



# Web Designing

## Working with Text, Links and Tables in HTML5



Car Skeleton (only body) is **HTML**



Car Painted or Decorated is **CSS**



Car Engine and Internal logic is **JS**

### Outline

- Working with Text, Links and Tables in HTML5
  - Text Formatting with Physical Style Elements
  - Text Formatting with Logical Style Elements
  - Character Entities in HTML5
  - PRE Element
  - DIV Element
  - SPAN Element
  - Tables Element
  - Lists
  - Hyperlinks.

### Text Formatting with Physical Style Elements

- HTML provides a number of tags such as HEAD and BODY to define the structure and appearance of a document.
- By default, the HTML document is stored in the plain text format, it means that it does not contain any type of formatting.
- To format the text in an HTML document, you need to use the various kinds of HTML tags.
- Formatting the text not only enhanced the visual appearance of the content but also improves the readability and comprehensibility.
- The content of a formatted document is presented in an organized manner, which allows readers to easily differentiate between various types of information. For instance, any important piece of information in an HTML document can be enclosed between B or I tags to make it appear in bold or italics respectively.

3

### Text Formatting with Physical Style Elements

- Sometimes, you may need to highlight, mark or emphasize certain important or technical terms to differentiate them from the normal text content. So HTML provides you with the MARK and the EM tag to highlight and emphasize the text content.
- In HTML the formatting tags are divided into two categories:
  - Physical tag: These tags are used to provide the visual appearance to the text.
  - Logical tag: These tags are used to add some logical or semantic value to the text.

4

### Text Formatting with Physical Style Elements

- Physical Tags are used to indicate that how specific characters are to be formatted or indicated using HTML tags.
- Any physical style tag may contain any item allowed in text, including conventional text, images, line breaks, etc.
- Although each physical tag has a defined style, you can override that style by defining your own look for each tag.
- All physical tags require ending tags.
- Syntax: <tag\_name> formatting character or para </tag\_name>
- **Features of Physical Tags:**
  - They are extremely straightforward.
  - They are used to highlighting important sentences.
  - Physical Text Styles indicate the specific type of appearance for a section e.g., bold, italics, etc.
  - Physical Styles are rendered in the same manner by all browsers.

5

### Text Formatting with Physical Style Elements

Element name	Description
<b>	This is a physical tag, which is used to bold the text written between it.
<i>	This is a physical tag which is used to make text italic.
<u>	This tag is used to underline text written between it.
<tt>	This tag is used to appear a text in teletype. (not supported in HTML5)
<sup>	It displays the content slightly above the normal line.
<sub>	It displays the content slightly below the normal line.
<small>	This tag is used to decrease the font size by one unit from base font size.
<big>	This tag is used to increase the font size by one conventional unit.

6

## Text Formatting with Physical Style Elements

- HTML Physical Style Tags Attributes
- The table given below list and describes all attributes of physical style tags available in HTML used to format the text in an HTML document.

Attribute	Description
class	Indicates a class name for a tag
dir	Indicates the directionality of the text, such as left to right or right to left
id	Indicates an unique id for a tag
lang	Indicates the language code for the content in a tag
style	Indicates an inline style for a tag
title	Specifies a title for a tag

7

## Physical Tag Example

```

<!DOCTYPE html>
<html>
  <head>
    <title>Physical Tags</title>
  </head>
  <body>
    <h1> Physical Tags </h1>
    Text without any formatting <br>
    <b> GeeksforGeeks- This is Bold text </b> <br>
    <big> GeeksforGeeks- This is BIG text </big> <br>
    <i> GeeksforGeeks- This is Italic text </i> <br>
    <small> GeeksforGeeks- This is Small text </small> <br>
    1<sup>st </sup> <br>
    H<sub>2</sub>O <br>
    <tt> GeeksforGeeks- This is teletype text </tt> <br>
    <u> GeeksforGeeks- This is underlined text</u> <br>
  </body>
</html>

```

8

### Text Formatting with Logical Style Elements

- In HTML, the logical style tags specify that the enclosed text has a specific meaning, context, or usage. For example, the ABBR tag conveys to the Web browser that the text enclosed inside this tag is an abbreviation. The browser change the appearance of the text depending upon the meaning of the tags.
- The advantage of using the logical style tags rather than the physical style tags is that the meaning related to the tag is more precisely conveyed to the users

9

### Logical Text Formatting Elements

Element name	Description
<abbr>	Defines an abbreviation
<strong>	This tag tells the browser that the text is important.
<address>	Defines an address element.
<em>	This tag is used to display content in italic.
<mark>	This tag is used to highlight text.
<del>	This tag is used to display the deleted content.
<ins>	This tag displays the content which is added
<code>	Defines computer code text
<blockquote>	Defines a long quotation
<pre>	Defines preformatted text
<q>	Defines short quotation
VAR	Represent a variable
BDO	Changes the direction of text
SAMP	Displays the sample program output on the Web page
KBD	Refers to the keyboard keys
DEL	Displays new terms on the Web page

### Text Formatting with Logical Style Elements

- HTML Logical Style Tags Attributes
- The following table list and describes all attributes used with the logical style tags to format the text in an HTML document:

Attribute	Description
class	Indicates a class name for a tag
dir	Indicates the directionality of text, such as left-to-right or right-to-left
id	Indicates a unique id for a tag
lang	Indicates a language code for the content in a tag
style	Indicates an inline style for the tag
title	Indicates the title for a tag

11

### Text Formatting with Logical Style Elements

- In addition to the above attributes, there are some other attributes, such as cite and datetime, which can only be used with the INS and DEL tags.
- The INS and DEL tags are used to display the insertion of content by underlining and deletion of content by striking through it in an HTML document.
- The cite attribute is used to indicate the reason for insertion and deletion.
- The value of the cite attribute is a Universal Resource Locator (URL), which points to some other document that describes the inserted or deleted text
- The datetime attributed is used to indicate the time of insertion or deletion. This attribute takes a single value, which is an encoded date and time stamp.
- The format of the datetime attribute value must be YYYY-MM-DDThh:mm:ssTZD

12

### Text Formatting with Logical Style Elements

- Components of the datetime Value Attribute :

Components	Description
YYYY	Indicates the year, such as 1996 or 2010
MM	Indicates the month, such as 05 for May
DD	Indicates the date, such as 01 to 31
T	Specifies that the next section displays the time
hh	Indicates the hour in a 24-hour format
mm	Indicates the minutes in an hour
ss	Indicates the seconds, 00 to 59
TZD	Indicates the Time-Zone Designator (TZD)

13

### Text Formatting with Logical Style Elements

- The HTML MARK tag is used to mark or highlight the text in an HTML document.
  - **Note** - By default, the MARK tag displays the text with yellow background color
  - HTML MARK Tag Attributes :

Attribute	Description
class	Indicates a class name for the MARK tag
id	Indicates a unique id for the MARK tag
style	Indicates an inline style for the MARK tag
title	Indicates a title for the MARK tag

14

### Text Formatting with Logical Style Elements

- The HTML STRONG tag is used to emphasize the important text with bold. This tag increases the font weight of the text and makes the text appears as bold. So that to help us to recognize the important text in the HTML document
- The HTML CODE tag is used to represent the computer code in an HTML document. So if you want to display some article on the Web page, which contains some text and code of a program, then you can write the program code within the CODE tag so that the reader of the article can differentiate between the normal text and the code.
- The HTML SMALL tag is used to display the text as a side comment or in small print. The small prints include the disclaimers, legal restrictions, and copyrights.

