Styling

<h1 style="color:blue;">This is a heading</h1>

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

<h1 style="background-color:red">PGDAC</h1>

<h1 style="border:2px solid red">Hello World</h1>

The HTML <head> Element

<head>	Defines information about the document
<title>	Defines the title of a document
<base>	Defines a default address or a default target for all links on a page
<link>	Defines the relationship between a document and an external resource
<meta>	Defines metadata about an HTML document
<script>	Defines a client-side script
<style>	Defines style information for a document

<Doctype>

- <!DOCTYPE html>

- Note The <!DOCTYPE> declaration must be the very first thing in your HTML document, before the <html> tag.

- it is an instruction to the web browser about what version of HTML the page is written in.

Hr (horizontal line)

- <hr width=50% align=left color="red">

1. Character Encoding

Defines which character set the page uses.

`<meta charset="UTF-8">`

Viewport (Responsive Design)

Controls how the page is displayed on mobile devices.

`<meta name="viewport" content="width=device-width, initial-scale=1.0">`

width=device-width → fits page to device screen.

initial-scale=1.0 → sets zoom level.

Page Description

Gives a short summary for search engines (SEO)

<meta name="description" content="Learn HTML metadata options with examples.">

<meta name="keywords" content="HTML, meta tags, SEO, metadata">
<meta name="author" content="Anu Mehra">
<meta http-equiv="refresh" content="30"> <!-- refresh every 30s -->

What is SEO?

(Search Engine Optimization)

SEO is the process of **improving a website** so that it ranks higher in **search engine results** (like Google, Bing).

Higher ranking → More visibility → More visitors.

<base>

- Specify a default URL and a default target for all links on a page:

- <head>
  <base href="https://india.gov.in/my-government/" target="_blank">
  </head>

  <body>
  Directory

<meta>

- The <**meta**> **tag** provides metadata about the **HTML** document. Metadata will not be displayed on the page, but will be machine parsable.

- **Meta** elements are typically used to specify page description, keywords, author of the document, last modified, and other metadata.

- The metadata can be used by browsers (how to display content or reload page), search engines (keywords), or other web services.

- Metadata is always passed as name/value pairs.

Example

- `<meta name="keywords" content="HTML, CSS, XML, XHTML, JavaScript">`

- `<meta name="description" content="my web page   ">`

Refresh page after 30 second

- `<meta http-equiv="refresh" content="30">`

Setting the viewport to make your website look good on all devices:

- <meta name="viewport" content="width=device-width,

- initial-scale=1.0">

Html Listing

- 1) Ordered list

- 2) Un ordered list

- 3) definition list

Unordered list

- ---------------Example 1----------------

- `<ul>`

- `<li>noida</li>`
  `<li>delhi</li>`
  `<li>pune</li>`
  `</ul>`

- ---------------Example 2-------------

- `<ul style="list-style-type:none">`
  `<li>noida</li>`
  `<li>delhi</li>`
  `<li>pune</li>`
  `</ul>`

Value	Description
disc	Sets the list item marker to a bullet (default)
circle	Sets the list item marker to a circle
square	Sets the list item marker to a square
none	The list items will not be marked

OrderedList

-

- noida
  delhi
  pune

Type	Description
type="1"	The list items will be numbered with numbers (default)
type="A"	The list items will be numbered with uppercase letters
type="a"	The list items will be numbered with lowercase letters
type="I"	The list items will be numbered with uppercase roman numbers
type="i"	The list items will be numbered with lowercase roman numbers

HTML Definition Lists

✓ A definition list is a list of items, with a description of each item.

✓ The <dl> tag defines a definition list.

✓ The <dl> tag is used in conjunction with <dt> (defines the item in the list) and <dd> (describes the item in the list):

```
<dl>
<dt>Coffee</dt>
<dd>- black hot drink</dd>
<dt>Milk</dt>
<dd>- white cold drink</dd>
</dl>
```

HTML Images

- Defined with the <img> tag.
- Empty tag, contains only attributes, no closing tag

Syntax for defining an image:

      <img src="*url*" alt="*some text*">

- **src Attribute**

      Specifies the url of the Image

- **alt Attribute**

      The alt attribute specifies an alternate text for an image, if the image cannot be displayed.

Images Alignment

Align=*position*	Image/Text Placement
Left	Image on left edge; text flows to right of image
Right	Image on right edge; text flows to left
Top	Image is left; words align with top of image
Bottom	Image is left; words align with bottom of image
Middle	Words align with middle of image

Image Map

- The <map> tag is used to define a client-side image-map. An image-map is an image with clickable areas.

- The required name attribute of the <map> element is associated with the <img>'s usemap attribute and creates a relationship between the image and the map.

