

HTML

Hyper Text Markup Language



- HTML (HyperText Markup Language) is the most basic building block of the Web. It defines the meaning and structure of web content.
- Other technologies besides HTML are generally used to describe a web page's appearance/presentation (CSS) or functionality/behavior (JavaScript).
- "Hypertext" refers to links that connect web pages to one another, either within a single website or between websites.

- HTML used to create web pages.
- HTML stands for HyperText Markup Language.
- HTML is not a programming language, it is a markup language.
- A markup language is a set of markup tags.
- Markup tags used to create web pages.
- Latest version HTML5.
- HTML consists of a series of elements.
- HTML elements tell the browser how to display the content.

HTML DOCUMENT

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <h1>My First Heading</h1>
    <p>My first paragraph.</p>
  </body>
</html>
```

HTML ELEMENTS

- An HTML element is defined by a start tag, some content, and an end tag:

SYNTAX: <tagname> Content goes here... </tagname>

- EXAMPLE:

The HTML element is everything from the start tag to the end tag:

```
<h1>My First Heading</h1>
<p>My first paragraph.</p>
```

EMPTY HTML ELEMENTS

- HTML elements with no content are called empty elements
- The
 tag defines a line break, and is an empty element without a closing tag:
- EXAMPLE:
`<p>This is a
 paragraph with a line break.</p>`
`<hr> for horizontal line`

HTML TAGS

- HTML tags are like keywords which defines that how web browser will format and display the content.
- All HTML tags must enclosed within <> these brackets.
- Every tag in HTML perform different tasks.
- If you have used an open tag <tag>, then you must use a close tag </tag>.

HTML TAGS EXAMPLE

- Meta Tags
 - DOCTYPE, title, link, meta and style
- Text Tags
 - < p >, < h1 >, < h2 >, < h3 >, < h4 >, < h5 >, < h6 >, < var >, < br >
- Link Tags
 - < a > and < base >
- Image and Object Tags
 - < img >, < object >

HTML TAGS EXAMPLE

- List Tags
`, , , <dl>, <dt> and <dd>`
- Table Tags
`<table>, <tr>, <td>, <th>, <caption>`
- Form Tags
`<form>, <input>, <textarea>, <select>, <button>, <label>`
- Special Tag
`<div>, `

HTML ATTRIBUTES

- All HTML elements can have attributes
- Attributes provide additional information about elements
- Attributes are always specified in the start tag
- Attributes usually come in name/value pairs like:
`name="value"`
- Examples:
- href Attribute:- The `<a>` tag defines a hyperlink. The href attribute specifies the URL of the page the link goes to:
`Visit W3Schools`

HTML ATTRIBUTES

- src Attribute:- The `` tag is used to embed an image in an HTML page. The src attribute specifies the path to the image to be displayed.

```

```

- width and height Attributes:- The `` tag should also contain the width and height attributes , which specify the width and height of the image (in pixels):

```

```

HTML ATTRIBUTES

- alt Attribute:- The required alt attribute for the tag specifies an alternate text for an image, if the image for some reason cannot be displayed.

```

```

- style Attribute:- The style attribute is used to add styles to an element, such as color, font, size, and more.

```
<p style="color:red;">This is a red paragraph.</p>
```

- title Attribute:- The title attribute defines some extra information about an element.

```
<p title="I'm a tooltip">This is a paragraph.</p>
```

HTML TEXT FORMATTING

- The HTML **** element defines bold text.
- The HTML *<i>* element defines italic text.
- The HTML **** element is used to define text with strong importance. The content inside is typically displayed in bold.
- The HTML <small> element defines smaller text.
- The HTML <sup> element defines superscript text. Superscript text appears half a character above the normal line, and is sometimes rendered in a smaller font.

HTML TEXT FORMATTING

- The HTML <sub> element defines subscript text. Subscript text appears half a character below the normal line, and is sometimes rendered in a smaller font.
- The HTML <ins> element defines a text that has been inserted into a document. Browsers will usually underline inserted text.
- The HTML element defines text that has been deleted from a document. Browsers will usually strike a line through the deleted text.

TASK 1

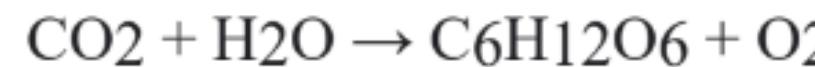
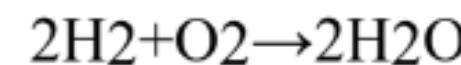


HTML ASSIGNMENT

1. Write the HTML code for the following tasks:

- a) Make the text “Futura Labs Technologies” as level two heading.
- b) Make the text “Web Designing and Publishing” as marked and bold.
- c) Create two paragraphs and write some text about Front end and back end.
- d) Make the text “Welcome” as underlined and italic.
- e) Write the HTML code for the following:

Chemical Equation:



Algebra Equation:

$$(a - b)^2 = a^2 - 2ab + b^2$$

$$(a + b)^3 = a^3 + 3a^2b + 3ab^2 + b^3$$

HTML IMAGE

- The HTML `` tag is used to embed an image in a web page.
- The `` tag has two required attributes: `src` & `alt`.

