



# HTML

## Introduction

- HTML is an acronym which stands for **Hyper Text Markup Language**.
- Tim Berners-Lee is known as father of HTML.
- HTML is used to create static web pages.
- Markup tags tell web browsers how to display the page (page formatting and layout).
- An HTML file has an extension .html

eg: new.html

## Hyper Text:

- A text has a link within it, is a hypertext.

## Markup language:

- A markup language is a programming language that is used make text more interactive and dynamic. It can turn a text into images, tables, links etc.

## Structure of HTML Document

<html>

<head>

Document header related tags

</head>

<body>

Document body related tags

</body>

</html>

## Basically an HTML document contains two parts

1.head section

2.body section

### 1. head section

In head section contains all the invisible details of that documents. Such as file, styles, scripts.

### 2. body section

It contains elements that is to be visible to users.

## HTML Tags

HTML tags are used to markup HTML elements.

eg : <p> </p> ->tag for paragraphs

<p> start tag

</p> end tag

<br> break tag

## HTML tag classification

1. Text tags

2. Multimedia

3. Container elements

4. Links

## 5. form elements

### 1. Text tags

- a. headings
- b. paragraphs
- c. lists

#### a. headings

- There are six different HTML headings which are defined with the <h1> to <h6> tags.
- <h1> is the largest heading tag and <h6> is the smallest heading tag.

#### Example

<h1>Heading no. 1</h1>

<h2>Heading no. 2</h2>

<h3>Heading no. 3</h3>

<h4>Heading no. 4</h4>

<h5>Heading no. 5</h5>

<h6>Heading no. 6</h6>

#### b. paragraphs

- HTML paragraph or HTML <p> tag is used to define a paragraph with in a webpage.

#### Example

<p>My First Paragraph</p>

<p>My Second Paragraph</p>

#### c. lists

- Unordered List

- Ordered List
- Description List (Definition List)

### Unordered List

- An unordered list starts with <ul> tags and each item will be marked with bullets.(small black circles)

#### Example

```
<ul>
    <li>Computer Science</li>
    <li>Information Technology</li>
    <li>Civil Engineering</li>
</ul>
```

#### OUTPUT

- Computer Science
- Information Technology
- Civil Engineering

### Ordered List

```
<ol>
    <li>cs</li>
    <li>ece</li>
    <li>cse</li>
</ol>
```

#### OUTPUT

1. cs
2. ece
3. cse

## Description List (Definition List)

<dl>

<dt>Coffee</dt>

<dd>Black hot drink</dd>

<dt>Milk</dt>

<dd>White cold drink</dd>

</dl>

### OUTPUT

Coffee

Black hot drink

Milk

White cold drink

## Text Formatting Tags

### 1. Bold

The HTML <b> element defines bold text, without any extra importance.

<b>Bold Text</b>

### 2. Italic

The HTML <i> element defines italic text, without any extra importance.

<i>Italic Text</i>

### 3. Underline

The HTML <u> element displays a text with an underline

<u>Underlined Text</u>

## Attributes

Attributes provide additional information about HTML elements. Some attributes are given below.

1. href attribute
2. id attribute
3. size attribute
4. name attribute
5. style attribute

### 1. href attribute

It is used for <a>tag [anchor tag].

Example

```
<a href="http://www.google.com">google</a>
```

(Note: <a href="image.html">click to see image</a>)

(Note: <a href="image.html" title="click here">click to see image</a>)

### 2. Id attribute

It specifies a unique id for an element.

Example : <p id="a">hai</p>

### 3. Size attribute

size attributes are used for image sizing purpose and it is inside <img>tag.

eg: 

Here size of the images width and height is the size attributes

## HTML Font

- HTML <font> tag is used to add style, size, and color to the text on a web page. The font tag is having three attributes called size, color, and face to customize your fonts.

The face attribute specifies the font family like "Times New Roman", "Verdana", etc.

#### Example

```
<font face="Times New Roman">
```

Font Family is Times New Roman

```
</font>
```

```
<font face="Verdana">
```

Font Family is Verdana

```
</font>
```

The font size attribute specifies the size of the text. The range of accepted values is from 1(smallest) to 7(largest). The default size of a font is 3.

#### Example

```
<font size="1">Font Size 1</font>
```

```
<font size="2">Font Size 2</font>
```

```
<font size="3">Font Size 3</font>
```

```
<font size="4">Font Size 4</font>
```

```
<font size="5">Font Size 5</font>
```

```
<font size="6">Font Size 6</font>
```

```
<font size="7">Font Size 7</font>
```

The font color attribute specifies the color of the text.

#### Example

```
<font color="red">This text is in red color</font>
```

```
<font color="blue">This text is in blue color</font>
```

## 2. Multimedia

Multimedia comes in many different formats. It can be almost anything you can hear or see.

