

DYNAMIC WEB PAGE DEVELOPMENT(DWPD)

UNIT 1

Introduction to HTML & CSS

(COURSE CODE: 3350702)

SYLLABUS

1a. Design and develop web pages using basic HTML tags.

1.1 History of Html

1.2 Basic Html Tags

(`<html>`,`<head>`,`<title>`,`<body>`,`<hr>`,``,`<embed>`,`<bgsound>`,`<blink>`,
``,`<center>`,`<marquee>`,

`<a>`)

1.3 Coding style ,syntax, Working with Image, Linking a webpage , Defination list (``, ``, ``)

1.4 Working with Table (`<th>`, `<td>`, `<tr>`)

1.5 Division Tags, IDs & Classes

1.6 Special Character or tags

1b. Use of advance HTML 5 Tags.

1c. Design Static Webpage using Html5 tags

1.7 Difference between Html 4.0 & 5.0

1.8 Brief Discuss Html 5 tags with Ex. (`<header>`, `<aside>`, `<section>`, `<footer>`, `<article>`,`<nav>`)

1.9 Introduction to Html5 Form Input Type ,Elements & Attributes.

1.10 Form Input Type (color, Date, Datetime, Datetime-local, email, month number, range, search, tel, time, url, Week)

1.11 Form Input Type Elements(Datalist, Keygen, output)

1.12 Html5 video & audio(<Audio>, <Video>)

1.13 Static Webpage Design using Html5 tags

1d. Design and develop web pages using CSS/ CSS 3 styles, internal and/or external style sheets.

1.14 Introduction to Css/dhtml

1.15 Briefly Discuss to stylesheet (What is Css? ,Use of Css, Type's of Css, Syntax)

1.16 Css margin, padding , Text, Font Properties

1.17 Css and links

1.18 Css Background, Border Properties, Height, width, Css Positioning, Layout creating

1.19 Css and backgrounds, Css and borders, Float Properties, Css video, audio Tag, Map Creating

1.20 Diff. between Css2 & Css3

1.21 Css3- Opacity, Box-Shadow, Border- radius, Gradient, Transition, Transform , Animation , Keyframes

1.DESIGN AND DEVELOP WEB

❖ 1.1 History of HTML

- ❖ HTML stands for Hypertext Markup Language, and it is used to build Static Website.
- ❖ In 1989, Tim Berners-Lee developed a system which allow to share documents with each other using electronic networking methods. This idea is known as World Wide Web.

- ❖ In 1992, Berners-Lee & team released the First Version of HTML known as HTML 1.0 which was finalized in
- ❖ In 1994, the second version of HTML was released, which is known as HTML 2.0. It same as HTML 1.0 specification but added a few new features.
- ❖ Dave Raggett introduced a new HTML version known as HTML 3.0
- ❖ The W3C released the HTML 4.0 at the end of 1997.

1.2. BASIC HTML TAGS

1. <html> Tag

- ❖ It used to give instructs Browser that this is HTML document.

- ❖ Example

```
<html>
```

```
</html>
```

2. <head> Tag

- ❖ It works as a container for<title>,<link>,<style>,&br/>& <script> tags.

- ❖ Generally <head> tag are used for following
- ❖ 1. To specify **Title of Document** that is displayed I the title bar of Web Page.
- ❖ To specify **Style sheet for HTML.**
- ❖ To **specify script such as JavaScript** in HTML page.
- ❖ Example

```
<html>
```

```
    <head>This is a heading</head>
```

```
</html>
```

3. <title> Tag

- ❖ It is used to specify title for web page.
- ❖ Example

```
<html>
```

```
  <head>
```

```
    <title>This is document title.</title>
```

```
  </head>
```

```
</html>
```

4 . <body> Tag

- ❖ It is used to Defines the document's body.
- ❖ It works as a container for text, hyperlink, image, font, list etc.