15

### Logical Tag Example

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
```

```
<h1> Logical Tags </h1>
```

```
Welcome to <abbr title="GeeksforGeeks"> GFG</abbr> <br>
```

```
This is <acronym title="GeeksforGeeks">GFG</acronym>
<br>
```

```
<address> GeeksforGeeks, 5th & 6th Floor, Royal Kapsons,
A- 118, Sector- 136, Noida,
Uttar Pradesh (201305) </address> <br>
```

16



### Logical Tag Example

`<cite>` GeeksforGeeks `</cite>` is my favourite website. `<br>`

`<code>` Sample code: system.out.println(); `</code>`

`<blockquote cite="https://www.geeksforgeeks.org/">`  
 A Computer Science portal for geeks. It contains well written,  
 well thought and well  
 explained computer science and programming articles, and  
 quizzes.  
`</blockquote>`

`<del>` This contains deleted content.`</del>`

`<ins>` Newly inserted content.`</ins>`

17

### Logical Tag Example

`<p>`  
`<dfn>` GeeksforGeeks `</dfn>` is a Computer Science portal  
 for geeks. It contains well  
 written, well thought and well explained computer science  
 and programming articles,  
 and quizzes.  
`</p>`

`<kbd>` GeeksforGeeks - This is a Keyboard input `</kbd>`

`<pre>` Dear User,

Congratulations !!

18

### Logical Tag Example

We are delighted to inform you that you are going to be part of GfG journey.

Thanks,  
GfG Team

This is a predefined formatted text </pre>

</body>  
</html>

19

### Formatting Text Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Formatting Text in HTML</title>
</head>
<body>
  <p>This is <b>bold text</b>.</p>
  <p>This is <strong>strongly important text</strong>.</p>
  <p>This is <i>italic text</i>.</p>
  <p>This is <em>emphasized text</em>.</p>
  <p>This is <mark>highlighted text</mark>.</p>
  <p>This is <code>computer code</code>.</p>
  <p>This is <small>smaller text</small>.</p>
  <p>This is <sub>subscript</sub> and <sup>superscript</sup> text.</p>
  <p>This is <del>deleted text</del>.</p>
  <p>This is <ins>inserted text</ins>.</p><p>This is <b>bold text</b>.</p>
</body>
</html>
```

20

### HTML Quotation Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML quotations</title>
</head>
<body>
  <blockquote>
    <p>This is an example of a long quotation.</p>
  </blockquote>
  <p>This is an example of <q>short inline</q> quotation.</p>
</body>
</html>
```

21

### HTML abbreviations Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML abbreviations</title>
</head>
<body>
  <p>The <abbr title="Hyper Text Markup Language">HTML</abbr> is the
publishing language of the World Wide Web.</p>
  <p>The <acronym title="Hyper Text Markup Language">HTML</acronym> is
the publishing language of the World Wide Web.</p>
  <p><strong>Warning:</strong> The &lt;acronym> tag has been removed in
HTML5 and shouldn't be used anymore. Use the &lt;abbr> tag instead.</p>
</body>
</html>
```

22

### HTML Delete and Insert Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML deleted and inserted text</title>
</head>
<body>
  <h1>To Do</h1>
  <ul>
    <li>Buy some cookies</li>
    <li><ins>Do some cleaning</ins></li>
    <li><del>Relaxation time</del></li>
    <li><ins>Visit a doctor</ins></li>
  </ul>
</body>
</html>
```

23

### HTML bdo Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML bdo tag</title>
</head>
<body>
  <p>The sequence "1-2-3-4-5" was reversed as: <bdo dir="rtl">1-2-3-4-5</bdo></p>
</body>
</html>
```

24

### HTML address Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML address tag (check)</title>
</head>
<body>
  <address>
    Written by <a href="mailto:webmaster@example.com">Jon Doe</a>.<br>
    Contact us at:<br>
    Post Box 210, Hollywood<br>
    USA
  </address>
</body>
</html>
```

25

### HTML comment Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML comments</title>
</head>
<body>
  <!-- this is an HTML comment -->
  <!-- Comments are not displayed,
       by the browser -->
  <h1>This is a heading</h1>
  <p>This is a paragraph.</p>
</body>
</html>
```

26

### HTML hr Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML hr tag</title>
</head>
<body>
  <p>This is the first paragraph of text.</p>
  <hr>
  <p>This is second paragraph of text.</p>
</body>
</html>
```

27

### HTML computer output Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML computer output tags</title>
</head>
<body>
  <p><code>Computer code</code></p>
  <p><kbd>Keyboard input</kbd></p>
  <p><samp>Sample text</samp></p>
  <p><var>Computer variable</var></p>
  <p><strong>Note:</strong> These tags are often used to represents a fragment of
computer code.</p>
</body>
</html>
```

28

### HTML Character Entities

- Sometimes, we need to include some special character, such > and < in the content of an HTML element. These characters are called as entities.
- So, HTML enables us to include such symbols in the content of an element by using the various character entities.
- World Wide Web Consortium (W3C) calls the character entities as character encodings.
- There are some character, such as Greek and Chinese, which do not appear on the keyboard of the user. Therefore, you cannot write them directly from the keyboard.
- However, you can overcome form this problem by using the character entities in an HTML document. The character entity is composed of the following parts in the sequential manner :
  - Ampersand symbol (&)
  - Name of the entity
  - A terminating semicolon

29

### HTML Character Entities

- A character entity looks like this:  
     &entity\_name;  
     OR  
     &#entity\_number;
- To display a less than sign (<) we must write: &lt; or &#60;
- Advantage of using an entity name: An entity name is easy to remember.
- Disadvantage of using an entity name: Browsers may not support all entity names, but the support for entity numbers is good.
- Note: Entity names are case sensitive.

