WWW WORLD WIDE WEB

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- AUTOMATED INFORMATION SHARING(FOR SCIENTIST ALL OVER THE WORLD)
- 1990->WRITTEN 3 FUNDAMENTAL TECHNOLOGIES (HTML,URI,HTTP)
- FEATURES->HYPERTEXT INFORMATION

 SYSTEM,CROSS-PLATFORM,DISTRIBUTED,OPEN STANDARDS,OPEN SOURCE



INTRODUCTION TO HTML

HYPERTEXT MARKUP LANGUAGE

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1993-HTML1.0 1995-HTML 2.0 HTML 3.0 HTML 4.0.1 CURRENT-HTML 5

WHAT IS HTML?

- Hypertext Markup Language(HTML5)
- Creating Web pages
- Describes the structure of a Web page
- Consists of series of elements which tell the browser how to display the content
- Not case-sensitive

HTML DOCUMENT

• HEAD TAG

• BODY TAG

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<h1>My First Heading</h1>
<br/>br>
My first paragraph.
</body>
</html>
```

HTML HEAD TAG

CONTAINER FOR METADATA (<TITLE>,<STYLE>,<META>,<LINK>,<SCRIPT>,<BASE>)

PLACED BETWEEN <HTML> AND <BODY> TAG

- THE <HEAD> ELEMENT IS A CONTAINER FOR METADATA (DATA ABOUT DATA)
- THE <HEAD> ELEMENT IS PLACED BETWEEN THE <HTML> TAG AND THE <BODY> TAG
- THE <TITLE> ELEMENT IS REQUIRED AND IT DEFINES THE TITLE OF THE DOCUMENT
- THE <STYLE> ELEMENT IS USED TO DEFINE STYLE INFORMATION FOR A SINGLE DOCUMENT
- THE <LINK> TAG IS MOST OFTEN USED TO LINK TO EXTERNAL STYLE SHEETS
- THE <META> ELEMENT IS TYPICALLY USED TO SPECIFY THE CHARACTER SET, PAGE DESCRIPTION,
 KEYWORDS, AUTHOR OF THE DOCUMENT, AND VIEWPORT SETTINGS
- THE <SCRIPT> ELEMENT IS USED TO DEFINE CLIENT-SIDE JAVASCRIPTS
- THE <BASE> ELEMENT SPECIFIES THE BASE URL AND/OR TARGET FOR ALL RELATIVE URLS IN A PAGE

HTML BODY TAG

- The <body> tag defines the document's body.
- The <body> element contains all the contents of an HTML document, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- There can only be one <body> element in an HTML document.
- The <body> tag also supports the Global Attributes.

HTML HEADINGS

- •HTML headings are titles or subtitles that you want to display on a webpage.
- HTML headings are defined with the <h1> to <h6> tags.
- Search engines use the headings to index the structure and content of your web pages.
- Each HTML heading has a default size. However, you can specify the size for any heading with the style attribute, using the CSS font-size property:

Heading $$1 < /h1 >$$

HTML PARAGRAPHS

- A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph.
- The HTML element defines a paragraph.
- The browser will automatically remove any extra spaces and lines when the page is displayed
- The <hr> element is used to separate content (or define a change) in an HTML page.
- •Use
br> if you want a line break (a new line) without starting a new paragraph
- The text inside a element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks

HTML FORMATTING ELEMENTS

Formatting elements were designed to display special types of text:

- • Bold text
- • Important text
- •<i> Italic text
- • Emphasized text
- •<mark> Marked text
- •<small> Smaller text
- • Deleted text
- •<ins> Inserted text
- •<sub> Subscript text
- <sup> Superscript text

HTML QUOTATIONS

- The HTML <blockquote> element defines a section that is quoted from another source.
- The HTML <q> tag defines a short quotation.
- The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.
- The HTML <address> tag defines the contact information for the author/owner of a document

or an article.

• The contact information can be an email address, URL, physical address, phone number, social

media handle, etc.

• The text in the <address> element usually renders in *italic*, and browsers will always add a line break

before and after the <address> element.

- BDO stands for Bi-Directional Override.
- The HTML <bdo> tag is used to override the current text direction

HTML LINKS

- HTML links are hyperlinks.
- You can click on a link and jump to another document.
- When you move the mouse over a link, the mouse arrow will turn into a little hand.
- The most important attribute of the <a> element is the href attribute, which indicates the link's destination.
- Use the $\langle a \rangle$ element to define a link
- Use the href attribute to define the link address
- Use the target attribute to define where to open the linked document

HTML IMAGES

