

Module (HTML) -1

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

Ans. :- **HTML Tags:** HTML tags are the fundamental building blocks of an HTML document. They are used to define and structure the content within the document. Tags are enclosed in angle brackets (< and >) and usually come in pairs - an opening tag and a closing tag.

For example: <p>This is a paragraph. </p>

HTML Elements: An HTML element consists of both the opening tag, the content, and the closing tag (if applicable). It represents a complete, structured piece of content within the HTML document. In the example above, the <p> element includes both the opening <p> tag, the content "This is a paragraph," and the closing </p> tag. An HTML element can be as simple as a single word or as complex as an entire section of a web page.

2. What are tags and attributes in HTML?

Ans. :- **HTML Tags:** HTML tags are the fundamental building blocks of an HTML document. They are used to define and structure the content within the document. Tags are enclosed in angle brackets (< and >) and usually come in pairs - an opening tag and a closing tag.

For example: <p>This is a paragraph. </p>

HTML Attributes: HTML attributes provide additional information or settings for HTML elements. Attributes are always specified within the opening tag of an element and are written as name-value pairs. The attribute name is followed by an equal sign (=) and the attribute value, which is enclosed in double or single quotes. Here's an example using the **src** attribute with an **img** element.

For example:

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

Ans. :- Void elements, also known as self-closing or empty elements, are HTML elements that do not have a closing tag. These elements are used to insert something into a document, but they don't contain any content themselves. Void elements are typically written as a single opening tag, optionally with attributes, and are closed with a forward slash (/) before the closing angle bracket (>). They are often used for embedding media, adding line breaks, or including elements like images or input fields.

For example: ,
, <hr>, <meta>, <link>, <input>

4. What are HTML Entities? With Example.

Ans.:- HTML entities are special codes used in HTML to represent characters that have special meanings or that cannot be easily typed using a keyboard. They are particularly useful when you want to display characters that are reserved for HTML markup (like <, >, &, etc.) or characters that are not part of the

standard character set. HTML entities are written using an ampersand (&) followed by a specific code and a semicolon (;) to indicate the end of the entity.

Ex.:-

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Document</title>

</head>

<body>

  &copy;

  &reg;

  &dollar;

  &pound;

  &#128121;

</body>

</html>
```

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

Ans.:-

- **Ordered Lists ()**

Ordered lists are used when you want to present a list of items in a specific order, typically with numbers or letters as markers. Each list item is automatically numbered in ascending order.

Ex.:-

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

- **Unordered Lists ()**

Unordered lists are used when the order of the list items doesn't matter, and you want to use bullet points or other symbols as markers.

Ex.:-

```
<li>Apples</li>
<li>Bananas</li>
<li>Oranges</li>
</ul>
```

- **Definition Lists (<dl>)**

Definition lists are used for glossaries, dictionaries, or any list of terms and their corresponding definitions. They consist of a list of terms (<dt>) followed by their definitions (<dd>).

Ex.:- <dl>

<dt>HTML</dt>

<dd>HyperText Markup Language</dd>

<dt>CSS</dt>

<dd>Cascading Style Sheets</dd>

</dl>

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

Ans.:- The **class** attribute is used to assign one or more class names to an HTML element. These class names are typically used to apply CSS styles or JavaScript behaviors to specific elements on a web page. The **class** attribute allows you to group together multiple elements that should share the same styling or functionality.

Ex.:-

<!DOCTYPE html>

<html>

<head>

<style>

.header {

background-color: #333;

color: white;

padding: 10px;

text-align: center;

}

.content {

margin: 20px;

}

.important {

font-weight: bold;

color: red;

}

</style>

</head>

<body>

<div class="header">

<h1>Welcome to My Website</h1>

</div>

<div class="content">

<p>This is some content on the page.</p>

<p class="important">This is important content.</p>

</div>

</body>

</html>

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

Ans.:-

- **id Attribute**:- The **id** attribute is used to uniquely identify a single HTML element on a page. Each **id** must be unique within a page. It is often used when you want to select and manipulate a specific element using JavaScript or apply a unique style to an individual element. Each **id** on a page must be unique. You cannot have multiple elements with the same **id**.
- **class Attribute**:- The **class** attribute is used to group multiple HTML elements together. You can apply the same class to multiple elements, allowing you to apply the same styling or behavior to multiple elements across your page. You can apply the same class to multiple elements on a page. Multiple elements can share the same class name.

Ex.:-