30

### HTML Character Entities

Result	Description	Entity Name	Entity Number
	non-breaking space	&nbsp;	&#160;
<	less than	&lt;	&#60;
>	greater than	&gt;	&#62;
&	ampersand	&amp;	&#38;
"	double quotation mark	&quot;	&#34;
'	single quotation mark (apostrophe)	&apos;	&#39;
¢	cent	&cent;	&#162;
£	pound	&pound;	&#163;
¥	yen	&yen;	&#165;
€	euro	&euro;	&#8364;
©	copyright	&copy;	&#169;
®	registered trademark	&reg;	&#174;

### HTML Character Entities Example

```

<!DOCTYPE html>
<html>
<body>
  <h1>HTML Entity Example</h1>
  <h2>The less-than sign: &lt; and &gt; are used</h2>
</body>
</html>

```



### HTML Organizing Text

- In a Web page, the content is organized into the different formats, such as layers, paragraphs, lines, tables, and divisions.
- Organizing text refers to the proper placement of all the HTML tags and their content in a Web page.
- By default, a Web browser wraps text in a Web page and displays the enclosed text in a single block by avoiding the line and paragraph breaks.
- Now, if the content of a page is not separated by any line or paragraph breaks, it becomes very tedious for the readers to understand the given information.
- HTML provides a number of tags to arrange text into paragraphs, list and tables.
- For instance, you can display the text on the Web page as paragraphs by using the P tag, or display a horizontal line in a Web page representing a break in the text.
- HTML also allows you to change to format of a specific text using the SPAN tag.

33

### HTML Organizing Text

- HTML allows you to arrange the text into different formats and styles, such as paragraphs, layers, and tables.
- By default, the Web browser displays all the text of an HTML page as a single paragraph.
- You can format this text in different ways by using the various tags. For example, the P tag is used to arrange the text in multiple paragraphs and the BR tag allows you to continue text from the next line.
- The following tasks are involved in arranging the text of a Web page :
  - Allowing word breaks
  - Defining the preformatted text
  - Defining the DIV tag
  - Defining the Span tag
  - Formatting the text in tables
  - Defining the Ruby (captioned) text

34

### HTML Organizing Text (WBR)

- Allowing Word Breaks : HTML provides the WBR tag to insert word breaks between the words or paragraphs in an HTML document.
- However, if a break is required between the words, then you can use the WBR tag.
- The WBR tag does not force the Web browser to break the line; whereas, the BR tag break the line irrespective of the space available in the Web page.

35

### HTML Organizing Text (WBR) Example

```
<!DOCTYPE html>
<html>
  <body>
    <h1>GeeksforGeeks</h1>
    <h2><wbr> Tag</h2>
    <!-- It is mostly used when the used word is too
long and
                                there are chances that the browser may break
lines at
                                the wrong place -->
    <p>GFGstandsforGeeksforGeeksanditis<wbr>acomputersciencepo
rtalforgeeks.</p>
  </body>
</html>
```

36

## HTML Organizing Text (PRE)

- In HTML, the preformatted tag, PRE, instructs the browser that the enclosed text is a formatted text and should not be formatted again. The `<pre>` tag in HTML is used to define the block of preformatted text which preserves the text spaces, line breaks, tabs, and other formatting characters which are ignored by web browsers. Text in the `<pre>` element is displayed in a fixed-width font, but it can be changed using CSS.
- Syntax: `<pre> Contents... </pre>`
- HTML PRE Tag Attributes are :

Attribute	Description
class	Indicates the class name for the PRE tag
dir	Indicates the direction of the enclosed text
id	Indicates an unique id for tag
lang	Indicates the base language used for the tag
style	Indicates an inline style for the tag
title	Indicates an extra information about the tag

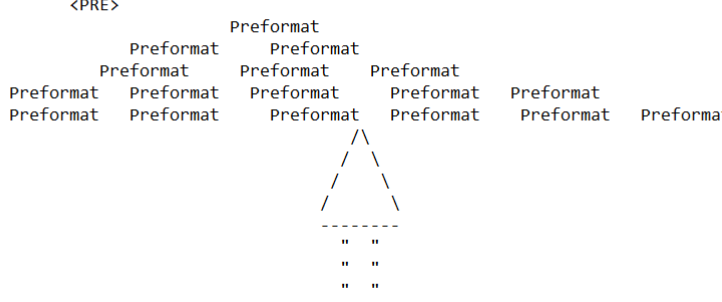
37

## HTML Organizing Text (PRE) Example

```

<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Preformat</TITLE>
  </HEAD>
  <BODY>
    <PRE>
      Preformat
        Preformat
          Preformat
            Preformat
              Preformat
                Preformat
                  Preformat
                    Preformat
                      Preformat
                        Preformat
                          Preformat
                            Preformat
                              Preformat
                                Preformat
                                  Preformat
                                Preformat
                              Preformat
                            Preformat
                          Preformat
                        Preformat
                      Preformat
                    Preformat
                  Preformat
                Preformat
              Preformat
            Preformat
          Preformat
        Preformat
      Preformat
    </PRE>
  </BODY>
</HTML>

```



38

## HTML Organizing Text (DIV)

- In HTML, the division (DIV) tag is used to divide the Web page into different divisions or sections.
- The DIV tag basically works as a container for the other HTML tags.
- Using the DIV tag, you can group the HTML tags in sections and apply Cascading Style Sheet (CSS) on them.
- The DIV tag is a block level tag and cannot be used inside the P tag. The P tag is only used for creating the paragraphs while the DIV tag is used to divide the Web page into different sections.

Attribute	Description
class	Defines the class name for a tag
dir	Defines the text direction for the content in a tag
id	Defines an unique id for a tag
lang	Defines the language code for the content in a tag
style	Defines an inline style for a tag
title	Defines an extra information about a tag

## HTML Organizing Text (DIV) Example

```

<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>DIV</TITLE>
  </HEAD>
  <BODY>
    <DIV style="background-color: red; text-align:
center">
      <P><B>HOME</B></P>
    </DIV>
    <DIV style="border: 2px solid black">
      <P><B>Navigation section</B></P>
    </DIV>
  </BODY>
</HTML>

```

## HTML Organizing Text (SPAN)

- The SPAN tag is used to change to style of the text enclosed within the tag using the style attribute.
- The SPAN tag provides the additional formatting capabilities to the HTML tags and is used with the style sheets to set presentational attributes that define the style of the content.
- Syntax: `<span class="">Some Text</span>`

Attribute	Description
class	Defines the class name for a tag
dir	Defines the text direction for the content in a tag
id	Defines an unique id for a tag
lang	Defines the language code for the content in a tag
style	Defines an inline style for a tag
title	Defines an extra information about a tag

41

## HTML Organizing Text (SPAN) Example

```

<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Span</TITLE>
  </HEAD>
  <BODY>
    <H1>
      Use <SPAN style="color: orange"> the SPAN
element</SPAN> for formatting
      <SPAN style="color: blue">Inline content</SPAN>
    </H1>
  </BODY>
</HTML>

```

42

## HTML Tables

- HTML provides the TABLE tag for arranging the text in a tabular format, i.e. in rows and columns.
- Syntax : <table>  
...the table elements and the data  
</table>
- The elements of table are : CAPTION, COLGROUP, COL, TBODY, THEAD, TFOOT, TR, TD, TH
- The TABLE tag is used along with the TH, TR, and TD tags.
- The TH tag is used to define the header of a table column.
- The TR tag is used to specify the content of the table rows.
- The TD tag is used to specify the content of a table cell. The elements under <td> are regular and left aligned by default


## HTML Tables

- You can set the width and the height of the table columns and rows using the style attribute in the TABLE tag.
- Using the style attribute, you can also define the borders for the table, font style for the table content, and the font size for the table.
- You can also specify the table caption, which indicates the content of the table, by using the CAPTION tag
  - The <caption> tag must be inserted immediately after the <table> tag. By default, a table caption will be center-aligned above a table.

