

INTRODUCTION

0301103

INTRODUCTION TO HTML5, CSS & JAVA SCRIPT

0301106

PRACTICAL ON INTRODUCTION TO HTML5, CSS & JAVA SCRIPT

0301103 Introduction to HTML5, CSS & JavaScript

UNIT	MODULES	WEIGHTAGE
1	Fundamentals of HTML5	20 %
2	Forms, Frames & HTML5 Tags	20 %
3	Cascading Style Sheet (CSS)	20 %
4	Introduction to JavaScript	20 %
5	Event Handling and Validating Forms	20 %

UNIT - 1 FUNDAMENTALS TO HTML5

- Basic Tags and Attribute
- Inserting Special Characters
- The List Tag
- Link Tag
- Image Map
- Table

Fundamental of HTML

- HTML stands for **Hyper Text Markup Language**.
- HTML is a **markup language** for describing web documents (web pages).
- HTML is a language interpreted by a Browser.
- A markup language is a **set of markup tags**.
- HTML documents are described by **HTML tags**.

HTML Tags

- Tags are **instructions that are embedded directly into the text** of the document.
- An HTML **tag is signal to a browser** that it should do something other than just throw text up on the screen.
- HTML Tag begin **with an open angle bracket < and end with a close angle bracket >**
- For example ``, `<|>`

Paired Tags

- A tag is said to be a Paired tag if it, **along with a companion tag**.
- For example the `` tag is a paired tag.
- The `` tag with its companion tag `` causes the text contained between them to be rendered in bold.
- In paired tags, the first tag `` is often called the **opening tag** and the second tag `` is called the **closing tag**.

Singular Tags

- A Singular or Stand-alone tag does not have a companion tag.
- For example `
` tag will insert a line break.

The Structure of an HTML program

- Every HTML program has a rigid structure.
- The entire web page is enclosed within `<HTML> </HTML>`
- Within these tags two distinct sections are created using the
 - `<HEAD></HEAD>` tag
 - `<BODY></BODY>` tag

The Structure of an HTML program

<HTML>

 <HEAD>

 </HEAD>

 <BODY>

 </BODY>

</HTML>

<HEAD> Document Head

- Information placed in this section **is essential to the inner working of the document** and has nothing to do with the content of the document.

```
<HTML>
```

```
  <HEAD>
```

```
    <TITLE>..... </TITLE>
```

```
  </HEAD>
```

<BODY> Document Body

- The tags used to indicate the start and end of the main body of textual information .

DEMO_1

<BODY>Tag Attributes

ATTRIBUTES	DESCRIPTION
BGCOLOR	Changes the default background color to whatever color is specified with this tag. User can specify a color by name or its equivalent hexadecimal number
BACKGROUND	Specifies the name of the Gif file that will be used as the background of the document.
TEXT	Changes the body text color from its default value to the color specified with this attribute.

DEMO_2 & DEMO_3

Titles and Footers

- Title
 - A web page could have a title that describes by the `<TITLE>` Tag.
 - It place in the title bar of the browser window.

DEMO_4

FORMATTING TAGS

- `<P> </P>`
- `
`
- `<H1> </h1>` TO `<H6> </H6>`
- `<HR>`
- ` `
- `<I> </I>`
- `<U> </U>`
- `<div></div>`
- ``

<P> Tag

- The HTML <p> element defines a paragraph.
- On encountering this tag browser, moves onto a new line, skipping one line between the previous line and the new line.

DEMO_5

 Line Break

- The HTML
 element defines a line break.
- Use
 if you want a line break (a new line) without starting a new paragraph

DEMO_6

Heading Styles <H1>

- HTML supports six different levels of headings.
- Headings are defined with the <h1> to <h6> tags.
- <h1> defines the most important heading. <h6> defines the least important heading.
 - `<h1> GLS ICA </h1>`

DEMO_7

<HR> tag

- The <HR> tag draws lines. This tag draws a horizontal line across the whole page wherever specified.

