specifiy how many rows or column the cell should span.

1. Colspan : Merging Rows

To merge two or more column into a single column,use the colspan attributes on the <td> (tabel data) element. The colspan attributes specifiles the number of columns a cell should span.

2. Rowspan : Merging Rows

To merge two or more rows into a single row use the rowspan attrinutes on the <td> (table data) element.The rowspan attribute specifies the number of rows a cell should span.

**(10) What is the difference between a block-level element and an inline element?**

Block-level Elements :

1. Structure:

• Start on a new line.

• Take up the full width available (by default), stretching horizontally as far as possible.

2. Layout:

• Create a "block" or "box" in the document flow.

• Allow setting width, height, margins, and padding.

Examples:

• <div>

• <p>

• <h1> to <h6>

• <ul>, <ol>, <li>

• <table>

• <form>

• Block-level elements are typically used for larger sections of content or structural elements.

Inline Elements:

1. Structure:

• Do not start on a new line. They flow within the content and only take up as much width as necessary.

2. Layout:

• Do not create a new "block" in the document flow.

• Generally, do not allow setting width, height, margins, or padding (or have limited impact on these properties).

3. Examples:

• <span>

• <a>

• <strong>, <em>, <code>

• <img>

• <br>, <i>, <u>

Inline elements are often used for smaller elements within a block of text, such as emphasizing text, creating links, or inserting

**(11) How to create a Hyperlink in HTML?**

In HTML, you can create a hyperlink using the <a> (anchor) element. The <a> element is used to define hyperlinks, and it can link to another web page, a file, an email address, or any other URL.

• href attribute: This attribute specifies the URL (Uniform Resource Locator) to which the link points. It can be a relative or absolute URL. If you want the link to open in a new browser tab or window, you can use the target="\_blank" attribute.

• Link Text: This is the text that will be displayed on the webpage and can be clicked by the user to navigate to the specified URL.

**(12) what is the use of an iframe tag ?**

The <iframe> (Inline Frame) tag in HTML is used to embed another document within the current HTML document. It allows you to display content from a different source, such as a web page, video, or interactive application, within a designated area of the current page.

• Embedding External Content: You can use <iframe> to embed content from another website or web page directly into your own. This is commonly seen when integrating external maps, videos, or other interactive elements.

• Security Considerations:

<iframe> can be used to sandbox content, providing a level of isolation. However, it's essential to be cautious about security, as embedding content from untrusted sources could potentially introduce security risks, such as cross-site scripting (XSS) vulnerabilities.

When using <iframe>, it's important to consider factors like the size, security implications, and the source of the content you are embedding. Additionally, modern web development practices often involve al

**(13) What is the use of a span tag? Explain with example?**

HTML <span> tag is used as a generic container of inline elements. It is used for styling purpose to the grouped inline elements (using class and id attribute or inline style).

The <span> tag does not have any default meaning or rendering.

The <span> tag can be useful for the following task:

• To change the language of a part of the text.

• To change the color, font, background of a part of text using CSS

• To apply the scripts to the particular part of the text.

Example

<html>

<head>

<title>Span Tag</title>

</head>

<body>

<h2>Example of span tag</h2>

<p>I have choosen only

<span style="color: red;">red</span>,

<span style="color: blue;">blue</span>, and

<span style="color: green;">green</span> colors for my painting

**(14) How to insert a picture into a background image of a web page?**

 Using background attribute

• We can use the background attribute in the body tag to set an image as the background of the webpage. We will need to specify the URL or the location of the image which we want to set to the background S

Syntax :

<body background = "URL or Path of Image">Body of the Webpage</body>

**(15) How are active links different from normal links?**

Active links and normal links are terms that are often used interchangeably, but they can have slightly different meanings depending on the context. Here's a breakdown of the distinctions

1. Normal Links:

• Normal links, also known as static links or passive links, are the regular hyperlinks that you find on web pages.

• These links typically consist of HTML code with an anchor tag (<a>), specifying the destination URL in the "href" attribute.

• Normal links provide a way for users to navigate from one web page to another by clicking on the link.

2. Active Links:

• The term "active links" is sometimes used in the context of web development or user interfaces to refer to links that respond to user interactions, such as hovering or clicking.

• In this context, an active link might have different styles (such as changing color or underlining) when a user hovers over it. This provides visual feedback to the user that the link is interactive.

• Active links can also refer to links that have associated JavaScript functions or events, making them more dynamic in response to user actions.

**(16) What are the different tags to separate sections of text?**

1. Heading Tags (<h1> to <h6>):

• Define headings and subheadings. <h1> is the highest level, and <h6> is the lowest.

2. Paragraph Tag (<p>):

• Defines paragraphs of text.

3. Section Tag (<section>):

• Represents a generic section of content, often used to group related elements.

4. Article Tag (<article>):

• Represents an independent, self-contained piece of content, such as a news article.

5. Div Tag (<div>):

• A generic container used to group other elements for styling or layout purposes.

6. Header Tag (<header>), Footer Tag (<footer>), and Main Tag (<main>):

• <header> is used to define header content (typically at the top of a document or section).

• <footer> is used to define footer content (typically at the bottom of a document or section).

• <main> is used to define the main content of a document.

**(17) What is SVG?**

SVG : Scalable Vector Graphics, is an XML-based file format for describing vector graphics. Unlike raster images (such as JPEG or PNG), which are based on a grid of pixels and can lose quality when resized, SVG is resolution-independent and can be scaled to any size without losing clarity.

**(18) What is difference between HTML and XHTML?**

HTML (Hypertext Markup Language) and XHTML (Extensible Hypertext Markup Language) are both markup languages used to structure content on the web. However, there are some key differences between them

1. Syntax:

• HTML: It has a more forgiving syntax and allows for more flexibility. Tags may not be closed, and attributes may not always be quoted. For example, <br> is valid in HTML.

• XHTML: It follows a stricter XML-based syntax. All tags must be properly nested, closed, and in lowercase. Attributes must be quoted. For example, <br /> is valid in XHTML.

2. Document Structure:

• HTML: It has a more lenient approach to document structure. It may tolerate errors and still resssnder a page.

• XHTML: It requires a well-formed XML document structure. Any error in the document structure can lead to a page not being displayed.

3. Compatibility:

• HTML: It is backward compatible with older browsers, and it is more forgiving of errors. It is widely used on the web.

• XHTML: It might not be as compatible with older browsers, and strict adherence to XML rules can make it less forgiving of errors.

4. Scripting and Event Handling:

• HTML: It often allows for looser scripting and event handling.

• XHTML: It may require stricter adherence to event handling and scripting practices.

**(19) What are logical and physical tags in HTML?**

1. Logical Tags:

• Description: Logical tags refer to elements that describe the structure and meaning of the content without specifying how the content should be presented.

• Examples: <article>, <section>, <nav>, <header>, <footer>,

<aside>, <figure>, <figcaption>, <h1> to <h6>, <p>, <em>,

<strong>, <a>, <span>, etc.

• Usage: Logical tags are intended to convey the semantic meaning of the content, making the HTML document more structured and meaningful.

2. Physical Tags:

• Description: Physical tags, on the other hand, refer to elements that are more directly related to the presentation or appearance of the content on the page.

• Examples: <b>, <i>, <u>, <font>, <br>, <center>, etc.

• Usage: Physical tags were more common in older versions of HTML and were often used to apply specific styles or formatting directly within the HTML document. However, many of these tags are now considered outdated, and it is recommended to use Cascading Style Sheets (CSS) for styling and layout instead.