### HTML Tables

- The <colgroup> tag specifies a group of one or more columns in a table for formatting.
  - The <colgroup> tag is useful for applying styles to entire columns, instead of repeating the styles for each cell, for each row.
  - Note: The <colgroup> tag must be a child of a <table> element, after any <caption> elements and before any <thead>, <tbody>, <tfoot>, and <tr> elements.
- The <col> tag specifies column properties for each column within a <colgroup> element.
  - The <col> tag is useful for applying styles to entire columns, instead of repeating the styles for each cell, for each row.

45

### HTML Tables

- The <thead> tag is used to group header content in an HTML table.
  - The <thead> element is used in conjunction with the <tbody> and <tfoot> elements to specify each part of a table (header, body, footer).
  - Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page.
  - Note: The <thead> element must have one or more <tr> tags inside.
  - The <thead> tag must be used in the following context: As a child of a <table> element, after any <caption> and <colgroup> elements, and before any <tbody>, <tfoot>, and <tr> elements.

46

## HTML Tables

- The <tfoot> tag is used to group footer content in an HTML table.
  - The <tfoot> element is used in conjunction with the <thead> and <tbody> elements to specify each part of a table (footer, header, body).
  - Note: The <tfoot> element must have one or more <tr> tags inside.
- The <tbody> tag is used to group the body content in an HTML table.
  - The <tbody> element is used in conjunction with the <thead> and <tfoot> elements to specify each part of a table (body, header, footer).
- Tip: The <thead>, <tbody>, and <tfoot> elements will not affect the layout of the table by default.

47

## HTML Tables

- What does colspan= do? Allows a single table cell to span the width of more than one cell or column.
- What does rowspan= do? Allows a single table cell to span the height of more than one cell or row.
- Why use colspan= or rowspan=?
  - Sometimes it makes sense for a cell to span multiple columns or multiple rows. This might be used for a header cell that titles a group of columns, or a side-bar that groups rows of entries.
- Both colspan= and rowspan= are attributes of the two table-cell elements, <th> and <td>. They provide the same functionality as “merge cell” in spreadsheet programs like Excel.
- The rowspan attribute specifies the number of rows a cell should span (vertical). **<th rowspan="number">**
- The colspan attribute defines the number of columns a cell should span (horizontal). **<td colspan="number">**

48



### Creating a Table Example

```

<!DOCTYPE html>
<html>
<head>
  <title>Creating Tables in HTML</title>
</head>
<body>
  <h2>HTML Table (Default Style)</h2>
  <table>
    <tr>
      <th>No.</th>
      <th>Name</th>
      <th>Age</th>
    </tr>
    <tr>
      <td>1</td>
      <td>Peter Parker</td>
      <td>16</td>
    </tr>
    <tr>
      <td>2</td>
      <td>Clark Kent</td>
      <td>34</td>
    </tr>
    <tr>
      <td>3</td>
      <td>Harry Potter</td>
      <td>11</td>
    </tr>
  </table>
</body>
</html>

```

49

### Setting Table Dimension Example

```

<!DOCTYPE html>
<html>
<head>
  <title>Example of setting HTML table dimensions</title>
</head>
<body>
  <table border="1" width="400" height="100">
    <tr>
      <td>row 1, cell 1</td>
      <td>row 1, cell 2</td>
    </tr>
    <tr>
      <td>row 2, cell 1</td>
      <td>row 2, cell 2</td>
    </tr>
  </table>
  <p><strong>Note:</strong> The CSS <code><a href="#">width</a></code>
  and <code><a href="#">height</a></code> property is the better way to set
  dimensions of a table.</p>
</body>
</html>

```

50

### HTML Caption Example

```

<!DOCTYPE html>
<html>
<head>
<title>Example of HTML caption Tag</title>
<style type="text/css">
    table, td, th {
        border: 1px solid gray;
    }
</style>
</head>
<body>
    <table>
        <caption>User Details</caption>
        <thead>
            <tr>
                <th>No.</th>
                <th>Name</th>
                <th>Email</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>1</td>
                <td>John Carter</td>
                <td>johncarter@mail.com</td>
            </tr>
            <tr>
                <td>2</td>
                <td>Peter Parker</td>
                <td>peterparker@mail.com</td>
            </tr>
            <tr>
                <td>3</td>
                <td>John Rambo</td>
                <td>johnrambo@mail.com</td>
            </tr>
        </tbody>
    </table>
</body>
</html>

```

51

### Default Border Example

```

<!DOCTYPE html>
<html>
<head>
<title>Example of HTML tables default border</title>
</head>
<body>
    <table border="1">
        <tr>
            <td>row 1, cell 1</td>
            <td>row 1, cell 2</td>
        </tr>
        <tr>
            <td>row 2, cell 1</td>
            <td>row 2, cell 2</td>
        </tr>
    </table>
    <p><strong>Note:</strong> The CSS <code><a href="#">border</a></code> property is the better way to set borders for tables.</p>
</body>
</html>

```

52

### Cell Padding in Table Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML table cellpadding</title>
</head>
<body>
  <table border="1" cellpadding="10">
    <caption>User Information</caption>
    <tr>
      <th>Name</th>
      <th>Email</th>
    </tr>
    <tr>
      <td>John</td>
      <td>john@mail.com</td>
    </tr>
  </table>
  <p><strong>Note:</strong> The CSS <code><a href="#"
target="_top">padding</a></code> property is the better way to control
padding of table cells.</p>
</body>
</html>
```

53

### Cell spacing in Table Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML table cellspacing</title>
</head>
<body>
  <table border="1" cellspacing="10">
    <caption>User Information</caption>
    <tr>
      <th>Name</th>
      <th>Email</th>
    </tr>
    <tr>
      <td>John</td>
      <td>john@mail.com</td>
    </tr>
  </table>
  <p><strong>Note:</strong> The CSS <code><a href="#"
target="_top">margin</a></code> property is the better way to control spacing between
table cells.</p>
</body>
</html>
```