- The <map> element contains a number of <area> elements, that defines the clickable areas in the image map.

Image Map Example

```
<img src="planets.gif" width="145" height="126" alt="Planets"
    usemap="#planetmap">


<map name="planetmap">
    <area shape="rect" coords="0,0,82,126" href="sun.htm" alt="Sun">
    <area shape="circle" coords="90,58,3" href="mercur.htm" alt="Mercury">
    <area shape="circle" coords="124,58,8" href="venus.htm" alt="Venus">
    </map>
```

HTML Tables

<TABLE>   table tag

<CAPTION>   optional table title

<TR>   table row

<TH>   table column header (Bold & Centered)

<TD>   table data element

Tables Example

```
<TABLE BORDER=1>
 <CAPTION>Table Caption</CAPTION>
 <TR><TH>Heading1</TH>     <TH>Heading2</TH></TR>
 <TR><TD>Row1 Col1 Data</TD><TD>Row1 Col2 Data</TD></TR>
 <TR><TD>Row2 Col1 Data</TD><TD>Row2 Col2 Data</TD></TR>
 <TR><TD>Row3 Col1 Data</TD><TD>Row3 Col2 Data</TD></TR>
</TABLE>
```

<TABLE> Element Attributes

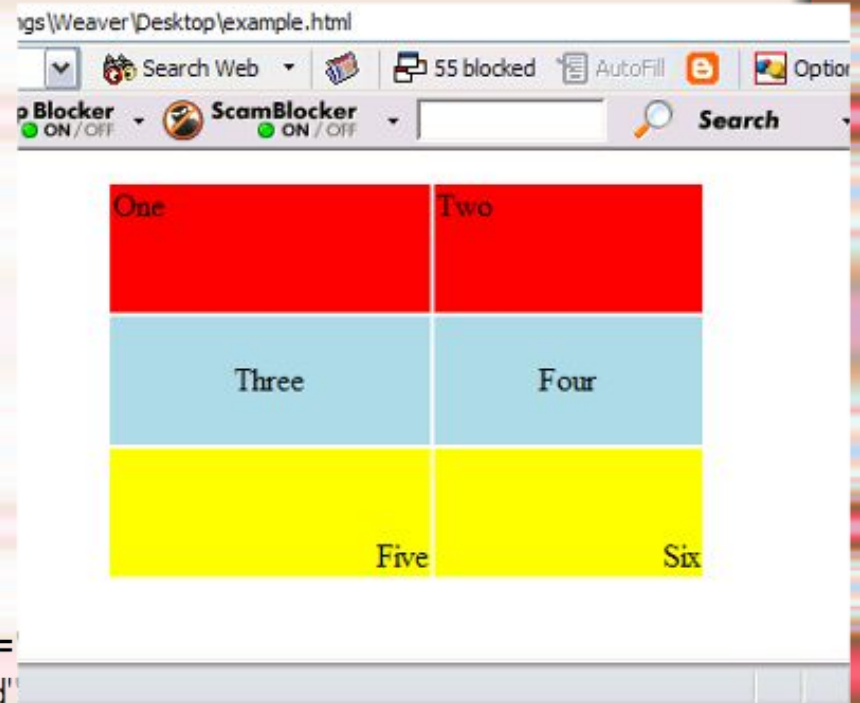| Attribute	Value	Description
align	left center right	Specifies the alignment of a table according to surrounding text
bgcolor	rgb(x,x,x) #xxxxxx colorname	Not supported in HTML5. Deprecated in HTML 4.01. Specifies the background color for a table
border	1	Specifies whether the table cells should have borders or not
cellpadding	pixels	Not supported in HTML5. Specifies the space between the cell wall and the cell content
cellspacing	pixels	Not supported in HTML5. Specifies the space between cells
width	pixels %	Not supported in HTML5. Specifies the width of a table

<TR> Table Row Attributes

Valid for the table row:
ALIGN -- left, center, right
VALIGN -- top, middle, bottom
BGCOLOR -- background color


```
<TABLE ALIGN="center" WIDTH="300" HEIGHT=
<TR ALIGN="left" VALIGN="top" BGCOLOR="red"
<TR ALIGN="center" VALIGN="middle" BGCOLOR="lightblue"><TD>Three</TD><TD>Four</TD>
<TR ALIGN="right" VALIGN="bottom" BGCOLOR="yellow"><TD>Five</TD><TD>Six</TD>
</TABLE>
```

\<TD> Table Cell Attributes

Valid for the table cell:

colspan -- how many columns this cell occupies

rowspan – how many rows this cell occupies

```
<TABLE ALIGN="center" WIDTH="300" HEIGHT="200" border="1">
<TR>
<TD colspan="1" rowspan="2">a</TD>
<TD colspan="1" rowspan="1">b</TD>
</TR>
<TR>
<TD colspan="1" rowspan="1">c</TD>
</TR>
</TABLE>
```

- table { border-collapse: separate; border-spacing: 5px; }

- /* cellspacing="5" */

- <table style="width:100%">
  <caption>heading for table </caption>
  <tr>
    <th></th>
    <th></th>
  </tr>
  <tr>
    <td></td>
    <td></td>
  </tr>
  </table>

HTML <div> & <span> Tag

HTML Block Elements

Block level elements normally start (and end) with a new line

when displayed in a browser.

