

Module 2

HTML → Hyper Text Markup Language

- It was developed by Tim - Berners-Lee
- HTML is the standard markup language for creating webpages.
- HTML Elements → The building blocks of HTML pages.
- " " → Represented by tags
- HTML Tags → Label pieces of content such as heading, paragraph, table & so on.

• Structure :-

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Page title </title>
```

```
</head>
```

```
<body>
```

```
<h1>Heading </h1>
```

```
<p>Paragraph </p>
```

```
</body>
```

```
</html>
```

- DOCTYPE html defines the doc to be an html file
- <html> elt is the root elt of an HTML page
- <head> elt contains meta info about the doc
- <title> elt specifies a title for the doc.

- The body elt contains the visible page content.
- The h1 elt defines a large heading & the p elt defines a paragraph.

The DOCTYPE Declaration → Represents the document type & helps browsers to display webpages correctly.
This declaration is not case sensitive.

Version	Year
HTML	1991
" 2.0	1995
" 3.2	1997
" 4.01	1999
X HTML	2000
HTML 5	2014

Standard HTML Document Structure

<html>

<head>

<title> Page title </title>

</head>

<body>

<h1> This is a heading </h1>

<p> This is a paragraph </p>

<p> This is another paragraph </p>

</body>

</html>

HTML Links

` Link `

HTML Images

`<img src = "hello.jpg" alt = "hi.jpg" width = "104"
height = "104">`

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Empty HTML Elements

`<!DOCTYPE html>`

`<html>`

`<body>`

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

`</body>`

`</html>`

Basic Text Markup

- Paragraph - `<p>` tag
- Line break - `
` tag
- Titles & subtitles - `<h>` tag
- Block & inline elements - `i`, `em`, `strong` tags
- List - `ul`, `ol`, `li` tags
- Links & `a` tag
- Embedding images in HTML pages - `img` tag

i) `<img src = "img_girl.jpg" alt = "Girl in a Jacket" style
style = "width: 500px; height: 600px">`

ii) `<img src = "img_girl.jpg" alt = "Girl in a Jacket" width = "500"
height = "600">`

<!DOCTYPE html>

<html>

<head>

<style>

img {

width: 100%;

}

</style>

</head>

<body>

<h2> Styling Images </h2>

<p> The image </p>

<img src = "html5.gif" alt = "HTML5ICON" width = "128"
height = "128">

<p> The image </p>

<img src = "html5.gif" alt = "HTML5ICON" style = "width: 128px;
height: 128px;">

</body>

</html>

Images in Another Folder

<img src = "/images/html5.gif" alt = "HTML5ICON" style =
"width: 128px; height: 128px;">

Animated Images

<img src = "programming.gif" alt = "Computer Man" style =
"width: 128px; height: 128px;">


```
<a href = "default.asp">
<img src = "smiley.gif" alt = "HTML tutorial" style =
"width: 42px; height: 42px; border: 1px solid black;" />
</a>
```

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HTML List

Unordered list → `` `` → • → small black circle/disc

Ordered " → `` ``

Description list → `<dl>`

→ `<dt>` → term / element name

→ `<dd>` → " / " description

Unordered HTML List

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

eg. `<!DOCTYPE html>`

`<html>`

`<body>`

`<h2>` An unordered HTML list `</h2>`

``

`` Coffee ``

`` Tea ``

`` Milk ``

``

`</body>`

`</html>`

Output:-

An unordered HTML list

- Coffee
- Tea
- Milk

The CSS "list-style-type" property is used to define the style of the list item markers.

Value	Description
disc	Sets the list item markers to a disc (Default condition)
circle	
square	
none	The list items will not be marked

eg: `<ul style="list-style-type: disc;">`

Ordered HTML List

It starts with `` tag. Each list item starts with `` tag. The list items will be marked with nos by default.

The type attribute of the `` tag defines the type of the list item markers.

Type	Description
type="1"	The list items will be numbered with no (default)
type="a"	
type="A"	
type="I"	
type="i"	

<ol type="a">

HTML Description List

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) & the <dd> tag describes each term.

eg: <!DOCTYPE html>

<html>

<body>

<h2> A Description List </h2>

<dl>

<dt> Coffee </dt>

<dd> Black Hot Sink </dd>

<dt> Milk </dt>

<dd> White cold drink </dd>

</dl>

</body>

</html>

HTML Tables

An HTML table is defined with `<table>` tag. Each table row is defined with `<tr>` tag. A table header is defined with `<th>` tag. By default table headings are bold & centred. A table data is defined with `<td>` tag.

eg: `<!DOCTYPE html>`

`<html>`

`<body>`

`<h2> Basic HTML Table </h2>`

`<table style="width:100%">`

`<tr>`

`<th> Firstname </th>`

`<th> Lastname </th>`

`<th> Age </th>`

`</tr>`

`<tr>`

`<td> Jill </td>`

`<td> Smith </td>`

`<td> 50 </td>`

`</tr>`

`<tr>`

`<td> Eve </td>`

`<td> Jackson </td>`

`<td> 94 </td>`

`</tr>`