```
<!DOCTYPE html>
<html>
<head>
  <style>
    .highlight {
      background-color: yellow }
    #unique-element {
      font-weight: bold; }
  </style>
</head>
<body>
  <p id="unique-element">This is a unique element with an ID.</p>
  <p class="highlight">This is a paragraph with a class that highlights text.</p>
  <p class="highlight">This is another paragraph with the same class.</p>
</body>
</html>
```

8. What are the various formatting tags in HTML?

Ans.:-

- - Bold text
- - Important text
- <i> - Italic text
- - Emphasized text
- <mark> - Marked text
- <small> - Smaller text
- - Deleted text
- <ins> - Inserted text
- <sub> - Subscript text
- <sup> - Superscript text
-
 - Line break
- <hr> - Horizontal line
- <h1>to<h6> - Headings

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

Ans.:-

- **Cell padding:-**

- It only associates with individual (single) cells.
- Using Cellpadding, one can easily control the white space present between a cell border and the content present in it.
- It is a very effective method.
- It has a default value of 1.
- One can create Cellpadding using the tag of HTML <table>.
- Here, we set the type of attribute to *cellpadding*.

- **Cell spacing:-**

- It associates with multiple cells- not just one.
- Using Cell spacing, you can set the spaces between various cells.
- It is comparatively less effective than the process of cell padding.
- In this case, the spacing value by default becomes 2.
- One can easily create Cell spacing by using the tag of HTML <table>.
- Here, we set the type of attribute to *cell spacing*.

Ex.:-

```
<!DOCTYPE html>
<html>
<head>
  <style>
    table {
      border-collapse: collapse;
      width: 50%; }
  </style>
</head>
<body>
  <table cellpadding="20" cellspacing="5" border="2" >
    <tr>
      <td>Row 1, Cell 1</td>
      <td>Row 1, Cell 2</td>
    </tr>
    <tr>
      <td>Row 2, Cell 1</td>
      <td>Row 2, Cell 2</td>
    </tr>
  </table>
</body>
</html>
```

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

Ans.:- To merge two or more rows or columns into a single row or column in an HTML table, you can use the **rowspan** and **colspan** attributes on the <td> (table data) elements. These attributes allow you to specify how many rows or columns a cell should span.

Ex.:-

```

<!DOCTYPE html>
<html>
<head>
  <style>
    table {
      border-collapse: collapse;
      width: 50%;
    }
    td {
      border: 2px solid black;
      padding: 10px;
      text-align: center;
    }
  </style>
</head>
<body>
  <table>
    <tr>
      <td rowspan="2">Cell 1<br>Spanning 2 Rows</td>
      <td>Cell 2</td>
      <td>Cell 3</td>
    </tr>
    <tr>
      <td colspan="2">Cell 4<br>Spanning 2 Columns</td>
    </tr>
    <tr>
      <td>Cell 5</td>
      <td>Cell 6</td>
    </tr>
  </table>
</body>
</html>

```

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

Ans.:-

- **Block-Level Elements:-**

- Display: Block-level elements typically start on a new line and take up the full width available to them, creating a "block" of content. They stack vertically on top of each other.
- Structure: They are often used for defining the main structure and layout of a web page, such as headings, paragraphs, lists, and div containers.
- Examples: Common block-level elements include <div>, <p>, <h1>, , , <header>
- Nesting: Block-level elements can contain other block-level and inline elements.
- Default Line Break: By default, a block-level element creates a line break before and after itself.

- **Inline Elements:-**

- Display: Inline elements do not start on a new line. They only take up as much width as necessary for their content and flow within the text or content of a block-level element.
- Structure: They are used for styling or adding additional information to the content within block-level elements.

- Examples: Common inline elements include , <a>, , ,
, and .
- Nesting: Inline elements cannot contain block-level elements. However, they can be nested within other inline elements.
- No Default Line Break: Inline elements do not create line breaks before or after themselves by default. They flow within the content.

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

Ans.:- To create a hyperlink (a clickable link) in HTML, you use the <a> (anchor) element, which requires the href attribute to specify the destination URL or the location to which the link will take the user.

Ex.:-

```
<!DOCTYPE html>
<html>
<head>
  <title>Hyperlink Example</title>
</head>
<body>
  <p>Welcome! <a href="https://www.abcd.com">To my website.</a>.</p>
</body>
</html>
```

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 or web page within the current page. It allows you to display content from another source, such as an external website, a video, a map, or any other web page, within a designated rectangular area of the current page. This is often used to include external content seamlessly within a webpage.

Ex.:-

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Iframet</title>
</head>
<body>
  <iframe width="560" height="315" src="https://www.youtube.com/embed/RLzC55ai0eo"
    title="YouTube video player" frameborder="0"
    allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture;
web-share"
    allowfullscreen></iframe>
</body>
</html>
```

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

Ans.:- The tag in HTML is a generic inline container used to apply styles or manipulate specific portions of text within a larger block of content. It doesn't add any visual formatting by itself but serves as a hook for CSS or JavaScript to target and style or manipulate content within it.