54

### Colspan and Rowspan in Table Example

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Example of HTML Table Rowspan and Colspan</title>
</head>
<body>
  <h2>Example of Table Rowspan</h2>
  <table border="1" cellpadding="10">
    <tr>
      <th rowspan="4">Users Info</th>
    </tr>
    <tr>
      <td>1</td>
      <td>John Carter</td>
      <td>johncarter@mail.com</td>
    </tr>
    <tr>
      <td>2</td>
      <td>Peter Parker</td>
      <td>peterparker@mail.com</td>
    </tr>
```

55

### Colspan and Rowspan in Table Example

```
<tr>
  <td>3</td>
  <td>John Rambo</td>
  <td>johnrambo@mail.com</td>
</tr>
</table>
<h2>Example of Table Colspan</h2>
<table border="1" cellpadding="10">
  <tr>
    <th colspan="3">Users Info</th>
  </tr>
  <tr>
    <td>1</td>
    <td>John Carter</td>
    <td>johncarter@mail.com</td>
  </tr>
  <tr>
    <td>2</td>
    <td>Peter Parker</td>
    <td>peterparker@mail.com</td>
  </tr>
```

56

### Colspan and Rowspan in Table Example

```

<tr>
  <td>3</td>
  <td>John Rambo</td>
  <td>johnrambo@mail.com</td>
</tr>
</table>
</body>
</html>

```

57

### Table Column Groups Example

```

<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML table column groups</title>
</head>
<body>
  <table border="1" cellpadding="10">
    <colgroup>
      <col style="background: #bed65a;">
      <col style="background: #f8d97f;">
    </colgroup>
    <tr>
      <td>row 1, cell 1</td>
      <td>row 1, cell 2</td>
    </tr>
    <tr>
      <td>row 2, cell 1</td>
      <td>row 2, cell 2</td>
    </tr>
  </table>
</body>
</html>

```

58

### Table with image Example

```

<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Using Images in a Table</TITLE>
  </HEAD>
  <BODY>
    <H2>Using Images in a Table</H2>
    <TABLE>
      <TR>
        <TH>Tic</TH>
        <TH>Tac</TH>
        <TH>Toe</TH>
      </TR>
      <TR>
        <TD><IMG src="x.jpg"/></TD>
        <TD><IMG src="o.jpg"/></TD>
        <TD><IMG src="x.jpg"/></TD>
      </TR>
      <TR>
        <TD><IMG src="o.jpg"/></TD>
        <TD><IMG src="x.jpg"/></TD>
        <TD><IMG src="o.jpg"/></TD>
      </TR>
    </TABLE>
  </BODY>
</HTML>

```

59

### HTML List

- HTML allows you to display the information in the form of lists.
- The information in these lists may be presented in an ordered and sequential manner or in an unordered and random manner.
- Three basic forms of lists:
  - Ordered lists (<ol>)
  - Unordered lists (<ul>)
  - Definition lists (<dl>)
- Here are the list of tags used in displaying the list in an HTML document:

Tag	Description
OL	used to display the list of information in an ordered of sequence
UL	used to display the information in an unordered list
LI	defines a list item
DL	allows you to include the description of the items in the UL or OL lists
DT	defines the term in a description list
DD	defines the description in a description list

## HTML List

### Ordered List

- |            |            |            |              |              |
|------------|------------|------------|--------------|--------------|
| 1. Block-A | a) Block-A | A. Block-A | i. Block-A   | I. Block-A   |
| 2. Block-B | b) Block-B | B. Block-B | ii. Block-B  | II. Block-B  |
| 3. Block-C | c) Block-C | C. Block-C | iii. Block-C | III. Block-C |
| 4. Block-D | d) Block-D | D. Block-D | iv. Block-D  | IV. Block-D  |

### Unordered List

- |           |           |           |
|-----------|-----------|-----------|
| • Block-A | ○ Block-A | ▪ Block-A |
| • Block-B | ○ Block-B | ▪ Block-B |
| • Block-C | ○ Block-C | ▪ Block-C |
| • Block-D | ○ Block-D | ▪ Block-D |

61

## HTML List

## Definition List

### Example of HTML definition List

#### Web

The part of the Internet that contains websites and web pages

#### HTML

A markup language for creating web pages

#### CSS

A technology to make HTML look better

62

## HTML List

- An ordered list, as enclosed by `<ol>` and `</ol>`, defines a list in which order matters. Ordering typically is rendered by a numbering scheme, using Arabic numbers, letters, or Roman numerals.
- An unordered list, signified by `<ul>` and `</ul>`, is used for lists of items in which the ordering is not specific. A browser typically adds a bullet
- A definition list is a list of terms paired with associated definitions—in other words, a glossary.
- Definition lists are enclosed within `<dl>` and `</dl>`.
  - Each term being defined is indicated by a `<dt>` element, which is derived from “definition term.”
  - Each definition itself is defined by `<dd>`.
    - `<dl>` – Defines the start of the list
    - `<dt>` – A term
    - `<dd>` – Term definition
    - `</dl>` – Defines the end of the list

63

## HTML Ordered List

- Ordered lists are a list of numbered items.
- To create an ordered list, type:
 

```
<OL>
  <LI> This is step one.
  <LI> This is step two.
  <LI> This is step three.
</OL>
```

**1. This is step one.**  
**2. This is step two.**  
**3. This is step three.**
- A type attribute can be added to an ordered list, to define the type of the marker. The table given here list and describes the list of marker types used in ordered list.

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



## HTML Ordered List

```

<ol>
  <li> Item one </li>
  <li> Item two </li>
  <ol type="I" >
    <li> Sublist item one </li>
    <li> Sublist item two </li>
    <ol type="i">
      <li> Sub-sub list item one </li>
      <li> Sub-sub list item two </li>
    </ol>
  </ol>
</ol>

```

**Types:**

- Type = 1 (default)
- Type = a
- Type = A
- Type = I
- Type = i

**Output**

```

1. Item one
2. Item two
   I. Sublist item one
   II. Sublist item two
      i. Sub-sub list item one
      ii. Sub-sub list item two

```

65

## HTML Ordered List

- Start : The <ol> element also has a start attribute that takes a numeric value to begin the list numbering.
  - Whether the type attribute is a letter or a numeral, the start value must be a number. To start ordering from the letter j, you would use <ol type="a" start="10"> because j is the tenth letter.