```
<tr>
  <td> John </td>
  <td> Doe </td>
  <td> 80 </td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

A border is set using the CSS border property.

```
<style>
  table, th, td {
    border: 1px solid black;
  }
```

```
</style>
```

If we want the borders to collapse into 1 border add the CSS border-collapse property.

```
<style>
  table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
  }
```

```
</style>
```

Cell padding specifies the space b/w the cell contents & its borders. To set the padding, use the CSS padding property.

<style>

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

th, td {

padding: 15px;

}

</style>

By default table headings are bold & centered. To left align the table headings, use the CSS `text-align` property.

<style>

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

th, td {

padding: 15px;

}

th {

text-align: left;

}

</style>

Border spacing specifies the space b/w the cells. To set the border spacing for a table, use the CSS `border-spacing` property.


```
table {
```

```
border-spacing: 15px;
```

```
}
```

To make a cell span more than 1 column, use the colspan attribute

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
table, th, td {
```

```
border: 1px solid black;
```

```
border-collapse: collapse;
```

```
}
```

```
th, td {
```

```
padding: 5px;
```

```
text-align: left;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h2> Cell that spans two columns </h2>
```

<p> To make cell span more than one column, use the colspan attribute </p>

```
<table style="width: 100%">
```

```
<tr>
```

```

<th> Name </th>
<th colspan="2"> Telephone </th>
</tr>
<tr>
<td> Bell Gates </td>
<td> 1234567 </td>
<td> 1234568 </td>
</tr>
</table>
</body>
</html>

```

To make a cell span more than 1 row, use the rowspan attribute

```

<tr>
<th rowspan="2"> Telephone </th>
<td> 1234567 </td>
</tr>
<tr>
<td> 1234568 </td>
</tr>

```

HTML Forms

The HTML <form> element defines a form that is used to collect user input.

```

<form>
:

```

form elements

</form>

Form elements are different types of input elements like text fields, checkboxes, radio buttons, submit buttons & more.

The <input> Element

The <input> elements can be displayed in several ways, depending on the type attribute.

Text Input

<input type="text"> defines a 1-line input field for text input

<!DOCTYPE html>

<html>

<body>

<h2>Text Input</h2>

<form>

Firstname: <input>

<input type="text" name="firstname">

<input>

Lastname: <input>

<input type="text" name="lastname">

</form>

<p> Note that the form itself is not visible </p>

<p> Also note that the default width of a text input field is 20 characters </p>

</body>

</html>

Radio Button Input

`<input type="radio">` defines a radio button. Radio buttons let a user select 1 of a limited no. of choices.

`<form>`

`<input type="radio" name="gender" value="male" checked>`
Male `
`

`<input type="radio" name="gender" value="female">` Female
`
`

`<input type="radio" name="gender" value="other">` Other
`</form>`

The Submit Button

`<input type="submit">` defines a button for submitting the form data to a form handler. The form handler is typically a server page with a script for processing ip data. The form handler is specified in the form's `action` attribute.

`<form action="/action-page.php">`

`<input type="submit" value="Submit">`

The Action Attribute

The `action` attribute defines the action to be performed when the form is submitted. Normally, the form data is sent to a webpage on the server when the user clicks on the submit button. In the example above, the form data is sent to a page on the server called `"action-page.php"`. If the `action` attribute is omitted, the action is sent to the current page.

The Target Attribute

It specifies if the submitted result will open in a new browser tab or in the current window. The default value is "_self" which means the form will be submitted in the current window. To make the form result open in a new browser tab, use the value "_blank".

```
<form action="/action_page.php" target="_blank">
```

The Method Attribute

It specifies the HTTP method (get/post) to be used when submitting the form data.

```
<form action="/action_page.php" method="get">
```

The default method when submitting form data is get. Always use post if the data contains sensitive or personal info.