

Frontend Assignment

Module - HTML

1) Are the HTML tags and elements the same thing?

Ans.

No, HTML tags and elements are not the same thing, although they are closely related.

HTML tags are used to mark up the structure and content of a web page. They consist of angle brackets (< and >) and are placed around elements to define their purpose and behaviour. Tags typically come in pairs: an opening tag and a closing tag. The opening tag denotes the start of an element, while the closing tag marks its end.

For example:

```
<h1>Welcome To Moon verse</h1>
```

HTML elements, on the other hand, are composed of tags, along with their content and any attributes. An element consists of the opening tag, the content within the tags, and the closing tag.

2) What are tags and attributes in HTML?

Ans.

In HTML, tags and attributes are essential components used to define the structure, content, and behaviour of web pages.

HTML tags are used to mark up the structure and content of a web page. They consist of angle brackets (< and >) and are placed around elements to define their purpose and behaviour. Tags typically come in pairs: an opening tag and a closing tag. The opening tag denotes the start of an element, while the closing tag marks its end.

For example:

```
<h1>Welcome To Moon verse</h1>
```

Attributes:

HTML attributes are used to provide additional information about elements. They are placed within the opening tag of an element and consist of a name and a value. Attributes modify the behaviour or appearance of an element.

For instance, the "href" attribute in an anchor <a> tag specifies the URL that the link should point to:

```
<a href="https://www.xyz.com"> </a>
```

3) What are void elements in HTML? With Example.

Ans.

Void elements in HTML are elements that do not have a closing tag. They are self-closing tags and do not contain any content or nested elements. Void elements are used to represent elements that don't require additional content or have no closing tag.

Here are some examples of void elements in HTML:

1. **
**: Represents a line break.
2. ****: Represents an image.
3. **<input>**: Represents an input control. `<input type="text" name="username" placeholder="Enter your username">`
4. **<hr>**: Represents a horizontal rule or divider.

4) What are HTML Entities? With Example.

Ans.

HTML entities are special codes or characters used to represent reserved characters or symbols in HTML. These entities are written using an ampersand (&), followed by a specific code or name, and terminated with a semicolon (;). They allow you to display characters that have special meanings in HTML, such as reserved characters (<, >, &, etc.), non-breaking spaces, and various symbols.

HTML entities allow you to display these reserved characters and symbols correctly in your HTML code without conflicting with the HTML syntax. They are particularly useful when you want to display special characters that have a special meaning or are not available on your keyboard.

Here are a few examples of HTML entities:

1) **<**; represents the less-than symbol (<)

`<p>This is an example of the less-than symbol: <</p>`

2) **>**; represents the greater-than symbol (>):

`<p>This is an example of the greater-than symbol: ></p>`

3) **&**; represents the ampersand symbol (&):

`<p>This is an example of the ampersand symbol: &</p>`

5) What are different types of lists in HTML? With Example.

Ans.

In HTML, there are three types of lists: unordered lists, ordered lists, and definition lists. Each type serves a different purpose and has its own corresponding HTML tags.

1) Unordered Lists (****):

Unordered lists are used to represent a list of items in no particular order. The list items are typically displayed with bullet points.

Here's an example:

```
<ul>
<li>Item 1</li>
<li>Item 2</li>
<li>Item 3</li>
</ul>
```

2) Ordered Lists (****):

Ordered lists are used to represent a list of items in a specific order. The list items are typically displayed with sequential numbers or letters.

Here's an example:

```
<ol>
<li>First item</li>
<li>Second item</li>
<li>Third item</li>
</ol>
```

3) Definition Lists (**<dl>**, **<dt>**, **<dd>**):

Definition lists are used to represent a list of terms and their corresponding definitions. The terms are marked with **<dt>** (definition term), and the definitions are marked with **<dd>** (definition description).

Here's an example:

```
<dl>
<dt>Term 1</dt>
<dd>Definition 1</dd>
<dt>Term 2</dt>
<dd>Definition 2</dd>
<dt>Term 3</dt>
<dd>Definition 3</dd>
</dl>
```

6) What is the 'class' attribute in HTML? With Example.

