

WEB

DEVELOPMENT

OR

ENGINEERING

# Web Development

## Front End

How data/content will show on screen

HTML



HTML

Basic Building Blocks

CSS



CSS

Designing of Basic Building Blocks

JS



JavaScript

Adding Behavior or functionalities

## Back End

How to save, update and delete data on server.

How to other resources of server



PHP

# HTML

## Elements

An HTML element is defined by a **start tag**, **some content**, and an **end tag**.

**<tagname>** **Content goes here...** **</tagname>**

Example:- **<p>** **This is paragraph tag** **</p>**

# HTML

## Attributes

- HTML attributes provide additional information about HTML elements.
- Attributes are always specified in **the start tag**
- Attributes usually come in name/value pairs like: name="value"

`<tagname width="500"> Content goes here... </tagname>`

Example:- `<p title="I'm a tooltip"> This is paragraph tag </p>`

# Lets create html file..!

# Basic Structure

Information about webpage

Code of webpage which will render in browser

```
<!DOCTYPE html> {It is an "information" to the browser about what document type to expect}
<html>

  {
    <head>
      <title> Page Title </title>
    </head>

    {
      <body>
        <h1> This is a Heading </h1>
        <p> This is a paragraph. </p>
      </body>
    }
  }

</html>
```

# Headings

1. `<h1>Heading 1</h1>`
2. `<h2>Heading 2</h2>`
3. `<h3>Heading 3</h3>`
4. `<h4>Heading 4</h4>`
5. `<h5>Heading 5</h5>`
6. `<h6>Heading 6</h6>`

# Paragraph

<p>This is a paragraph.</p>

<p>This is another paragraph.</p>



# HTML Formatting Elements

Formatting elements or tags are used to specify the way of text representation. For example `<b>` is used to make the text bold.

Following are some formatting elements in HTML

1. `<b>` - Bold text
2. `<strong>` - Important text
3. `<i>` - Italic text
4. `<em>` - Emphasized text
5. `<mark>` - Marked text
6. `<small>` - Smaller text
7. `<del>` - Deleted text
8. `<ins>` - Inserted text
9. `<sub>` - Subscript text
10. `<sup>` - Superscript text

# HTML Tags properties

Different tags have different properties. These properties help to change the decoration of tag content. To change these properties we use CSS. We will work on these properties in upcoming lectures

# Comments

```
<!-- Write your comments here -->
```

## Example

```
<!-- Do not display this H1 at the moment  
<h1> Hey </h1>  
-->
```

# Links - Hyperlinks

You can click on a link and jump to another document.

When you move the mouse over a link, the mouse arrow will turn into a little hand.

`<a>` tag defines a hyperlink as shown below

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

Example

```
<a href="https://www.google.com/"> Visit google.com! </a>
```

# Unordered Lists

An unordered HTML list

- Item
- Item
- Item
- Item

We have following two tags to create unordered list

`<ul>` :- Unordered list

`<li>` :- List item

Example

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

# Ordered Lists

An ordered HTML list

1. First item
2. Second item
3. Third item
4. Fourth item

We have following two tags to create unordered list

`<ol>` :- ordered list

`<li>` :- List item

Example

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

# Description Lists

A description list is a list of terms, with a description of each term.

The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term

Example

```
<dl>
```

```
<dt> Water </dt>
```

```
<dd> We drink </dd>
```

```
<dt> Sprite </dt>
```

```
<dd> We drink </dd>
```

```
</dl>
```

# Tables

- The `<table>` tag defines an HTML table.
  - Each table row is defined with a `<tr>` tag.
  - Each table header is defined with a `<th>` tag.
  - Each table data/cell is defined with a `<td>` tag.
- 
- By default, the text in `<th>` elements are bold and centered.
  - By default, the text in `<td>` elements are regular and left-aligned.



# Tables Example

```
<table>
  <tr>
    <th> Firstname </th>
    <th> Lastname </th>
    <th> Age </th>
  </tr>
  <tr>
    <td> Ali </td>
    <td> Usman </td>
    <td> 20 </td>
  </tr>
</table>
```

# Images

We can add images in our web page using `<img` tag

``

Example

``

# Images

We can add images in our web page using `<img` tag

``

Example

``

# Block-level Elements

A block-level element always starts on a new line.