Examples: <h1>, <p>, <ul>, <table>

HTML Inline Elements

Inline elements are normally displayed without starting a new line.

Examples: <b>, <td>, <a>, <img>

The HTML <div> Element

- ✓ The HTML <div> element is a block level element that can be used as a container for grouping other HTML elements.

- ✓ It is a block level element, the browser will display a line break before and after it.

- ✓ When used together with CSS, the <div> element can be used to set style attributes to large blocks of content.

- ✓ Another common use of the <div> element, is for document layout.

- ✓ The <div> tag is used to group block-elements to format them with CSS.

Example

- `<div style="background-color:black;color:white;padding:20px;">`

- `<h2>PGDAC</h2>`

- `<p>………………………………..</p>`

- `<p>**************</p>`

- `</div>`

HTML <frameset> Tag

✓ The <frameset> tag defines a frameset.

✓ The <frameset> element holds one or more <frame> elements. Each <frame> element can hold a separate document.

✓ The <frameset> element specifies HOW MANY columns or rows there will be in the frameset.

✓ <frameset> tag attributes:

   Rows="20%,80%"

   Cols ="20%,80%"

Example

- ```html
  <html>

  <frameset cols="25%,50%,25%">
    <frame src="frame_a.htm">
    <frame src="frame_b.htm">
    <frame src="frame_c.htm">
    </frameset>

  </html>
  ```

<Frame> tag Attributes

✓ **Name**- refers the name of the frame

✓ **Src**-location of the web page to be loaded

✓ **noresize** - not resizable

✓ **Scrolling** – auto, yes, no

✓ **frameborder** – 1, 0

HTML Iframes

✓ An iframe is used to display a web page within a web page.

Syntax for adding an iframe: <iframe src="*URL*"></iframe>

The URL points to the location of the separate page.

Iframe - Set Height and Width

Example

<iframe src="demo_iframe.htm" width="200" height="200"></iframe>

Iframe - Remove the Border

Example   <iframe src="demo_iframe.htm" frameborder="0"></iframe>

Use iframe as a Target for a Link

Example   <iframe src="demo_iframe.htm" name="iframe_a"></iframe>
            <p>
            W3Schools.com</p>

\<marquee> Tag

✓ \<marquee> tag is used for scrolling piece of text or image displayed either horizontally across or vertically down.

Attribute	Value	Description
bgcolor	rgb(x,x,x) #xxxxxx colorname	Deprecated - Specifies the background color.
direction	Up, down left, right	Defines the direction of scrolling the content.
loop	number	Specifies how many times to loop. The default value is INFINITE, which means that the marquee loops endlessly.
scrolldelay	seconds	Defines how long to delay between each jump.
scrollamount	number	Defines how how far to jump.
width	pixels or %	Defines the width of marquee.

HTML <fieldset> Tag

✓ The <fieldset> tag is used to group related elements in a form.

✓ The <fieldset> tag draws a box around the related elements.

```
<form>
  <fieldset name="personalia" disabled>
    <legend align="center">Personal Info:</legend>
    Name: <input type="text"><br>
    Email: <input type="text"><br>
    Date of birth: <input type="text">
  </fieldset>
</form>
```

HTML <optgroup> Tag

✓ The <optgroup> is used to group related options in a drop-down list.

```
<select>
 <optgroup label="Swedish Cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
 </optgroup>
 <optgroup label="German Cars">
  <option value="mercedes">Mercedes</option>
  <option value="audi">Audi</option>
 </optgroup>
</select>
```

HTML Video Tag

- HTML 5 supports <video> tag also. The HTML video tag is used for streaming video files such as a movie clip, song clip on the web page.

- Currently, there are three video formats supported for HTML video tag:

- mp4

- webM

- ogg

Click to add title

- \<video controls>
  - \<source src="movie.mp4" type="video/mp4">
  - Your browser does not support the html video tag.

- \</video>

Click to add title

- `<video width="320" height="240" controls autoplay loop>`

  - `  <source src="movie.mp4" type="video/mp4">`
- `</video>`

Image uploading

The multiple Attribute

- A file upload field that accepts multiple values:

- Choose files

- <input type="file" name="img" multiple>