Ans.

The **class** attribute in HTML is used to assign one or more class names to an element. It allows you to define a class or group to which the element belongs, making it easier to select and style elements using CSS or JavaScript.

Here's an example of how the **class** attribute is used:

```
<p class="highlight">This paragraph has a class of 'highlight'.</p>
```

7) What is the difference between the 'id' attribute and the 'class' attribute of HTML elements? With Example.

Ans.

The **id** attribute and the **class** attribute in HTML serve different purposes and have distinct characteristics.

1) id attribute:

The **id** attribute is used to uniquely identify an individual element on a web page. Each **id** value must be unique within the entire HTML document. The **id** attribute is defined within a single element using a unique identifier.

Example:

```
<h1 id="main-heading">This is the main heading</h1>
<p id="intro">This is the introduction paragraph.</p>
```

2) class attribute:

The **class** attribute is used to group elements that share similar characteristics or belong to the same class. Multiple elements can have the same **class** value. The **class** attribute can be applied to multiple elements by assigning the same class name to them.

Example:

```
<p class="highlight">This is a highlighted paragraph.</p>
<p class="highlight">This is another highlighted paragraph.</p>
```

8) What are the various formatting tags in HTML?

Ans.

HTML provides a set of formatting tags that allow you to apply different styles and formatting to your content.

Here are some commonly used formatting tags in HTML:

<u>: Underlines the enclosed text. `<p>This is a <u>underlined</u> word.</p>`

 - Bold text
 - Important text
<i> - Italic text
 - Emphasized text
<mark> - Marked text
<small> - Smaller text
<big> - Bigger text
 - Deleted text
<ins> - Inserted text
<sub> - Subscript text
<sup> - Superscript text

9) How is Cell Padding different from Cell Spacing? With Example.

Ans.

In HTML tables, cell padding and cell spacing are attributes used to control the space around and between table cells, respectively. Both cell padding and cell spacing can be used to adjust the appearance and spacing of table cells, but they affect different aspects of the table layout. Cell padding controls the space within a cell, while cell spacing controls the space between cells in the table.

1) Cell Padding:

Cell padding controls the space between the content of a table cell and the cell's boundaries. It is defined using the **cellpadding** attribute on the **<table>** element or the **padding** attribute on individual **<td>** or **<th>** elements. The value of the attribute specifies the amount of padding in pixels or as a percentage of the cell's width.

Example:

```
<table cellpadding="10">
<tr>
<td>This is cell 1</td>
<td>This is cell 2</td>
</tr>
</table>
```

In this example, the **cellpadding** attribute is set to "10", resulting in 10 pixels of padding around the content of each table cell.

2) Cell Spacing:

Cell spacing controls the space between adjacent table cells. It is defined using the **cellspacing** attribute on the **<table>** element. The value of the attribute specifies the amount of space in pixels or as a percentage between adjacent cells.

Example:

```
<table cellspacing="5">
<tr>
<td>This is cell 1</td>
<td>This is cell 2</td>
</tr>
</table>
```

In this example, the **cellspacing** attribute is set to "5", resulting in 5 pixels of space between adjacent cells.

10) How can we club two or more rows or columns into a single row or column in an HTML table? With Example.

Ans.

In HTML tables, you can merge two or more rows or columns into a single row or column using the **rowspan** and **colspan** attributes. These attributes allow you to control the span of a cell across multiple rows or columns.

Here are examples of how to merge rows and columns in an HTML table:

1) Merging Rows (**rowspan**):

To merge two or more rows into a single row, you can use the **rowspan** attribute on a cell to specify the number of rows it should span.

```
<table>
<tr>
<td rowspan="2">Merged Row 1</td>
<td>Cell 1</td>
<td>Cell 2</td>
</tr>

<tr>
<td>Cell 3</td>
<td>Cell 4</td>
</tr>
</table>
```

In this example, the first cell in the first row (**<td rowspan="2">Merged Row 1</td>**) spans two rows. It effectively merges the two rows into a single row.