Example : <html>

<head>

<title>My First HTML Page.</title>

</head>

<body>

Welcome To My Website

</body>

</html>

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5. <hr> Tague

- ❖ It used to display Horizontal Line on web page.
- ❖ Same Attribute of <hr> tague

Attribute	purpose
Size	It used to give Height of horizontal line.<hr size="20">
Width	It used to give Width of horizontal line.<hr width="40">
align	It used to give specify alignment of horizontal line.<hr align="center">

6. Tag

- ❖ It is used to display an image on web page.
- ❖ In this tag must have to use src attribute to display the image.
- ❖ Example

```

```

7. <embed> Tag

- ❖ It is used to embed various multimedia objects or external application.
- ❖ In this tag must have to use src attribute to display the file.
- ❖ Example

```
<embed src="bgsound.mp3" autostart="true"  
hidden="true">
```

8. <bgsound> Tag

- ❖ It is used to embed background sound file in web page.
- ❖ In this tag must have to use src attribute to be embedded within web page.
- ❖ Example

`<bgsound src="bgsound.wav" loop="2">`

9. <blink> Tag

❖ It is used to blink the Text ON & OFF on a web page.

❖ Example

<blink> New Update </blink>

10. Tag

❖ It is used to format text.

❖ Using this tag we can specify font color, size, & font face for the text.

❖ Example

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11. <center> Tag

- ❖ It is used to display center align text on a web page.

- ❖ Example

<center> Weicome To My Website </center>

12.<marquee> Tag

- ❖ It is used to display scrolling text on a web page.
- ❖ It is scrolled **either horizontally or vertically** using <marquee> tag. By default it scroll **Horizontally left to right.**

- ❖ Example

- ❖ <marquee> New Update Available </marquee>

13. <a> Anchor Tag

- ❖ The <a> Tag is also known as Anchor Tag.
- ❖ It is used to create hyperlink in a web page. Hyperlink is used to redirect user from one page to another page.
- ❖ This Tag uses to href attribute.
- ❖ Example
< a href="vpmp.html"> VPMP polytechnic

1.3. Coding Style, Syntax, Working with Image, Linking a Webpage.

1.3.1 Coding Style

- ❖ Following same Coding Style in HTML.
- ❖ 1. Write all HTML tags in lowercase.
- ❖ 2 Indent tags & text as per requirements..
- ❖ 3. Give meaning full name of each HTML element.
- ❖ 4. Limit length of line up to 120 characters. If the line contain more than 120 character then wrap them.

1.3.2. Syntax of Coding

- ❖ Every programming language having their **own syntax rules**. These syntax rules must be followed by developer for successful execution of code.
- ❖ **The following have same Syntax Rules of HTML**
 - ❖ 1. In each HTML Tag must contain between < and > symbol to separate them from text.
 - ❖ 2. In HTML closing tag is similar to starting tag but you have to place / after < symbol.
 - ❖ 3. In HTML tag names are case insensitive
 - ❖ 4. An element may contain other nested elements.

- ❖ 5. In some HTML tags there is no need for a closing tag.
- ❖ 6. The comment must include between `<!--` and `-->` symbol.
- ❖ 7. The value of attributes may contain between single or double quotation marks.
- ❖ 8. There must be space between tag name & an attribute name.

1.3.3. Working with Image

- ❖ HTML provides the facility of working with images. In HTML the **** tag is used to display an image on a web page.
- ❖ In **src attribute** are used to display the image of web page.
- ❖ The general form of **** tag is
- ❖ ****
- ❖ **There no need to close tag.**
- ❖ **Set Width & height of Image:**
- ❖ By default the **** tag display the image in its actual size.
- ❖ It is possible to user set height & width of image using height & width attribute.

- ❖ For Example

- ❖ ``

- ❖ Set alternate text for Image:

- ❖ `` tag have to use **alt attribute**.

- ❖ For Example

- ``

- ❖ Set Border of Image:

- ❖ `` tag use the border attribute.

- ❖ For Example

- ❖ ``

- ❖ Set alignment of Image:

- ❖ The `` Tag provide align attribute to specify alignment of the image on a web page.

- ❖ For Example

- ❖ ``

- ❖ Mark Image to work as a hyperlink

- ❖ The tag can be contained between <a> & tag to work as a hyperlink.