```

<ol type = "1" start = "4">    - Numerals starts with 4.
<ol type = "I" start = "4">    - Numerals starts with IV.
<ol type = "i" start = "4">    - Numerals starts with iv.
<ol type = "a" start = "4">    - Letters starts with d.
<ol type = "A" start = "4">    - Letters starts with D.

```

66

## Ordered and nested ordered List Example

```

<!DOCTYPE html>
<html>
<head>
  <title>HTML Ordered List</title>
</head>
<body>
  <h2>HTML Ordered List</h2>
  <ol>
    <li>Fasten your seatbelt</li>
    <li>Starts the car's engine</li>
    <li>Look around and go</li>
  </ol>
  <hr>
  <h2>HTML Nested Ordered List</h2>
  <ol>
    <li>Fasten your seatbelt</li>
    <li>Starts the car's engine</li>
    <li>Look around and go
      <ol>
        <li>Check the blind spot</li>
        <li>Check surrounding for safety</li>
      </ol>
    </li>
  </ol>
</body>
</html>

```

67

## Ordered List Example

```

<html>
<head>
  <title>Ordered list</title>
</head>
<body> Ordered list
<ol>
  <li>Car</li>
  <li>Bicycle</li>
  <li>Aeroplane</li>
  <li>Bus</li>
</ol>
<ol type="a">
  <li>Car</li>
  <li>Bicycle</li>
  <li>Aeroplane</li>
  <li>Bus</li>
</ol>
<ol type="A">
  <li>Car</li>
  <li>Bicycle</li>
  <li>Aeroplane</li>
  <li>Bus</li>
</ol>
<ol type="i">
  <li>Car</li>
  <li>Bicycle</li>
  <li>Aeroplane</li>
  <li>Bus</li>
</ol>
<ol type="I">
  <li>Car</li>
  <li>Bicycle</li>
  <li>Aeroplane</li>
  <li>Bus</li>
</ol>
<ol start="6">
  <li>Car</li>
  <li>Bicycle</li>
  <li>Aeroplane</li>
  <li>Bus</li>
</ol>
</body>
</html>

```

3

### HTML Ordered List

- The reversed attribute, when used on the <ol> element, allows a list to appear in reverse order. An ordered list of five items numbered 1 to 5 may be reversed and ordered from 5 to 1.
  - The reversed attribute is a Boolean attribute, and as such it doesn't accept any value. It is either true or false. False is the default value; the value becomes true when the attribute name reversed appears on the <ol> element.

```
<ol reversed>
<li>Head north on N Halsted St</li>
<li>Turn right on W Diversey Pkwy</li>
<li>Turn left on N Orchard St</li>
</ol>
```

69

### HTML Ordered List

- The value attribute may be used on an individual <li> element within an ordered list to change its value within the list. The number of any list item appearing below a list item with a value attribute will be recalculated accordingly.
  - As an example, if the second list item has a value attribute value of 9, the number on that list item marker will appear as if it is the ninth item. All subsequent list items will be numbered upwards from 9.

```
<ol>
<li>Head north on N Halsted St</li>
<li value="9">Turn right on W Diversey Pkwy</li>
<li>Turn left on N Orchard St</li>
</ol>
```

70

## HTML Unordered List

- An unordered list is a list of bulleted items.
- To create an unordered list, type:
 

```
<UL>
  <LI> First item in list
  <LI> Second item in list
  <LI> Third item in list
</UL>
```

- First item in list
  - Second item in list
  - Third item in list
- A style attribute can be added to an unordered list, to define the style of the marker. EX: `<ul style="list-style-type:disc">`
- The table given below list and describes attributes of the HTML unordered list style type.

Style	Description
list-style-type:circle	The list items will be marked with circles
list-style-type:disc	The list items will be marked with bullets (default)
list-style-type:square	The list items will be marked with squares
list-style-type:none	The list items will not be marked

## HTML Unordered List

```
<ul>
  <li> One </li>
  <li> Two </li>
  <ul type="circle">
    <li> Three </li>
    <li> Four </li>
    <ul type="square">
      <li> Five </li>
      <li> Six </li>
    </ul>
  </ul>
</ul>
```

**Types:**

Type = disc (default)

Type = circle

Type = square

**Output**

- One
- Two
  - Three
  - Four
    - Five
    - Six

### Unordered List Example

```

<!DOCTYPE html>
<html>
<head>
  <title>HTML Unordered List</title>
</head>
<body>
  <h2>HTML Unordered List</h2>
  <ul>
    <li>Chocolate Cake</li>
    <li>Black Forest Cake</li>
    <li>Pineapple Cake</li>
  </ul>
  <hr>
  <h2>HTML Nested Unordered List</h2>
  <ul>
    <li>Chocolate Cake
      <ul>
        <li>Chocolate Velvet Cake</li>
        <li>Chocolate Lava Cake</li>
      </ul>
    </li>
  </ul>
  <ul>
    <li>Black Forest Cake</li>
    <li>Pineapple Cake</li>
  </ul>

```

73

### Definition List Example

```

<!DOCTYPE html>
<html>
<head>
  <title>HTML Description or Definition List</title>
</head>
<body>
  <h2>HTML Definition List</h2>
  <dl>
    <dt>Bread</dt>
    <dd>A baked food made of flour.</dd>
    <dt>Coffee</dt>
    <dd>A drink made from roasted coffee beans.</dd>
  </dl>
</body>
</html>

```

74

### Nested List Single-level Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML nested list</title>
</head>
<body>
  <h1>HTML Nested List</h1>
  <ul>
    <li>Item 1</li>
    <li>Item 2
      <ul>
        <li>Item 2.1</li>
        <li>Item 2.2</li>
        <li>Item 2.3</li>
      </ul>
    </li>
    <li>Item 3</li>
  </ul>
</body>
</html>
```

75

### Nested List Multi-level Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Example of HTML nested list</title>
</head>
<body>
  <h1>HTML Nested List</h1>
  <ul>
    <li>Item 1</li>
    <li>Item 2
      <ul>
        <li>Item 2.1</li>
        <li>Item 2.2</li>
        <li>Item 2.3</li>
      </ul>
    </li>
    <li>Item 3
      <ul>
        <li>Item 3.1</li>
        <li>Item 3.2
          <ul>
            <li>Item 3.2.1</li>
            <li>Item 3.2.2</li>
            <li>Item 3.2.3</li>
          </ul>
        </li>
        <li>Item 3.3</li>
      </ul>
    </li>
  </ul>
</body>
</html>
```

76

### HTML Ruby (Captioned) Text

- You can define the caption for your text using the RUBY tag in you Web page.
- This tag is used to specify ruby annotations that provide reading or pronunciation guide of a particular language, such as Chinese and Japanese.
- A ruby is a part of an annotation pair in which a piece of text (known as ruby text) is associated with another set of text (known as ruby base).
- Ruby annotations are frequently used in many Asian countries, such as Japan and China to provide the pronunciation guide in various kinds of publications, including school books and magazines.
- The RUBY tag contains the following tags :
  - RP - Contains parenthesis
  - RT - Acts as the container for the ruby text

77

### HTML Ruby (Captioned) Text

- These tags are used to provide a structural association between the ruby text and ruby base.
- Structural association refers to various ways in which the ruby text and ruby base can be connected with each other.
- In the RUBY tag, the text appearing before the RT tag is called the base text. Whereas the text appearing after the RT tag is called the notation.

Ruby Tag Attribute	Description
class	Indicates the class name for the RUBY tag
cols	Indicates the number of columns used in the table
dir	Indicates the direction of the enclosed text
id	Indicates an unique id for a tag
lang	Indicates the base language used for a tag
language	Indicates the scripting language used for a tag
style	Indicates an inline style for a tag
title	Indicates the title of a tag
name	Indicates the name of a tag

### HTML Ruby (Captioned) Text Example

