

INTRODUCTION TO

HTML & CSS



DEFINITIONS

FOUR MAJOR REQUIREMENT

- WWW– WORLD WIDE WEB.
- HTML –HTML IS A TEXT FORMATTING LANGUAGE.
- URL – UNIFORM RESOURCE LOCATOR.
- BROWSER – A SOFTWARE PROGRAM WHICH IS USED TO SHOW WEB PAGES.

WHAT IS HTML?

- HTML stands for hyper text markup language
- HTML is the standard markup language for creating web pages
- HTML describes the structure of a web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

CREATING A BASIC STARTING DOCUMENT -

```
<!doctype html>  
<html>  
  
  <head>  
    <title>my first page</title>  
  </head>  
  
  <body>  
    this is what is displayed.  
  </body>  
  
</html>
```

<!DOCTYPE HTML>TAG

The <!doctype html> declaration defines that this document is an HTML5 document.

Note: But browser understands, type of tags and elements but just for SEO, we need to mention type of html..

<HTML> Tag

The `<html>` tag represents the root of an HTML document. The `<html>` tag is the container for all other HTML elements (except for the `<!DOCTYPE>` tag).

Note: You should always include the “lang” attribute inside the `<html>` tag, to declare the language of the Web page. This is meant to assist search engines and browsers.

<HEAD> Tag

The <head> tag in HTML is used to define the head portion of the document which contains information related to the document.

The <head> tag contains other head elements such as <title>, <meta>, <link>, <style> <link> etc.

In HTML 4.01 the <head> element was mandatory but in HTML5, the <head> element can be omitted.

<TITLE> Tag

A title tag is an HTML element that specifies the title of a web page.

Title tags are displayed on search engine results pages (SERPs) as the clickable headline for a given result, and are important for usability, SEO, and social sharing.

The title tag of a web page is meant to be an accurate and concise description of a page's content.

<BODY> Tag

HTML <body> tag defines the main content of an HTML document which displays on the browser.

It can contain text content, paragraphs, headings, images, tables, links, videos, etc.

The <body> must be the second element after the <head> tag or it should be placed between </head> and </html> tags.

HTML elements

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

- Start tag * element content end tag *
- `<p>` this is a paragraph `</p>`
- `` this is a link ``
- *The start tag is often called the opening tag. The end tag is often called the closing tag.

TAGS

- Codes enclosed in brackets.
- Usually paired.

`<TITLE>My Web Page</TITLE>`

- Not case sensitive

`<TITLE> = <title> = <TitLE>`

HTML COMMENT

Comments can be inserted into the HTML code to make it more readable and understandable.

Comments are ignored by the browser and are not displayed

```
<body>
```

```
    <!-- this is comment-- >
```

```
</body>
```

HTML ATTRIBUTES

- ✓ HTML elements can have attributes
- ✓ Attributes provide additional information about an element
- ✓ Attributes are always specified in the start tag
- ✓ Attributes come in name/value pairs like: `name="value"`

ATTRIBUTES EXAMPLE

HTML links are defined with the `<a>` tag. The link address is specified in the href attribute.

Ex:

```
<!DOCTYPE html>
```

```
<html>
```

```
  <body>
```

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

```
      This is a link
```

```
    </a>
```

```
  </body>
```

```
</html>
```

COLOR IN HTML

HTML colors are specified with predefined color names, or with RGB, HEX, HSL.

- ✓ RGB Color Values - `rgb(red, green, blue)`
- ✓ HEX Color Values - In HTML, a color can be specified using a hexadecimal value in the form:
example - `#rrggbb`
- ✓ HSL Color Values - HSL stands for hue, saturation, and lightness.

Example - `hsl(hue, saturation, lightness)`

Basic Colors

Color Name	RGB Triplet	Hexadecimal	Color Name	RGB Triplet	Hexadecimal
Aqua	(0,255,255)	00FFFF	Navy	(0,0,128)	000080
Black	(0,0,0)	000000	Olive	(128,128,0)	808000
Blue	(0,0,255)	0000FF	Purple	(128,0,128)	800080
Fuchsia	(255,0,255)	FF00FF	Red	(255,0,0)	FF0000
Gray	(128,128,128)	808080	Silver	(192,192,192)	C0C0C0
Green	(0,128,0)	008000	Teal	(0,128,128)	008080
Lime	(0,255,0)	00FF00	White	(255,255,255)	FFFFFF
Maroon	(128,0,0)	800000	Yellow	(255,255,0)	FFFF00

Background Color

It is very common to see web pages with their background color set to white or some other colors.

To set your document's background color, you need to edit the `<BODY>` element by adding the `BGCOLOR` attribute.

The following example will display a document with a white background color:

```
<body bgcolor="#ffffff">
```

```
</body>
```

TEXT Color

The TEXT attribute is used to control the color of all the normal text in the document. The default color for text is black. The TEXT attribute would be added as follows:

```
<body bgcolor="#ffffff" text="#ff0000">  
</body>
```

In this example the document's page color is white and the text would be red.