```

```



HTML LINK

- HTML links are hyperlinks. You can click on a link and jump to another document.

```
<a href="url">link text</a>
```



Write HTML code to display the image according to the following criteria:

- a) Image should be 300 X 200 pixels in size.
- b) Alternate text should be “Image not found”.
- c) Horizontal and vertical spacing should be 50 pixels and 80 pixels respectively.
- d) Display some text along the cursor when user moves the mouse over the image.

TASK 2&3

Write HTML code for following tasks:

- a) Make the hypertext “Home Page” as hyperlinked to your own html page.
- b) Make the hypertext to link any search engine.
- c) Make the hypertext “Futura Labs” hyperlinked to www.thefuturalabs.com that will open in a new tab.
- d) Insert the image of 200 X 300 pixels and make it hyperlinked to any of your page.



1. Inline

- by using the style attribute inside HTML elements.

2. Internal

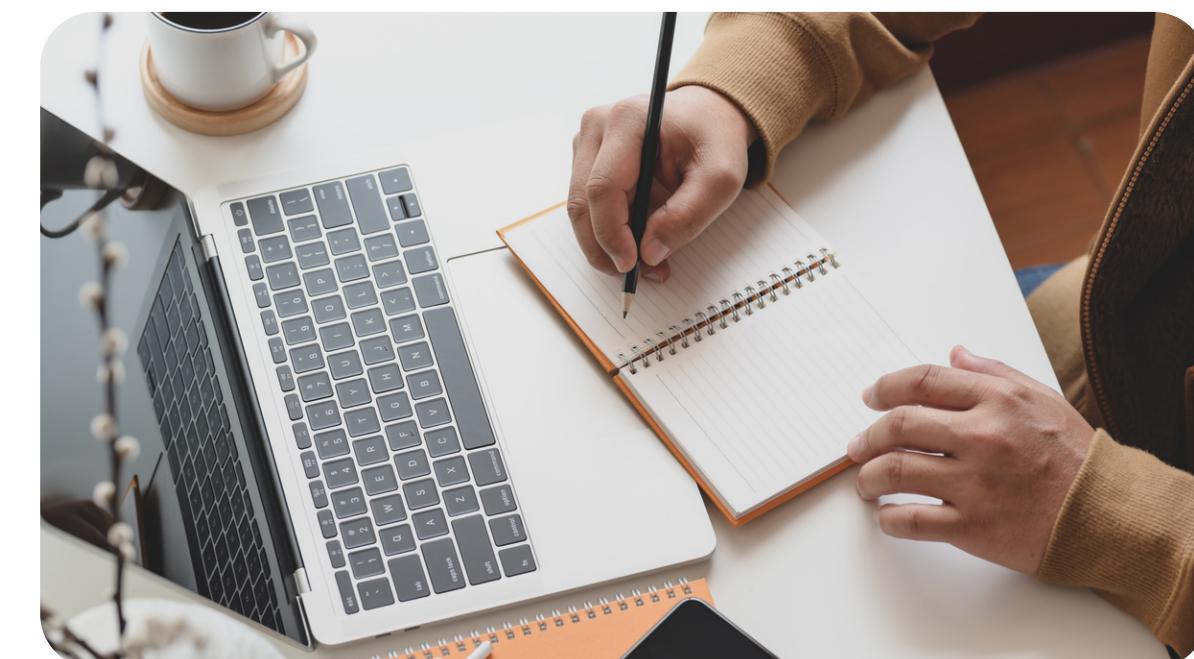
- by using a <style> element in the <head> section

3. External

- by using a <link> element to link to an external CSS.

HTML CSS

- CSS stands for **Cascading Style Sheets**.
- It can control the layout of multiple web pages all at once.
- CSS can be added to HTML documents in **3 ways**:



CSS SELECTORS

1. id

- The id attribute specifies a unique id for an HTML element. The value of the id attribute must be unique within the HTML document.
- The id attribute is used to point to a specific style declaration in a style sheet.
- The syntax for id is: write a hash character (#), followed by an id name. Then, define the CSS properties within curly braces {}.

CSS SELECTORS