```
<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Ruby Text</TITLE>
  </HEAD>
  <BODY>
    We are talking about the RUBY element of
    <RUBY><B>HTML</B><RT><B><SMALL>Hyper
Text Markup Language</SMALL></B></RT></RUBY>
  </BODY>
</HTML>
```

79

### Hyperlink

- In HTML, hypertext refers to a point of references for detailed text on the same or different Web pages.
- Generally, a hyperlink is an underlined word or phrase or can also be an image or icon that contains a specific address of a Web page.
- The address is provided in the hyperlink in the form of the Uniform Resource Locator (URL), which is a unique address allotted to every Web page. With the help of URL, you can navigate to the specific Web page.
- Hyperlinks also allows you to access the main system of you computer.
- For instance, most of the websites provide an e-mail address to users to contact website administrator or to send any query, suggestions, and comments regarding the respective website.
- This e-mail address is provided on a Web page in the form of hyperlink.

80



## Hyperlink

- When a user selects that hyperlink, a new mail message window automatically appears on the screen, in which the user can write the query or suggestion in that window and sent it to that e-mail address.
- You can also access various news groups or blogs over the Internet with the help of hyperlinks by providing the URL of a news group and blog.
- A hyperlink interconnects the current Web page with the other Web pages available on the Internet. In HTML, you can create a hyperlink by using the anchor element (A).
- The hyperlink redirects the user to the another HTML page, image, or file.
- The A element uses the href attribute to specify the target resource or document that you want to open when the user clicks the hyperlink.

81

## Hyperlink

- The term href stands for Hypertext Reference. The href attribute sets the URL of the target resource.
- In HTML, links are defined with the <a> tag. For example,
- `<A href=http://www.google.com>Google</A>`
- **HTML Link - The target Attribute**
  - The A element uses the target attribute to specify a window where you want to open a document when a hyperlink is clicked.
  - For instance, you can open a document in the same window or in another window just by using the target attribute.

Value	Description
_blank	Opens the linked document in a new unnamed window
_self	Opens the linked document in the current window (this is default value)
_parent	Opens the linked document in the parent window
_top	Opens the linked document in the topmost window
framename	Opens the linked document in a named frame

### Hyperlink Example

```

○ Hyperlink.html
<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Creating a Hyperlink</TITLE>
  </HEAD>
  <BODY>
    <H1>This is the FIRST PAGE</H1>
    <BR/>
    <BR/>
    <H1><A href="refpage.html">Go to the
      REFERENCE PAGE</A></H1>
  </BODY>
</HTML>

```

83

### Hyperlink Example

```

○ refpage.html
<!DOCTYPE>
<HTML>
  <HEAD>
    <TITLE>Creating a Reference Page</TITLE>
  </HEAD>
  <BODY>
    <H1>This is the REFERENCE PAGE</H1>
  </BODY>
</HTML>

```

84

### Hyperlink Example Using target attribute

```

○ Hyperlinktarget.html
<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Creating a Hyperlink with the target
      attribute</TITLE>
  </HEAD>
  <BODY>
    <H1><A href="refpage.html" target="_blank">Go
      to the REFERENCE PAGE</A></H1>
    <BR/>
    <H3>(You are directed to a New Window)</h3>
  </BODY>
</HTML>

```

85

### Hyperlink Example Using target attribute

```

○ refpage.html
<!DOCTYPE>
<HTML>
  <HEAD>
    <TITLE>Creating a Reference Page</TITLE>
  </HEAD>
  <BODY>
    <H1>This is the REFERENCE PAGE</H1>
  </BODY>
</HTML>

```

86

### Hyperlink Example Using target attribute

```

○ Hyperlinktarget.html
<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Creating a Hyperlink with the target
      attribute</TITLE>
  </HEAD>
  <BODY>
    <H1><A href="refpage.html" target="_self">Go
      to the REFERENCE PAGE</A></H1>
    <BR/>
    <H3>(You are directed to a New Window)</h3>
  </BODY>
</HTML>

```

87

### Hyperlink Example Using target attribute

```

○ refpage.html
<!DOCTYPE>
<HTML>
  <HEAD>
    <TITLE>Creating a Reference Page</TITLE>
  </HEAD>
  <BODY>
    <H1>This is the REFERENCE PAGE</H1>
  </BODY>
</HTML>

```

88

### HTML Link - The id Attribute

- The A element uses the id attribute to create a fragment identifier within a document.
- A fragment identifier specifies a particular location within a document.
- You can navigate different locations within a document just by using the id attribute.
- The id attribute takes a character string as a value. This value must be unique in the same document. However, it can be reused in different documents.
- The id attribute can be used to create bookmarks inside HTML documents. Bookmarks are not displayed in any special way. They are invisible to the reader.

89

### HTML Link - The id Attribute Example

- Add an id attribute to any <a> element.  
`<a id="topS">Go To Top</a>`
- Then create a link to the <a> element (Go To Top):  
`<a href="#topS">Go To Top</a>`
- Click on the link below to watch the effect. After clicking on the below link, you will go to the top of this web page.

90

### HTML Link - The id Attribute Example

```
<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Creating a Hyperlink with id
      attribute</TITLE>
  </HEAD>
  <BODY>
    <H1>This is TOP</H1>
    <A id="top"></A>
    <A href="#middle">Go to Middle</A>
    <BR/>
    <A href="#bottom">Go to Bottom</A>
    <H1>This is TOP</H1>
```

91

### HTML Link - The id Attribute Example

```
<BR/><BR/><BR/><BR/><BR/><BR/><BR/><BR/>

<BR/><BR/><BR/><BR/><BR/><BR/><BR/><BR/>

<BR/><BR/><BR/><BR/><BR/><BR/><BR/><BR/>

<BR/><BR/><BR/><BR/><BR/><BR/><BR/><BR/>

  <H1>This is MIDDLE</H1>
  <A id="middle"></A>
  <A href="#top">Go to Top</A>
  <BR/>
  <A href="#bottom">Go to Bottom</A>
```

92

### HTML Link - The id Attribute Example