Using Image Background

The BODY element also gives you ability of setting an image as the document's background.

An example of a background image's HTML code is as follows:

```
<body background="hi.gif" bgcolor="#ffffff">  
</body>
```

Headings, Paragraphs, Breaks & Horizontal Rules

In this chapter you will add headings to your page, insert paragraphs, add some breaks, and add horizontal rules.

- 1 Heading elements. (H1 , H2 , H3 , H4 , H5 , H6)
- 2 Use Paragraphs to add text (<p> content </p>)
- 3 Insert breaks- break the line (
 tag)
- 4 Add a Horizontal Rule. (<hr> tag)

Headings, <Hx> </Hx>

<body>

<h1> heading 1 </h1>

<h2> heading 2 </h2>

<h3> heading 3 </h3>

<h4> heading 4 </h4>

<h5> heading 5 </h5>

<h6> heading 6 </h6>

</body>

HEADING 1

HEADING 2

HEADING 3

HEADING 4

HEADING 5

HEADING 6

HTML Images

HTML images are defined with the `` tag. The filename and the size of the image are provided as attributes.

Ex: `<!DOCTYPE html>`

`<html>`

`<body>`

``

`</body>`

`</html>`

HTML Links

HTML links are defined with the `<a>` tag. The link address is specified in the href attribute.

Ex:

```
<!DOCTYPE html>
```

```
<html>
```

```
    <body>
```

```
        <a href="http://www.facebook.com" target= "_blank" >
```

```
        This is a link</a>
```

```
    </body>
```

```
</html>
```

Character Formatting

In this chapter you will learn how to enhance your page with Bold, Italics, and other character formatting options.

Objectives : Upon completing this section, you should be able to

- 1 Change the color and size of your text.
- 2 Use Common Character Formatting Elements.
- 3 Add special characters.
- 4 Use other character formatting elements.
- 5 Align your text.

HTML Formatting Elements

1. `` bold ``
2. `<i>` italic `</i>`
3. `<u>` underline `</u>`
4. `<pre>` preformatted `</pre>`
5. `` emphasis `` browsers usually display this as italics.
6. `` strong `` browsers display this as bold.
7. `<tt>` teletype `</tt>` text is displayed in a mono-spaced font.

HTML Formatting Elements

- 8. `<strike>` strike-through text`</strike>`
- 9. `` is used for strike at the latest browsers ``
- 10. `<big>` places text in a big font`</big>`
- 11. `<small>` places text in a small font`</small>`
- 12. `_{` places text in subscript position `}`
- 13. `^{` places text in superscript style position `}`
- 14. `<ins>` showing new inserted text`</ins>`
- 15. `<mark>` used for highlighting`</mark>`

HTML Block and Inline Elements

Inline Elements

A block-level element always starts on a new line and takes up the full width available .

The `<div>` element is a block-level element.

`<div>` Defines a section in a document (block-level).

Inline Elements

An inline element does not start on a new line and only takes up as much width as necessary.

This is an inline `` element inside a paragraph.

`` Defines a section in a document (inline)

HTML Quotation and Citation Elements

- `<abbr>` = Defines an abbreviation or acronym
- `<address>` = Defines contact information for the author/owner of a document
- `<blockquote>` = Defines a section that is quoted from another source
- `<cite>` = Defines the title of a work
- `<q>` = Defines a short inline quotation

Lists

In this chapter you will learn how to create a variety of lists.

Objectives

Upon completing this section, you should be able to

1. Create an unordered list.
2. Create an ordered list.
3. Create a defined list.
4. Nest Lists.

List Elements

HTML supplies several list elements. Most list elements are composed of one or more `` (List Item) elements.

UL : Unordered List. Items in this list start with a list mark such as a bullet. Browsers will usually change the list mark in nested lists.

```
<ul>
```

```
<li> list item ...</li>
```

```
<li> list item ...</li>
```

```
</ul>
```

List Elements

you have the choice of three bullet types:
disc(default), circle, square.

2. these are controlled in netscape navigator by the “type” attribute for the element.

```
<ul type="square">  
  <li> list item ...</li>  
  <li> list item ...</li>  
  <li> list item ...</li>  
</ul>
```

- list item ...
- list item ...
- list item ...

List Elements

Ol: ordered list. items in this list are numbered automatically by the browser.

```
<ol>
```

```
<li> list item ...</li>
```

```
<li> list item ...</li>
```

```
<li> list item ...</li>
```

```
</ol>
```

```
1. list item ...
```

```
2. list item ...
```

```
3. list item
```

Order List Type -:

TYPE	Numbering	Styles
1	Arabic numbers	1,2,3,
a	Lower alpha	a, b, c,
A	Upper alpha	A, B, C,
i	Lower roman	i, ii, iii,
I	Upper roman	I, II, III,

Start attribute in order list -:

you can specify a starting number for an ordered list.

```
<ol type="i">
```

```
<li> list item ...</li>
```

```
<li> list item ...</li>
```

```
</ol>
```

```
<p> text ....</p>
```

```
<ol type="i" start="3">
```

```
<li> list item ...</li>
```

```
</ol>
```

DL: definition list. This kind of list is different from the others.