2) Merging Columns (**colspan**):

To merge two or more columns into a single column, you can use the **colspan** attribute on a cell to specify the number of columns it should span. By using the **rowspan** and **colspan** attributes, you can manipulate the structure of your HTML table and merge cells across multiple rows or columns as needed.

```
<table>
<tr>
<td>Cell 1</td>
<td colspan="2">Merged Column 1</td>
<td>Cell 2</td>
</tr>

<tr>
<td>Cell 3</td>
<td>Cell 4</td>
<td>Cell 5</td>
<td>Cell 6</td>
</tr>
```

```
</tr>
</table>
```

In this example, the second cell in the first row (**<td colspan="2">Merged Column 1</td>**) spans two columns. It effectively merges the two columns into a single column.

11) What is the difference between a block-level element and an inline element?

Ans.

In HTML, block-level elements and inline elements are two different types of elements that have distinct characteristics and behaviours in terms of layout and rendering. The main difference between block-level elements and inline elements lies in their default display behaviour, layout properties, and how they interact with other elements in the HTML document. Block-level elements create distinct blocks, while inline elements are displayed within the text flow. Understanding these differences helps in structuring and styling HTML content effectively.

1) Block-level elements:

Block-level elements are displayed as individual blocks that span the full width of their parent container by default. They start on a new line and typically create a visual "block" in the layout of the web page. Examples of block-level elements include **<div>**, **<p>**, **<h1>** to **<h6>**, ****, ****, **<table>**, and **<form>**.

2) Inline elements:

Inline elements are displayed within the flow of the text and do not create line breaks by default. They occupy only the necessary space required by their content. Examples of inline elements include ****, **<a>**, ****, ****, ****, **<input>**, and **
**.

12) How to create a Hyperlink in HTML? With Example.

Ans.

To create a hyperlink in HTML, you can use the **<a>** (anchor) tag. The **<a>** element allows you to define a clickable link that directs users to another web page, a specific section within the same page, or an external resource.

Here's an example of how to create a hyperlink in HTML:

```
<a href="https://www.xyz.com"> Visit Example Website </a>
```

In this example, The **<a>** tag represents the anchor used to create the hyperlink. The **href** attribute specifies the destination URL that the link should navigate to. In this case, it is set to **"https://www.xyz.com"**. The text "Visit Example Website" is the visible text of the link that users will see on the page.

13) What is the use of an iframe tag? With Example

Ans.

The **<iframe>** (Inline Frame) tag in HTML is used to embed another HTML document within the current document. It allows you to display content from another source, such as a web page, video, map, or document, within a rectangular frame on your web page.

The **<iframe>** element requires the **src** attribute, which specifies the URL of the embedded content. Here's an example of how to use the **<iframe>** tag:

```
<iframe src="https://www.youtube.com/embed/dQw4w9WgXcQ" width="600" height="320"></iframe>
```

In this example, The **src** attribute specifies the URL of the embedded content, which is a YouTube video in this case. The **width** and **height** attributes define the dimensions of the iframe in pixels.

14) What is the use of a span tag? Explain with example?

Ans.

HTML 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 tag is an inline container used to mark up a part of a text, or a part of a document. The tag is easily styled by CSS or manipulated with JavaScript using the class or id attribute. The tag is much like the element, but is a block-level element and is an inline element.

Example:

```
<p> I have chosen only  
<span style="color: red;"> red</span>,  
<span style="color: blue;"> blue </span>  
<span style="color: green;"> green</span> Colours for my painting.  
</p>
```

15) How to insert a picture into a background image of a web page? With Example.

Ans.

To insert a picture into the background image of a web page, you can use CSS (Cascading Style Sheets) to set the background image property.