```
<html>
  <head>
    <style>
      #myHeader {
        background-color: lightblue;
        color: black;
      }
      #paragraph{Color:black;}
    </style></head>
    <body>
      <h1 id="myHeader">My Header</h1>
      <p id="paragraph">hello</p>
    </body>
  </html>
```

CSS SELECTORS

2. class

- The HTML class attribute is used to specify a class for an HTML element. The syntax for class is: .classname{}

```
<html> <head>
      <style>
.myHeader { background-color: lightblue; color: black; }
      </style></head>
      <body>
<h1 class="myHeader">My Header</h1>
<p class="myHeader">hello</p>
      </body>
</html>
```

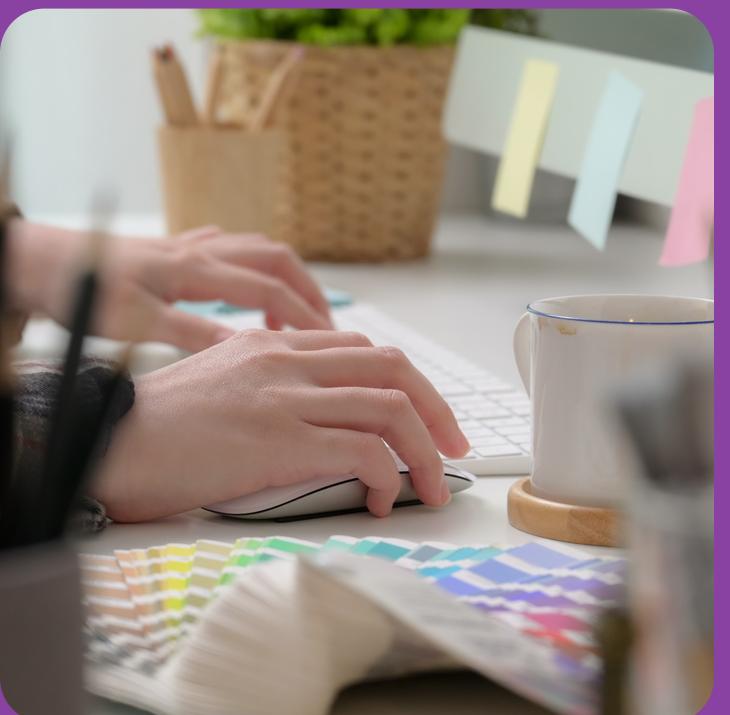
SPAN

- The tag is an inline container used to mark up a part of a text, or a part of a document.



DIV

- The <div> (division) element is a generic block-level element that is typically used to separate page content into blocks.



HTML LIST

1

Ordered List

2

Unordered List

3

**Description List
or
Definition List**

Unordered HTML List

- An unordered list starts with the tag. Each list item starts with the tag.
- The list items will be marked with bullets (small black circles) by default:

```
<ul>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

Ordered List

- In the ordered HTML lists, all the list items are marked with numbers by default.
- It is known as numbered list also. The ordered list starts with `` tag and the list items start with `` tag.

```
<ol>  
  <li>Aries</li>  
  <li>Bingo</li>  
  <li>Leo</li>  
</ol>
```

HTML Description List or Definition List

- It is also known as a definition list where entries are listed like a dictionary or encyclopedia.
- The HTML definition list contains the following three tags:
 - <dl> tag defines the start of the list.
 - <dt> tag defines a term.
 - <dd> tag defines the term definition (description).

```
<dl>
  <dt>Aries</dt>
  <dd>-One of the 12 horoscope sign.</dd>
  <dt>Bingo</dt>
  <dd>-One of my evening snacks</dd>
</dl>
```

TASK 4



Largest Header

Smallest Header

This is a paragraph

1. First create the ol tags
2. Then create the li tags

- Milk
- Sugar

Cat

Four legged meower

Dog

Four legged woofer

TASK 5



7. Write the HTML code for the following browser display by considering the following points:

Follow these instructions:

- “**Internship programs**” should be center aligned, Level 2 heading and underlined.
- Background color of whole list should be yellow.
- The text below horizontal line should be italic.
- “PHP”, “Flutter ” and “Data Science” should be hypertext and linked with PHP.html, Flutter.html and Datascience.html respectively.

Short Term Courses

- A. Web Fullstack
 - [PHP](#)
 - Python
 - MERN
- B. Mobile App Development
 - Android
 - [Flutter](#)
 - React Native
- C. Others
 - UI/UX
 - [Data Science](#)

HTML TABLE

- HTML tables allow web developers to arrange data into rows and columns.
- Each table cell is defined by a <td> and a </td> tag.
- Each table row starts with a <tr> and end with a </tr> tag.
- If you want your cells to be headers, use the <th> tag instead of the <td> tag.
- To add a border, use the CSS border property on table, th, and td elements.
- To set the width of a table, add the style attribute to the <table> element.