A block-level element always takes up the full width available.

Example

<address>	<dl>	<h1>-<h6>	<ol>	<ul>
<article>	<dt>	<header>	<p>	<video>
<aside>	<fieldset>	<hr>	<pre>	
<blockquote>	<figcaption>	<li>	<section>	
<canvas>	<figure>	<main>	<table>	
<dd>	<footer>	<nav>	<tfoot>	
<div>	<form>	<noscript>		

# <div>

Div is a block element.

Mostly we use this element to group other elements.

Example

<div>

<p> Hello World <\p>

<p> Hello World <\p>

<p> Hello World <\p>

</div>

# Inline Elements

An inline element does not start on a new line.

An inline element only takes up as much width as necessary.

Example

<a>	<button>	<input>	<samp>	<sup>
<abbr>	<cite>	<kbd>	<script>	<textarea>
<acronym>	<code>	<label>	<select>	<time>
<b>	<dfn>	<map>	<small>	<tt>
<bdo>	<em>	<object>	<span>	
<big>	<i>	<output>	<strong>	
 	<img>	<q>	<sub>	

# Line

We can add line in our web page using `<hr>` tag

`<p>` HTML is the standard markup language for creating Web pages. HTML describes the structure of a Web page, and consists of a series of elements. HTML elements tell the browser how to display the content. `</p>`

`<hr>`

`<p>` CSS is a language that describes how HTML elements are to be displayed on screen, paper, or in other media. CSS saves a lot of work, because it can control the layout of multiple web pages all at once. `</p>`

# Button

We can add button in our web page using `<button>` tag

## Example

```
<button type="button"> Click Me! </button>
```



# id Attribute

The HTML id attribute is used to specify a unique id for an HTML element.

You cannot have more than one element with the same id in an HTML document.

## Example

```
<h1 id="myHeader">My Header</h1>
```

# class Attribute

The HTML class attribute is used to specify a class for an HTML element.

Multiple HTML elements can share the same class.

Example

```
<p class="abc" >London is the capital of England.</p>
```

```
<p class="abc" >Paris is the capital of France.</p>
```

# Form Tag

An HTML form is used to collect user input. The user input is most often sent to a server for processing.

The HTML `<form>` element is used to create an HTML form for user input.

Example

```
<form>  
  .  
  form elements  
  .  
</form>
```

# input Tag

In forms we use input tag to define which type of input we will take.  
We use <input tag for this purpose.

Example

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

# Input tag count.. – type attribute

Input tag has attribute type which use to tell which type of input we are going to take. Following are the type of input available.

- |  |   |
|--|---|
| 1. <code>&lt;input type="button"&gt;</code>                | 1. <code>&lt;input type="month"&gt;</code>    |
| 2. <code>&lt;input type="checkbox"&gt;</code>              | 2. <code>&lt;input type="number"&gt;</code>   |
| 3. <code>&lt;input type="color"&gt;</code>                 | 3. <code>&lt;input type="password"&gt;</code> |
| 4. <code>&lt;input type="date"&gt;</code>                  | 4. <code>&lt;input type="radio"&gt;</code>    |
| 5. <code>&lt;input type="datetime-local"&gt;</code>        | 5. <code>&lt;input type="range"&gt;</code>    |
| 6. <code>&lt;input type="email"&gt;</code>                 | 6. <code>&lt;input type="reset"&gt;</code>    |
| 7. <code>&lt;input type="file"&gt;</code>                  | 7. <code>&lt;input type="search"&gt;</code>   |
| 8. <code>&lt;input type="hidden"&gt;</code>                | 8. <code>&lt;input type="submit"&gt;</code>   |
| 9. <code>&lt;input type="image"&gt;</code>                 | 9. <code>&lt;input type="tel"&gt;</code>      |
| 10. <code>&lt;input type="text"&gt;</code> (default value) | 10. <code>&lt;input type="url"&gt;</code>     |
| 11. <code>&lt;input type="time"&gt;</code>                 | 11. <code>&lt;input type="week"&gt;</code>    |

**THANKS...!**