Here's an example:

```
.xyz {  
background-image: url("image.jpg");  
background-repeat: no-repeat;  
background-size: cover;  
}
```

16) How are active links different from normal links?

Ans.

Active links and normal links refer to different states of hyperlinks in HTML. Let's explore the differences:

1) Normal Links:

Normal links, also known as default links, are the standard state of hyperlinks. They are displayed with their default styling, such as an underline and the default link color defined by the browser. When users interact with normal links, they typically change appearance on hover and provide visual feedback to indicate interactivity. Normal links are the default state before any user action.

2) Active Links:

Active links represent the state of hyperlinks when they are currently being interacted with or clicked by the user. The appearance of active links may differ depending on the browser and CSS styles applied. Typically, active links are visually highlighted or styled differently from normal links to provide immediate feedback that the link has been activated. This state is temporary and lasts only during the

duration of the user's interaction, such as while clicking or pressing on the link. Active links revert to their normal state once the interaction is complete.

To summarize, normal links are the default appearance and behavior of hyperlinks, while active links represent the temporary state when a link is being interacted with. Active links often have distinct visual cues to indicate the ongoing interaction, allowing users to understand which links they are currently engaging with.

17) What are the different tags to separate sections of text?

Ans.

In HTML, there are several tags you can use to separate and structure different sections of text within a web page. These tags help organize the content and provide semantic meaning to the various parts of the text.

Here are some commonly used tags for separating sections of text:

1. **<div>**: The **<div>** tag is a generic container element that is commonly used to divide the content into logical sections. It doesn't have any semantic meaning on its own but can be styled and manipulated using CSS.
2. **<p>**: The **<p>** tag represents a paragraph of text. It is used to separate blocks of text into distinct paragraphs.
3. **<h1>** to **<h6>**: Headings from **<h1>** to **<h6>** are used to define different levels of headings, with **<h1>** being the highest level and **<h6>** being the lowest level. These tags are useful for structuring and organizing the content hierarchy.
4. **<section>**: The **<section>** tag represents a thematic grouping of content within a document. It helps in dividing the page into distinct sections, such as chapters, parts, or topics.
5. **<article>**: The **<article>** tag represents a self-contained, independent piece of content that can be distributed or syndicated on its own. It is often used for blog posts, news articles, or forum threads.
6. **<header>**: The **<header>** tag is used to define the header or top section of a web page or a section within a document. It typically contains introductory or navigational elements.
7. **<footer>**: The **<footer>** tag represents the footer or bottom section of a web page or a section within a document. It usually contains information about the author, copyright notices, or contact details.
8. **<nav>**: The **<nav>** tag is used to define a section of navigation links within a document or web page. It is commonly used for menus or navigation bars.
9. **<aside>**: The **<aside>** tag is used to define content that is tangentially related to the main content. It is often used for sidebars, pull quotes, or additional information.

These tags help in structuring and organizing the content of a web page, making it more accessible, readable, and maintainable. Choosing the appropriate tag depends on the specific purpose and semantic meaning of the content you want to separate.

18) What is SVG?

Ans.

SVG stands for Scalable Vector Graphics. It is a file format and XML-based markup language used to describe two-dimensional vector graphics. Unlike raster image formats (such as JPEG or PNG), which store images as a grid of pixels, SVG uses mathematical equations to define shapes, lines, curves, and colors. This allows SVG images to be scaled, rotated, and resized without losing quality or clarity.

SVG images are created and edited using graphic design software or text editors. They can be displayed in web browsers directly, integrated into HTML documents using the **<svg>** element, or used in other contexts such as presentations, animations, or icons.

19) What is difference between HTML and XHTML?

Ans.