Attributes	Description
ALIGN	Aligns the line on the browser screen. Defalut is center of the screen.
SIZE	Changes the size of the rule.
WIDTH	Set the width of the rule

DEMO_8

Text Style <I> <U>

- To display text in Bold style tag is used.
- To display text in Italics style <I> </I> tag is used.
- To display text with underline <U> </U> tag is used.

DEMO_9

<div> Tag

- The <div> tag defines a division or a section in an HTML document.
- The <div> tag is **used as a container for HTML elements** - which is then styled with CSS or manipulated with JavaScript.
- The <div> tag is easily styled by using the class or id attribute.
- Any sort of content can be put inside the <div> tag!
- **Note: By default, browsers always place a line break before and after the <div> element.**

DEMO_30

 Tag

- The tag is used to **embed an image in an HTML page**.
- Images are not technically inserted into a web page; images are linked to web pages.
- The tag creates a holding space for the referenced image.
- The tag has two required attributes:
 - **src** - Specifies the path to the image
 - **alt** - Specifies an alternate text for the image, if the image for some reason cannot be displayed
- **Note:** Also, always specify the width and height of an image. If width and height are not specified, the page might flicker while the image loads.

DEMO_31 DEMO_32

COMMENT IN HTML

- Comment tags are used to insert comments in the HTML source code.
- `<!-- Write your comments here -->`

DEMO_20

SPECIAL CHARACTER IN HTML

CHAR	NUMBER	ENTITY	DESCRIPTION
	 		SPACE
<	<		LESS THAN
>	>		GRATER THAN
&	&		AND
¢	₵	₵	CEDI SIGN
£	₤	₤	LIRA SIGN

SPECIAL CHARACTER IN HTML

CHAR	NUMBER	ENTITY	DESCRIPTION
₹	₹	₹	INDIAN RUPEE SIGN
Rs	₨	₨	RUPEE SIGN
©	©	©	COPYRIGHT SIGN
®	®	®	REGISTERED SIGN
∀	∀	∀	FOR ALL
Σ	∑	∑	N-ARY SUMMATION

SPECIAL CHARACTER IN HTML

CHAR	NUMBER	ENTITY	DESCRIPTION
™	™	™	TRADEMARK

DEMO_21

List Tags

- Types of List
 - Unordered List
 - Order List
 - Definiton Lists

List Tags – unordered List

- An unordered list starts with the tag `` and ends with ``.
- Each list item starts with the tags ``. The attributes that can be specified with `` are:

Attributes	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

List Tags – ordered List

- An ordered list starts with the tag `` and ends with ``.
- Each list item starts with the tags ``. The attributes that can be specified with `` are:

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

DEMO_23

List Tags – Definition List

- It is also called Description List
- The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term:

DEMO_24

Link Tag

- HTML allows linking to other HTML documents as well as images.
- Clicking on a section of text or an image in one web page will open an entire web page or an image.
- The text or an image that provides such linkage is called Hypertext, a Hyperlink or a hotspot.
- ``

DEMO_25 DEMO_26

Link Tag

- Link Can be:
 - External Document Reference
 - Internal Document Reference
 - Image Link

Link Type	Description
LINK	Changes the default color of a Hyper link to whatever color is specified with this tag. The user can specify the color name.
ALINK	Changes the default color of a hyperlink that is activated to whatever color is specified with this tag.
VLINK	Changes the default color of a hyperlink that is already visited to whatever color is specified with this tag.

Image Map

What is image mapping :

- In image mapping an image is specified with certain set of coordinates inside the image which act as hyperlink areas to different destinations.

- **Elements required in Mapping an Image :**

There are three basic html elements which are required for creating a mapped image.

1. Map : It is used to create a map of the image with clickable areas.
2. Image : It is used for the image source on which mapping is done.
3. Area : It is used within the map for defining clickable areas.