Ex.:-

```
<!DOCTYPE html>
<html>
<head>
  <style>
    .highlight {
      background-color: yellow;
      font-weight: bold;
    }
  </style>
</head>
<body>
  <p>This is a <span class="highlight">highlighted</span> word in a sentence.</p>
  <p>Another example: <span style="color: blue;">This text is blue.</span></p>
</body>
</html>
```

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

Ans.:- You can set a background image for an element using CSS (Cascading Style Sheets). You typically apply background images to elements like <body>, <div>, or any other HTML element of your choice.

Ex.:-

```
<!DOCTYPE html>
<html>
<body>
<h2>Background Image</h2>
<p style="background-image: url('img_girl.jpg');">
You can specify background images for any visible HTML element. In this example, the background image
is specified for a p element. By default the background-image will repeat itself in the direction(s)</p>
</body>
</html>
```

16. How are active links different from normal links?

Ans.:-

- **Normal Links:-**

- Default Appearance: Normal links are the default state of links on a web page. In this state, links usually appear as underlined text with a specific color (typically blue) to indicate that they are clickable.
- Behavior: When a user hovers over a normal link, it might change color or become underlined to provide visual feedback. When clicked, the link takes the user to the destination URL.

- **Active Links:-**

- Appearance: Active links refer to the state of a link when a user is actively clicking on it. This state is often used to provide immediate visual feedback to the user that they are interacting with the link.

- Behavior: When a link is active, it may change in appearance to indicate that it's being clicked. For example, it might change color or become slightly darker or lighter to simulate a "pressed" effect. This provides visual feedback to the user that their action has been registered.

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

Ans.:- Three tags are used to separate the texts.

- `
` tag - Usually `
` tag is used to separate the line of text. It breaks the current line and conveys the flow to the next line.
- `<p>` tag - The `<p>` tag contains the text in the form of a new paragraph.
- `<blockquote>` tag - It is used to define a large, quoted section. If you have a large quotation, then put the entire text within `<blockquote>.....</blockquote>` tag.

18. What is SVG?

Ans.:- SVG stands for Scalable Vector Graphics. It is a widely used XML-based vector image format for two-dimensional graphics with support for interactivity and animation. SVG files are used to define vector graphics, which are graphics that are represented as mathematical shapes and can be scaled to any size without losing image quality.

- Here are some key characteristics and features of SVG:
 - Vector Graphics: SVG images are composed of geometric shapes such as lines, curves, and polygons. These shapes are defined by mathematical equations rather than a fixed grid of pixels. This means SVG images can be scaled up or down without losing quality.
 - XML Format: SVG files are written in XML (eXtensible Markup Language), making them human-readable and easy to create and manipulate using code.
 - Wide Browser Support: Most modern web browsers support SVG, making it a versatile choice for web graphics.
 - Animation: SVG supports animations and can be animated using CSS or JavaScript. This allows for the creation of dynamic and visually engaging graphics.
 - Accessibility: When used correctly and with proper markup, SVG images can be accessible to individuals with disabilities, making them an inclusive choice for web graphics.
 - Small File Sizes: SVG files are often relatively small compared to raster image formats like JPEG or PNG, making them a good choice for web performance.

19. What is difference between HTML and XHTML?

Ans.:-

HTML	XHTML
HTML stands for Hypertext Markup Language.	XHTML stands for Extensible Hypertext Markup Language.
It was developed by Tim Berners-Lee.	It was developed by W3C i.e World Wide Web Consortium.
It is extended from SGML.	It is extended from XML and HTML.
All tags and attributes are not necessarily to be in lower or upper case.	In this, every tag and attribute should be in lower case.
The format is a document file format.	The format is a markup language.
Doctype is not necessary to write at the top.	Doctype is very necessary to write at the top of the file.

It is not necessary to close the tags in the order they are opened.	It is necessary to close the tags in the order they are opened.
---	---

20. What are logical and physical tags in HTML?

Ans.:-

- **Logical Tags:-**

- <abbr> Defines an abbreviation
- <acronym> Defines an acronym
- <address> Defines an address element
- <cite> Defines citation
- <code> Defines computer code text
- <blockquote> Defines a long quotation
- Defines text
- <dfn> Defines a definition term
- <ins> Defines inserted text
- <kbd> Defines keyboard text
- <pre> Defines preformatted text
- <q> Defines short quotation
- <samp> Defines sample computer code
- Defines strong text
- <var> Defines a variable

- **Physical Tags:-**

- Defines bold text
- <big> Defines big text
- <i> Defines italic text
- <small> Defines small text
- <sup> Defines superscripted text
- <sub> Defines subscripted text
- <tt> Defines teletype text
- <u> Deprecated. Use styles instead