- ❖ For Example

1.3.4. Linking a web page

- ❖ Hyperlink is used to link one page with other page.
- ❖ In Hyperlink can be created in HTML using `<a>` tag. It is also called Anchor Tag.
- ❖ The anchor tag `<a>` provides **href attribute** to specify URL or path of a web page.
- ❖ For Example
- ❖ ` Contact Us`

1.3.5. List

- ❖ List is useful to represent information in structured way.
- ❖ So that user can easily read the information.
- ❖ In HTML there are three type of List
 - ❖ 1. Ordered List(ol)
 - ❖ 2. Unordered List(ul)
 - ❖ 3. Definition List(dl)
- ❖ 1. Create Ordered List(ol)
- ❖ Ordered List is used to represent information in numerical Or alphabetic form.
- ❖ The tag in association with the tag is used to crate ordered list in HTML.

- ❖ **For Example**
- ❖ ****
- ❖ ** DWPD **
- ❖ ** JAVA **
- ❖ ** CMTS **
- ❖ ** CNS **
- ❖ ****

Output:

- 1.DWPD**
- 2.JAVA**
- 3.CMTS**
- 4.CNS**

2. Create Unordered List

- ❖ Unordered List is used to represent information in a bullet form.
- ❖ The Tag in association with the tag is used to create unordered list in HTML.
- ❖ For Example

 DWPD

 JAVA

 CMTS

 CNS

Output:

- **DWPD**
- **JAVA**
- **CMTS**
- **CNS**

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3. Create Definition List(dl)

- ❖ Definition list is useful for representing in two levels format.
- ❖ In two levels format first level contain topic & second level description of topic.
- ❖ In HTML definition list can be used creating using `<dl>`, `<dt>`, & `<dd>` tag.
- ❖ The `<dl>` tag is used to represent definition list.
- ❖ The `<dt>` tag is used to represent definition team.
- ❖ The `<dd>` tag is used to represent definition.
- ❖ The `<dt>` & `<dd>` tag are contained between `<dl>` & `</dl>` tag.

❖ For Example

<dl>

<dt>HTML

<dd>Hyper Text Markup Language

<dt> PHP

<dd> Hypertext Preprocessor

</dl>

❖ Output

HTML

Hyper Text Markup Language

PHP

Hypertext Preprocessor

1.4. Working with Table (<table>, <th>, <tr>, <td>)

- ❖ The <table> tag is used to create table in HTML.
- ❖ Only <table> tag is not enough to create table. we have to use <tr>, <th>, <td> tag in a <table> tag.

Tag	Purpose
<table>	Used to define table.
<tr>	Used to define row within table
<th>	Used to define Table Header
<td>	Used to define table cell.

For Example

```
<table border="1">
```

```
<tr>
```

```
    <th>Enroll. No. </th>
```

```
    <th> Name of Student </th>
```

```
</tr>
```

```
<tr>
```

```
    <td> 156540307001 </td>
```

```
    <td> Aakruti </td>
```

```
</tr>
```

```
</table>
```

Output

Enroll. No.	Name of Student
156540307001	Aakruti

1.5. Division <div> Tag, IDs & Classes

❖ 1. <div> Tag

- ❖ The <div> tag defines a division or a section in an HTML document.
- ❖ The <div> tag is used to group block-elements to format them with CSS styles.

❖ For Example

```
<div style="color:blue">  
  <h3>This is a heading</h3>  
  <p>This is a paragraph.</p>  
</div>
```

❖ Example-1

```
<div style="border:2px solid;">
```

```
    <h1> section 1</h1>
```

```
    <p> welcome to our web site. </p>
```

```
</div>
```

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❖ Some Attribute of <div> tag

Attribute	Purpose
align	It Used to specify horizontal alignment for the contents of <div> tag.
style	It used to specify formatting style for the contents of <div> tag.
id	It is used to uniquely identify the division or section on a web pages.

title	Title attribute is used to specify title for the <div> tag.
class	The class attribute assign a class name or a list of class names separated by spaces to the section or division on a web page.

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1.6 SPECIAL CHARACTER

- ❖ In HTML some character can not be directly typed or displayed using keyboard. This character is known as Special Character.
- ❖ HTML entity always begins with & (ampersand) symbol and ends with ; (semicolon).
- ❖ We can directly place HTML entity in source code where we want to display special character.
- ❖ For Example

`<p>`

`© Copyright Reserved`

`</p>`

Output

© Copyright Reserved

Special Character	Entity Name
© (copyright sign)	©
® (registered sign)	®
< (less than), > (greater than)	< >
&	&
space	
← (left arrow)	←

1.7 DIFFERENCE BETWEEN HTML 5.0 & 4.0

HTML 5.0

- 1.HTML 5 there are content specific elements such as header, footer, aside, article, section etc..
- 2.HTML 5 specifications support audio & video Tag.
- 3.HTML 5 is capable of handling inaccurate syntax.