HTML (Hypertext Markup Language) and XHTML (Extensible Hypertext Markup Language) are both markup languages used for structuring and presenting content on the web. However, there are some key differences between the two:

1. Syntax: HTML and XHTML have different syntax rules. HTML has a more forgiving syntax, allowing for more flexibility and leniency in writing markup. XHTML, on the other hand, follows stricter XML rules, requiring well-formed and properly closed tags, lowercase tag names, and attribute values enclosed in quotes.
2. Document structure: XHTML requires a well-defined document structure with a root element, head element, and body element, similar to XML. HTML is less strict in its structure and allows for more flexibility in organizing the document.
3. Case sensitivity: HTML is generally case-insensitive, meaning that tags and attributes can be written in uppercase or lowercase. XHTML is case-sensitive, requiring tags and attributes to be written in lowercase.
4. Error handling: HTML browsers are more forgiving of syntax errors and will attempt to render the content even if there are errors in the markup. XHTML browsers are less forgiving and may display errors or refuse to render the page if the markup is invalid.
5. MIME type: HTML is typically served with the MIME type "text/html," while XHTML is served with the MIME type "application/xhtml+xml."
6. XML compatibility: XHTML is designed to be compatible with XML, which allows it to be processed and manipulated using XML tools and technologies. HTML, on the other hand, does not have the same level of XML compatibility.

It's worth noting that XHTML was initially introduced as a stricter and more standardized version of HTML, emphasizing the use of well-formed and valid markup. However, with the development of HTML5, which introduced new elements, attributes, and improved semantics, the distinction between HTML and XHTML has become less significant. In practice, most web developers now primarily use HTML5, which combines the flexibility of HTML with many of the stricter rules from XHTML.

20) What are logical and physical tags in HTML?

Ans.

Logical tags - Logical tags are designed to describe (to the browser) the enclosed text's meaning. An example of a logical tag is the ** ** tag. By placing text in between these tags you are telling the browser that the text has some greater importance. By default

all browsers make the text appear bold when in between the and tags, but the point to take away from this is that the strong tag implies that importance of that text. This has impact with search engines like Google who look for such tags to help figure out what the page is about. Examples of logical tags are , , <blockquote>.

Physical tags – Physical tags are used to tell the browser how to display the text enclosed in the physical tag. Some of the examples of physical tags are , <big>, <i> etc.

21) Create below example using only HTML tags without CSS.

Ans.

Login Page of MoonVerse

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <fieldset>
    <legend align="center">Login to MoonVerse</legend>

    <form action="Home Page Moonverse.html" target="_self">
      <table align="center" bgcolor="#C0C0C0" cellspacing="5">
        <tr>
          <td>User Id :</td>
        </tr>

        <tr>
          <td><input type="text" required placeholder="Email address or Phone no" name=""
id="username"></td>
        </tr>

        <tr>
          <td>Password :</td>
        </tr>

        <tr>
          <td><input type="password" required placeholder="Password" name=""
id="Password"></td>
        </tr>

        <tr>
          <td align="center"><a href=""><input type="submit" value="Log In"></a></td>
        </tr>

        <tr>
          <td align="center"><a href="">Forgot password</a></td>
        </tr>
      </table>
    </form>
  </fieldset>
</body>
</html>
```

```

        </tr>

        <tr>
            <td align="center"><a href="">Creat a new Account</a></td>
        </tr>
    </table>

</form>
</fieldset>
</body>
</html>

```

Home Page of MoonVerse

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>

    <table align="center" cellspacing="0" width="100%">
        <tr align="center">
            <td><a href="Home Page Moonverse.html"> Home </a> </td>
            <td><a href="About Moonverse.html"> About us </a> </td>
            <td><a href="Contact us Moonverse.html"> Contact us </a> </td>
            <td><a href="#"> Join us </a> </td>
            <td><a href="#"> My Profile </a> </td>
            <td><a href="Login Page Moonverse.html"> Log Out </a> </td>
        </tr>
    </table>

    <h3 style="color:rgb(132, 81, 5);" align="center"> Welcome to the MOONVERSE </h3>

    <table align="center" cellspacing="10" width="100%">
        <tr align="center">
            <td> </td>
        </tr>

        <tr align="center">
            <td>
            </td>
        </tr>

        <tr align="center">