The Image

- The image is inserted using the `` tag. The only difference from other images is that you must add a `usemap` attribute:

```

```

- The `usemap` value starts with a hash tag `#` followed by the name of the image map, and is used to create a relationship between the image and the image map.

Image Map <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 '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.

DEMO_27

Image Map <MAP>

- The <area> tag takes certain attributes.

Attribute	Description
Shape	The Shape of a region can be one of the following : Rect, Circle, Poygon, Default
Coords	A Rectange will take Coordinates : x1,y1,x2,y2 A Circle will take Coordinates : Centerx, Centery and radius A Polygon will take three or more paris of coordinates A Default shape will not take any parmeter and it indicates protion of the image not specified under any area tag.
Href	Takes the name of the .html file that is linked ot the pariticular area on the image.

Example

```
<html>
```

```
<body>
```

```
<p>Click on the sun or on one of the planets to watch it closer:</p>
```

```

```

```
<map name="planetmap">
```

```
<area shape="rect" coords="0,0,82,126" alt="Sun" href="sun.htm">
```

```
<area shape="circle" coords="90,58,3" alt="Mercury" href="mercur.htm">
```

```
<area shape="circle" coords="124,58,8" alt="Venus" href="venus.htm">
```

```
</map>
```

```
</body>
```

```
</html>
```

TABLES

- Table
 - Introduction
 - Caption Tag
 - Width and Border attributes
 - CellPadding Attribute
 - Cell Spacing Attribute
 - Background color Property
 - Colspan and Rowspan Attributes

HTML TABLES

- A table is a two dimensional matrix, consisting of rows and columns.
- All the table related tags are included between the `<table> </table>`
- Each row of a table is described between `<tr>.....</tr>`
- Each column of a table is describe between `<td>.....</td>`

HTML TABLES Rows

- Row can be two types:
 - Header rows - `<TH>.....</TH>`
 - Data rows - `<TR></TR>`

HTML TABLES Attributes

Attribute	Description
ALIGN	Horizontal alignment. It can be LEFT, RIGHT, CENTER
VALIGN	Vertical alignment. It can be TOP, MIDDLE, BOTTOM
WIDTH	Set the WIDTH to a specific number of pixels or %
BORDER	Control the border to be placed around the table. Border thickness is specified in pixels.
CELLPADDING	This attribute controls the distance between the data in a cell and the boundaries of the cell.
CELLSPACING	Control the spacing between adjacent cells.
COLSPAN	It make the cell defined by the tag to take up more than one column.
ROWSPAN	It make the cell defined by the tag to take up more than one row.

<caption>

- Often tables need to be given a heading, which gives the reader a context for the information in the tables.
- Table heading are called Captions
- It can be provided by

`<CAPTION> </CAPTION>`

Attribute	Description
ALIGN	BOTTOM (Will place the caption immediately below the table) TOP (Will place the caption immediately above the table)

COLAPN & ROWSPAN

Attribute	Description
COLSPAN	It make the cell defined by the tag to take up more than one column.
ROWSPAN	It make the cell defined by the tag to take up more than one row.

COLAPN & ROWSPAN

Winners of the competitions are :

Sr. No.	Event	Student Name	Rank
1.	Drawing	Shah Shikha	1 st
		Shah Maitri	2 nd
2.	Rangoli	Chauhan Ishita Shaikh Farheen	1 st
		Bhitrai Neha Shah Yatri	2 nd
3.	Mehandi	Bhitrai Neha	1 st
		Harshara Vibhuti	2 nd
4.	Chess	Kanzariya Mihir	1 st
		Prajapati Kunal	2 nd

COLAPN & ROWSPAN

1	2		
3	4	5	6
	7	8	
	9		10

COLAPN & ROWSPAN

GLSICA	GLS (I&RKD) INSTITUTE OF COMPUTER APPLICATION			
	I	II	III	IV
0	1	2	3	4

Tabel 1.1



UNIT 1 COMPLETED