- Images can improve the design and the appearance of a web page.
- The tag has two required attributes:
 - src Specifies the path to the image
 - alt Specifies an alternate text for the image
- The HTML <map> tag defines an image map. An image map is an image with clickable areas. The areas are defined with one or more <area> tags.
- A background image can be specified for almost any HTML element.

HTML LISTS

- NUMBERED LIST OR ORDERED LIST (OL)
- NON-NUMBERED LIST OR BULLETED OR UNORDERED LIST (UL)
- DEFINITION LIST OR DESCRIPTION LIST (DL)

ORDERED LIST

To represent different ordered lists, there are 5 types of attributes in tag.

Туре	Description
Type "1"	This is the default type. In this type, the list items are numbered with numbers.
Type "I"	In this type, the list items are numbered with upper case roman numbers.
Type "i"	In this type, the list items are numbered with lower case roman numbers.
Type "A"	In this type, the list items are numbered with upper case letters.
Type "a"	In this type, the list items are numbered with lower case letters.

UNORDERED LIST

To represent different ordered lists, there are 4 types of attributes in tag.

Туре	Description
Type "disc"	This is the default style. In this style, the list items are marked with bullets.
Type "circle"	In this style, the list items are marked with circles.
Type "square"	In this style, the list items are marked with squares.
Type "none"	In this style, the list items are not marked.

DESCRIPTION LIST

- •HTML Description List or Definition List displays elements in definition form like in dictionary. The <dl>, <dt> and <dd> tags are used to define description list.
- The 3 HTML description list tags are given below:
 - <dl> tag defines the description list.
 - <dt> tag defines data term.
 - <dd> tag defines data definition (description).

HTML TABLE TAGS

HTML table tag is used to display data in tabular form (row * column). There can be many columns in a row.

Tag	Description	
	It defines a table.	
	It defines a row in a table.	
	It defines a header cell in a table.	
<	It defines a cell in a table.	
<caption></caption>	It defines the table caption.	
<colgroup></colgroup>	It specifies a group of one or more columns in a table for formatting.	
<col/>	It is used with <colgroup> element to specify column properties for each column.</colgroup>	
	It is used to group the body content in a table.	
<thead></thead>	It is used to group the header content in a table.	
<tfooter></tfooter>	It is used to group the footer content in a table.	

HTML SPECIAL CHARACTER ELEMENTS

HTML character entities are used as a replacement of reserved characters in HTML. You can also replace characters that are not present on your keyboard by entities.

Result	Description	Entity Name	Entity Number
	non-breaking space		160
<	less than	<	60
>	greater than	>	62
&	ampersand	&	38
**	double quotation mark	"	34
	single quotation mark (apostrophe)	'	39
19	cent	¢	162
£	pound	£	163
/	yen	¥	165
€	Euro	€	8364
®	copyright	©	169
R	registered trademark	®	174

HTML BLOCK ELEMENTS AND INLINE ELEMENTS

- There are two display values: block and inline
- A block-level element always starts on a new line and takes up the full width available
- An inline element does not start on a new line and it only takes up as much width as necessary
- The <div> element is a block-level and is often used as a container for other HTML elements
- The element is an inline container used to mark up a part of a text, or a part of a document

HTML COMMENTS

- HTML comments are not displayed in the browser, but they can help document your HTML source code.
 - <!-- Write your comments here -->
- Comments are not displayed by the browser, but they can help document your HTML source code.
- With comments you can place notifications and reminders in your HTML code.
- Comments are also great for debugging HTML, because you can comment out HTML lines of code, one at a time, to search for errors.

HTML EMOJIS

- Emojis are characters from the UTF-8 character set: 😄 😍 💗
- Emojis look like images, or icons, but they are not.
- They are letters (characters) from the UTF-8 (Unicode) character set.

Some Emoji Symbols in UTF-8

Emoji	Value
	& #128507;
Å	& #128508;
k	& #128509;
	& #128510;
3	& #128511;
	& #128512;
=	& #128513;
8	& #128514;
&	& #128515;
=	& #128516;
	& #128517;

END OF SESSION 1