Each item in a dl consists of one or more **definition terms (dt elements)**, followed by one or more **definition description (dd elements)**.

```
<dl>  
<dt> html </dt>  
<dd> hyper text markup language </dd>  
<dt> dog </dt>  
<dd> a human's best friend!</dd>  
</dl>
```

html	
	hyper text markup language
dog	
	a human's best friend!

Nesting Lists - you can nest lists by inserting a ul, ol, etc., inside a list item (li).

Example - :

```
<ul type = "square">  
  <li> list item ...</li>  
  <li> list item ...  
    <ol type="i" start="3">  
      <li> list item ...</li>  
      <li> list item ...</li>  
      <li> list item ...</li>  
      <li> list item ...</li>  
      <li> list item ...</li>  
    </ol>  
  </li>  
  <li> list item ...</li>  
</ul>
```

- List item ...
- List item ...
 - iii. List item ...
 - iv. List item ...
 - v. List item ...
 - vi. List item ...
 - vii. List item ...
- List item ...

Images

- **** this element defines a graphic image on the page.
- **image file (src:source)**: this value will be a url (location of the image) e.g. <http://www.domain.com/dir/file.ext> or /dir/file.txt.
- **alternate text (alt)** : this is a text field that describes an image or acts as a label. it is displayed when they position the cursor over a graphic image.
- **alignment (align)** : this allows you to align the image on your page.

Images

- **WIDTH (WIDTH):** IS THE WIDTH OF THE IMAGE IN PIXELS.
- **HEIGHT (HEIGHT):** IS THE HEIGHT OF THE IMAGE IN PIXELS.
- **BORDER (BORDER):** IS FOR A BORDER AROUND THE IMAGE, SPECIFIED IN PIXELS.
- **HSPACE:** IS FOR HORIZONTAL SPACE ON BOTH SIDES OF THE IMAGE SPECIFIED IN PIXELS. A SETTING OF 5 WILL PUT 5 PIXELS OF INVISIBLE SPACE ON BOTH SIDES OF THE IMAGE.
- **VSPACE:** IS FOR VERTICAL SPACE ON TOP AND BOTTOM OF THE IMAGE SPECIFIED IN PIXELS. A SETTING OF 5 WILL PUT 5 PIXELS OF INVISIBLE SPACE ABOVE AND BELLOW THE IMAGE.

Some Examples on images

- ``
- ``
- ``
- ``
- `< img src =" jordan.gif" align="left">`

CSS

css can be added to html in the following ways:

- **inline** - using the style attribute in html elements
- **internal** - using the <style> element in the <head> section
- **external** - using an external css file

HTML Class(.) and Id(#)

- The HTML class attribute is used to define equal styles for elements with the same class name.
- So, all html elements with the same class attribute will get the same style.
- The id attribute specifies a unique id for an html element (the value must be unique within the html document).
- The id value can be used by css and javascript to perform certain tasks for the element with the specific id value.

Tables

- The `<table></table>` element has four **sub-elements**:
 1. Table row `<tr></tr>`.
 2. Table header `<th></th>`.
 3. Table data `<td></td>`.
 4. Caption `<caption></caption>`.
- **Note:** the table row elements usually contain table header elements or table data elements.

Tables Attributes

- **Bgcolor**: some browsers support background colors in a table.
- **Width**: you can specify the table width as an absolute number of pixels or a percentage of the document width. You can set the width for the table cells as well.
- **Border**: you can choose a numerical value for the border width, which specifies the border in pixels.
- **Cellspacing**: cell spacing represents the space between cells and is specified in pixels.

Tables Attributes

- **Cellpadding**: cell padding is the space between the cell border and the cell contents and is specified in pixels.
- **Align**: tables can have left, right, or center alignment.
- **Background**: background image, will be titled in ie3.0 and above.
- **Bordercolor, bordercolordark**.

Table Data and Table Header Attributes

- **Colspan**: specifies how many cell columns of the table this cell should span.
- **Rowspan**: specifies how many cell rows of the table this cell should span.
- **Align**: cell data can have left, right, or center alignment.
- **Valign**: cell data can have top, middle, or bottom alignment.
- **Width**: you can specify the width as an absolute number of pixels or a percentage of the document width.
- **Height**: you can specify the height as an absolute number of pixels or a percentage of the document height.

Q.1

Spare Parts

Stock Number	Description	List Price
3476-AB	76mm Socket	45.00
3478-AB	78mm Socket	47.50
3480-AB	80mm Socket	50.00

Q.2

Column 1 Header	Column 2 Header
Row 1 Col 1	
Row 2 Col 1	Row 2 Col 2
	Row 3 Col 2