```
<H1>This is MIDDLE</H1>
```

```
<BR/><BR/><BR/><BR/><BR/><BR/><BR/><BR/>
```

```
<BR/><BR/><BR/><BR/><BR/><BR/><BR/><BR/>
```

```
<BR/><BR/><BR/><BR/><BR/><BR/><BR/><BR/>
```

```
<BR/><BR/><BR/><BR/><BR/><BR/><BR/><BR/>
```

```
<H1>This is BOTTOM</H1>
```

```
<A id="bottom"></A>
```

```
<A href="#top">Go to Top</A>
```

```
<BR/>
```

93

### HTML Link - The id Attribute Example

```
<A href="#middle">Go to Middle</A>
```

```
<H1>This is BOTTOM</H1>
```

```
</BODY>
```

```
</HTML>
```

94

### Absolute URLs vs. Relative URLs

- Absolute URL (a full web address) in the href attribute.  
`<a href="https://www.google.com/">Google</a>`
- A local link (a link to a page within the same website) is specified with a relative URL (without the "https://www" part):  
`<a href="html_images.html">HTML Images</a>`

95

### Absolute URLs vs. Relative URLs Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>Absolute URLs</h2>
```

```
<p><a href="https://www.google.com/">Google</a></p>
```

```
<h2>Relative URLs</h2>
```

```
<p><a href="refpage.html">Go to the reference page</a></p>
```

```
</body>
```

```
</html>
```

96



## Linking to Mail System

- Use mailto: inside the href attribute to create a link that opens the user's email program

- Example

`<a href="mailto:someone@example.com">Send email</a>`

```
<!DOCTYPE HTML>
```

```
<HTML>
```

```
  <HEAD>
```

```
    <TITLE>Linking to Mail System</TITLE>
```

```
  </HEAD>
```

```
  <BODY>
```

```
    <H1><A
```

```
href="mailto:info@kogentindia.com">E-mail Us</A></H1>
```

```
  </BODY>
```

```
</HTML>
```

97

## HTML Link Color

- When you place your mouse cursor over a link, then you will watch the following two things will happen normally:
  - the arrow of the mouse will turn into a little hand
  - the color of the link element will change
- By default, the link will appear as in all browsers:

Link	Appearance
unvisited link	underline and blue
visited link	underline and purple
active link	underline and red

98

### HTML Link Color Example

```
<!DOCTYPE html>
<html>
<head>
</head>
<body link="green" alink="yellow" vlink="pink" >

    <p>You can change the default colors of links</p>
    <a href = "https://www.ddu.ac.in" target = "_blank" >DDU
    Website</a>

</body>
</html>
```

99

### Types of HTML Link

- There are six types hyperlinks.
  - Types of Hyperlinks are defined on the basis of their value.
  - Hyperlinks Types
    - Empty Link
    - Relative Link
    - Absolute Link
    - Internal Link
    - Mailto Link
    - Telephone Link
  - Empty Link : An hyperlink without href value id blank link. Usually we avoid empty hyperlinks as they refresh or reload webpages. Example : `<a href="">Empty Link</a>`

100

### Types of HTML Link

- Relative Link : Relative link means a hyperlink with path relative to root directory. If your webpage is saved on desktop, then desktop is your root directory, but if it's in a folder, that folder is your root directory.  
Example : `<a href="webdesigning.html">Web Designing Tutorials </a>`
- Absolute Link : Absolute Link is hyperlink with Absolute Path. This could be http, https, or file protocol based.  
Example `<a href="https://tutorial.com/webdesigning.html">Web Designing Tutorials </a>`
- Email Link: Mailto Link is used to create Click to mail link or Email Link in html. This is very useful when we are showing our mail to user. On click of mail link, your mail application, (Outlook, Gmail, mail etc) will open compose tab.
- Example: `<a href="mailto:user@domain.com">Mail Link</a>`<sup>101</sup>

### Types of HTML Link

- Internal Link: Internal Link is hyperlink with Internal Path. To call an element with id, internal link is used. As id is unique, internal link call that element.  
Example  
`<a href="#section1">Section 1</a>`  
`<a href="#section2">Section 2</a>`  
`<a href="#section3">Section 3</a>`  
  
`<div id="section1">Section 1 Division</div>`  
`<div id="section2">Section 2 Division</div>`  
`<div id="section3">Section 3 Division</div>`
- Click To Call Link(telephone link): Click to call is used using tel: followed by phone number in href. This is recommended on a webpage to show telephone numbers with click to call feature.  
Example: `<a href="tel:+9101204280181">Call Tech Altum</a>`<sup>102</sup>

## HTML Image as a LINK

- You can also use any image as a link in HTML. Here is an example demonstrates how to provide image link in HTML:

- `Imglink.html`

```
<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>Images as hyperlink</TITLE>
  </HEAD>
  <BODY>
    <H2> Using Images as Hyperlink</H2>
    <A href="Target.html">
      <IMG src="progressBar.png"
        height="100" width="100"/>
    </A>
  </BODY>
</HTML>
```

103

## HTML Image as a LINK

- `Target.html`

```
<!DOCTYPE HTML>
<HTML>
  <HEAD>
    <TITLE>target page</TITLE>
  </HEAD>
  <BODY>
    <H2>Welcome to target page</H2>
  </BODY>
</HTML>
```

104

### HTML LINK Tag

- HTML provide the LINK tag to link a Web page with an external resource or document, such as a Cascading Style Sheet (CSS) file or an Extensible Markup Language (XML) file.
- The rel attribute of the LINK tag is used to create relation with the other resources. This attributes takes different values that specify which resource is to be linked with the Web page.
- For example, the stylesheet value specifies that the page is linked with a stylesheet file.

<body>

<link rel="stylesheet" href="mystylesheet.css">

</body>

105

### Other values of the rel attribute

Name	Description
alternate	Specifies the link on the basis of the other attributes of the LINK tag
archives	Creates a relation to the collection of records, documents, or other materials of historical events
author	Provides a hyperlink to the page that contains the information about the author of the current document
bookmark	Indicates that the current document is a permalink or bookmark
external	Refers to the content or a document that is not the part of the current website
feed	Provides the hyperlink to a syndication feed, which is data format that provides the user updated content of a document

### Other values of the rel attribute

Name	Description
first, next, prev, last	Defines the relation between the pages that are the part of a series
help	Represents that the content of the referenced document provides help for the current tag
icon	Specifies an image that indicates the icon of the current document
index	Specifies the document that contains the table of content or index of the current document
license	Indicates that the current document provides copyright license terms
nofollow	Does not allow author or publisher to endorse the referenced document

107

### Other values of the rel attribute

Name	Description
noreferrer	Secures the referrer details and other information
pingback	Notifies a blog automatically when the other blogs are linked to it
prefetch	Specifies that the highly required resource is to be stored in the cache memory for later use
search	Provides a hyperlink to the resource to specifically search the current document and its related resource
sidebar	Signifies that the referenced document is displayed in the sidebar of the browser. The left-side portion of a Web page is known as sidebar
start	Represents the first document from a list of documents

108

### Other values of the rel attribute

Name	Description
stylesheet	Refers to the stylesheet for the current document
tag	Provides a tag to the current document that represents the referenced document
up	Provides a hyperlink to a document that is used to go back to the first page or the home page of the document

109



110