HTML TABLE

```
<table>
  <tr>
    <th>Company</th>
    <th>Contact</th>
    <th>Place</th>
  </tr>
  <tr>
    <td>Alfreds Futterkiste</td>
    <td>95478124</td>
    <td>Germany</td>
  </tr>
  <tr>
    <td>Centro comercial Moctezuma</td>
    <td>784556214</td>
    <td>Mexico</td>
  </tr>
</table>
```

colspan

- To make a cell span over multiple columns, use the colspan attribute:
- The value of the colspan attribute represents the number of columns to span.

```
<table>
  <tr>
    <th colspan="2">Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>43</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>57</td>
  </tr>
</table>
```

rowspan

- To make a cell span over multiple rows, use the rowspan attribute:
- The value of the rowspan attribute represents the number of rows to span.

```
<table>
  <tr>
    <th>Name</th>
    <td>Jill</td>
  </tr>
  <tr>
    <th rowspan="2">Phone</th>
    <td>555-1234</td>
  </tr>
  <tr>
    <td>555-8745</td>
  </tr>
</table>
```

TASK 6



A	B		C
F	D		E
H	I		J
	L	M	K

TASK 7



Create the following stripped Zebra Table by using CSS:

Id	Name	Subject
1001	Suresh	Physics
1002	Ram	Economics
1003	Preeti	Chemistry
1004	Shalini	Zoology
1004	Vivek	Math
1004	Ramesh	Botany

TASK 8



5. Write HTML code for the following browser display:

Task	Day of the Week						
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
College	Java	Web Design	C lang	Python	Practical	OFF	
Work	Subject preparation and project work						

Daily Schedule

Follow these instructions:

- Border should be 2px and height and width should be 50% and 100% respectively.
- Background colour of the table should be yellow.
- Cell padding and cell spacing should be “5px” and “6px” respectively.
- Table should be center aligned.
- Background of ‘OFF’ cell should be red.
- Make caption “Daily Schedule” below the table.
- Task and day of the week should be column header.

HTML FORM

- The <form> element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.
- The <fieldset> tag is used to group related elements in a form. The <fieldset> tag draws a box around the related elements. The <legend> tag is used to define a caption for the <fieldset> element.
- The <input> tag specifies an input field where the user can enter data. The <input> element is the most important form element.
- The <textarea> tag defines a multi-line text input control. A text area can hold an unlimited number of characters. The size of a text area is specified by the <cols> and <rows> attributes.
- The <input type="tel"> defines a field for entering a telephone number.
- The <input type="date"> defines a date picker.
- The <input type="email"> defines a field for an e-mail address.
- The <input type="password"> defines a password field (characters are masked).
- The <select> element is used to create a drop-down list. The content between the opening <option> and closing </option> tags is what the browsers will display in a drop-down list.

HTML FORM

```
<form action="/action_page.php">  
<label for="fname">First name:</label>  
    <br>  
    <input type="text" id="fname"  
        name="fname" value="John"><br>  
<label for="lname">Last name:</label>  
    <br>  
    <input type="text" id="lname"  
        name="lname" value="Doe"><br><br>  
<input type="submit" value="Submit">  
</form>
```

TASK 9



Sign Up

First Name

Last Name

Date of Birth Date Month Year

Gender Male Female

Country

E-mail

Phone

Password

Confirm Password

I Agree to the Terms of use

TASK 10



-->

Registration Form

Enter Name	<input type="text"/>
Enter Password	<input type="password"/>
Enter Address	<input type="text"/>
Select Game	<ul style="list-style-type: none"><input type="checkbox"/> Hockey<input type="checkbox"/> Football<input type="checkbox"/> Badminton<input type="checkbox"/> Cricket<input type="checkbox"/> volleyball
Gender	<input type="radio"/> Male <input type="radio"/> Female
Select ur age	<input type="text"/>
Select Photo	<input type="file"/> Choose File No file chosen
<input type="button" value="Click Me"/> <input type="button" value="Reset"/> <input type="button" value="Submit Form"/>	

HTML MEDIA

- To show a video in HTML, use the <video> element:

```
<!DOCTYPE html>

<html>
  <body>
    <video width="320" height="240" controls>
      <source src="movie.mp4" type="video/mp4">
    </video>
  </body>
</html>
```

HTML MEDIA

- To play an audio file in HTML, use the <audio> element:

```
<!DOCTYPE html>
<html>
<body>
<audio controls>
<source src="song.mp3" type="audio/mpeg">
</audio>
</body>
</html>
```

Iframe

- Syntax:

```
<iframe src="url" title="description"></iframe>
```

- Example:

```
<iframe src="demo_iframe.htm" height="200"  
width="300" title="Iframe Example"></iframe>
```



THANK YOU