Examples: Images, audios, videos etc.

```
<html>
  <head>
    <title>image</title>
  </head>
  <body>
    
  </body>
</html>
```

```
<!doctype html>
<html>
<body>
<audio controls>
<source src="horse.ogg" type="audio/ogg" >
</audio>
<video height="200" width="200" controls>
<source src="movie.mp4" type="video/mp4">
</video>
</body>
</html>
```

## 3. Container elements

They are html elements that can contain other elements.

eg: tables

**Tables** are defined with the <table> tag and the tables are divided into table rows with <tr> tag.

Table row are again divided into table data. <td>tag.

A table row can also divided into table heading <th> tag.



## Example:-

```

<html>
  <head>
    <title>TABLE</title>
  </head>
  <body>
<table border="2" Align="center">
<tr>
  <th rowspan="2">id</th>
  <th rowspan="2">name</th>
  <th colspan="3">Vehicle</th>
  <th rowspan="2">year</th>
</tr>
<tr>
  <th>bike</th>
  <th>car</th>
  <th>cycle</th>
</tr>
<tr>
  <td>1</td>
  <td>Anu</td>
  <td rowspan="2">Duke</td>
  <td rowspan="1">Baleno</td>
  <td rowspan="2">Nill</td>
  <td rowspan="2">2017</td>
</tr>
<tr>
  <td>2</td>
  <td>Vishnu</td>
  <td rowspan="2">City</td>
</tr>
<tr>
  <td>3</td>
  <td>jinu</td>
  <td>R1</td>
  <td>Hero </td>
  <td>2015</td>
</tr>
<tr>
  <td>4</td>
  <td>manu</td>
  <td rowspan="2">Ninja</td>
  <td>Audi</td>
  <td>axn</td>
  <td rowspan="2">2016</td>
</tr>
<tr>
  <td>5</td>
  <td>sanu</td>
  <td>lamborghini</td>
  <td>nill</td>
</tr>
  </body>
</table>
</html>

```

output

id	name	Vehicle			year
		bike	car	cycle	
1	Anu	Duke	Baleno	Nill	2017
2	Vishnu		City		
3	jinu	R1		Hero	2015
4	manu	Ninja	Audi	axn	2016
5	sanu		lamborgini	nill	

span tag

Used for align the table into one row or one column

<span> </span>

### 3. Form elements

HTML form are used for collect the user inputs.

<form name="f1" id="f1" method="POST" action="page.html">

.....

form elements

.....

</form>

### HTML forms contain form elements

Form elements are different types of input elements.

eg: check boxes,radio buttons,submit buttons etc.

## 1. Text box

Text box is used for enter a single line text input.

```
<form>
```

```
first name:<br>
```

```
<input type="text" name="fname" placeholder="firstname here"><br>
```

```
last name:<br>
```

```
<input type="text" name="lname" placeholder="lastname here"><br>
```

```
</form>
```

### Name attributes

It is used for identify the form elements on the server side when user submit the form.

### Value attributes

It is used to set a text or value inside the text box.

### Id attributes

It is used for identify the elements on the client side by css or javascript.

### Placeholder attributes

The placeholder attribute specifies a short hint that describes the expected value of an input field.

### min and max attributes

```
<form >
```

Enter a date before 1980-01-01:

```
<input type="date" name="bday" max="1979-12-31">
```

Enter a date after 2000-01-01:

```
<input type="date" name="bday" min="2000-01-02">
```

Quantity (between 1 and 5):

```
<input type="number" name="quantity" min="1" max="5">
<input type="submit">
</form>
```

## 2. Password box

eg: `<input type="password" name="pwd" id="passwr" placeholder="password here" />`

used for typing password into the form.

## 3. Radio buttons

Radio buttons are used for selecting one of a limited number of choices.

eg:

```
<form>
<input type="radio" name="gender" value="male" checked="checked"
>male</input>
<input type="radio" name="gender" value="female" >female</input>
</form>
```

(Note: name should be same in both male and female options)

## 4. Checkbox

Check box is used for users for selecting zero or more options of a limited number of choices.

```
<form>
<input type="checkbox" name="lang" value="php">php</input>
<input type="checkbox" name="lang" value="java">java</input>
</form>
```

## 5. Select box

```
<form>  
<select name="dist">  
  <option selected="selected" disabled="disabled" value="">district</option>  
  <option value="ekm">Ernakulam</option>  
  <option value="ktm">kottyam</option>  
</select>  
</form>
```

## 6. Textarea

```
<form>  
<textarea name="addr"> </textarea>  
</form>
```

## 7. Buttons

Buttons are used for submit a programs or to clear/reset the form in to the server.

### Submit button

For submitting the form

```
<form>  
<input type="submit" name="sub" value="Register" />  
<button name="sub">Register</button>  
</form>
```

### Reset button

For reset the form

```
<form>
```

```
<input type="reset" name="sub" value="Reset all" />
```

```
</form>
```

( **Note:** `date(type="date")`, `number(type="number")`, `mail(type="mail")`, `time(type="time")` )

### Method

1.get

2.post

### <iframe> Tag

The <iframe> tag specifies an inline frame.

An inline frame is used to embed another document within the current HTML document.

eg:

```
<body>
```

```
<iframe src="soften.html" width="800px" height="400px">
```

```
<p>Your browser does not support iframes.</p>
```

```
</iframe>
```

```
</body>
```