```

```

        <td></td>
    </tr>

    <tr align="center">
        <td>  </td>
    </tr>

</table>

<table width="20%" align="center">
    <tr align="center">
        <td><a href="#" target="_parent">Top</a></td>
        <td><a href="Home Page Moonverse.html">Home</a></td>
    </tr>

    <tr align="center">
        <td colspan="2" style="color: rgb(82, 50, 3);">Thank You for visiting !!
        <br>
        Visit Again !!</td>
    </tr>
</table>

</body>
</html>

```

About MoonVerse

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>

    <table align="center" cellpadding="0" cellspacing="0" width="100%">
        <tr align="center">
            <td> <a href="Home Page Moonverse.html"> Home </a> </td>
            <td> <a href="About Moonverse.html"> About us </a> </td>
            <td> <a href="Contact us Moonverse.html"> Contact us </a> </td>
            <td> <a href="#"> Join us </a> </td>
            <td> <a href="#"> My Profile </a> </td>
            <td> <a href="Login Page Moonverse.html"> Log Out </a> </td>
        </tr>
    </table>

```


<h3 style="color:rgb(132, 81, 5);" align="center"> About MoonVerse </h3>

<pre align="center">

For the stars of heaven and the constellations there of shall not give their light: the sun shall be darkened in his going forth, and the moon shall not cause her light to shine. And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also.</pre>

<pre align="center">

To Him who made the great lights,
For His lovingkindness is everlasting:
The sun to rule by day,
For His lovingkindness is everlasting,
The moon and stars to rule by night,
For His lovingkindness is everlasting.

</pre>

<table width="20%" align="center">

<tr align="center">

<td>Top</td>

<td>Home</td>

</tr>

</table>

</body>

</html>

Contact To MoonVerse

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<body>

```
<table align="center" cellspacing="0" width="100%">
  <tr align="center">
    <td> <a href="Home Page Moonverse.html"> Home </a> </td>
    <td> <a href="About Moonverse.html"> About us </a> </td>
    <td> <a href="Contact us Moonverse.html"> Contact us </a> </td>
    <td> <a href="#"> Join us </a> </td>
    <td> <a href="#"> My Profile </a> </td>
    <td> <a href="Login Page Moonverse.html"> Log Out </a> </td>
  </tr>
</table>
```


<h3 style="color:rgb(132, 81, 5);" align="center"> Contact Us </h3>

```
<pre align="center">
"Technology is best when it brings people together,
We are trying to get people together in the parallel verse,
In our new Verse , MOONVERSE..."
```

```
"Innovation is the outcome of a habit, not a random act,
So be the part of innovating new verse by connecting with us."</pre>
```

```
<table align="center" width="50%" cellspacing="0">
  <tr align="center">
    <td><a href="#">Address : <br> X01 , X Floor , XY Hights , Main highway , X City , Y State , Z
Country , Code : X0X0X0 </a></td>
    <td rowspan="3" align="center"></td>
  </tr>
```

```

  <tr align="center">
    <td><a href="mailto:abcd123@gmail.com">Mail to : <br> abcd123@gmail.com </a></td>
  </tr>
```

```

  <tr align="center">
    <td><a href="tel:0000000000">Phone No. : <br> +XX 0000000000</a></td>
  </tr>
```

</table>

```
<table align="center" width="50%" cellspacing="0">
```

```

  <tr>
    <td><iframe
src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d3671.429092494977!2d72.51
290907485136!3d23.044725215502105!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x
```

395e9b767b0a48ed%3A0x713f82e619ac7868!2sTOPS%20Technologies!5e0!3m2!1sen!2sin!4v1684258703143!5m2!1sen!2sin" width="400" height="250"></iframe> </td>

<td><iframe width="400" height="250"
src="https://www.youtube.com/embed/7bAjDGFwfxU"></iframe></td>
</tr>

</table>

<table width="20%" align="center">
<tr align="center">
<td>Top</td>
<td>Home</td>
</tr>
</table>

</body>

</html>