HTML 4.0

- 1.HTML 4 there are no content specific elements such as header, footer, aside, article, section etc..
- 2.HTML 4 specifications does not support audio & video tag.
3. HTML 4 cannot handle inaccurate syntax.

HTML 5

4. HTML 5 does not work with older version of Browser.
5. HTML 5 support date, datetime, range, number, email,url, color, week input type tag.
6. HTML 5 application cache, WebSQL database as available in client side storage.

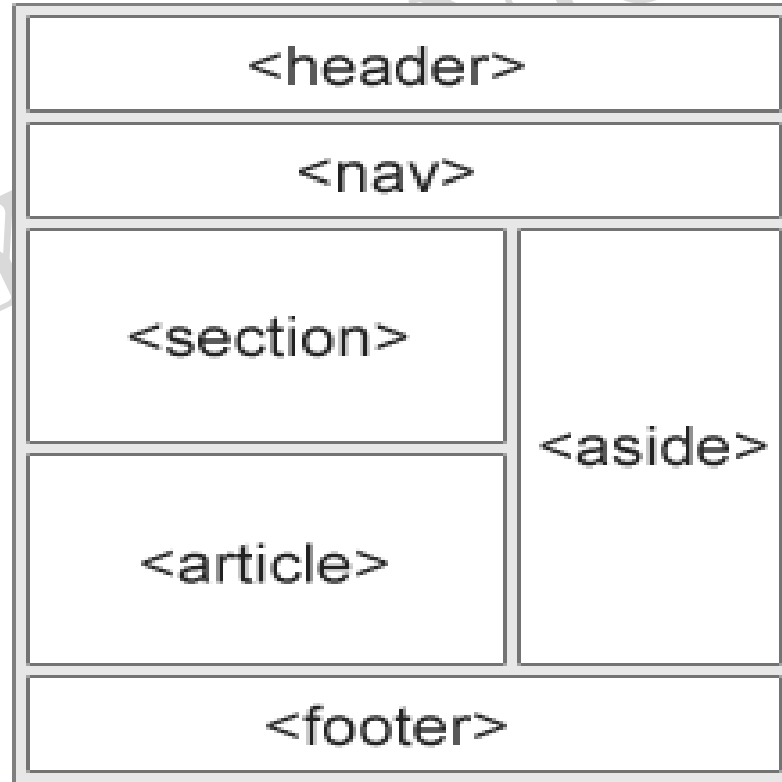
HTML 4

4. HTML 4 works with all version of Browsers.
5. HTML 4 does not support date, datetime, range,number,email,url ,color, week input type tag.
6. HTML 4 Browser cache can be used as temporary storage.

1.8 HTML 5.0 TAG WITH EXAMPLE

- ❖ HTML 5.0 allows the facility of define various section of web page using built in following tags.
- ❖ Structure of HTML 5

1. `<header>`
2. `<nav>`
3. `<section>`
4. `<article>`
5. `<aside>`
6. `<footer>`



1. <header> Tag

- ❖ The <header> Tag element allows user to define a section which define header of web page.
- ❖ This tag are generally use banner ,logo, title & sub title of the web site.
- ❖ We can use multiple header within a single web site.
- ❖ For Example

```
<header>
```

```
    <h1> VPMP POLYTECHNIC</h1>
```

```
</header>
```

2. <nav> Tag

- ❖ The <nav> element allows user to define a section that contain set of navigation link.
- ❖ The <nav> element is a section containing links to other documents or to parts within the current documents.
- ❖ For Example

<nav>

 Home

 Log In

 Registration

</nav>

3. <section> Tag

- ❖ The <section> Tag allows user to define various type of section in a web page.
- ❖ It can be header, footer, chapter etc...
- ❖ For Example

<section>

<h1>Welcome To My Website. </h1>

</section>

4. <article> Tag

- ❖ The <article> Tag allows user to define a section which is independent from the remaining layout of web page.

- ❖ **Example**

<article>

<header> <h1> Programming in PHP </h1>

</header>

<p> Hypertext Preprocessor </p>

<footer> sem 5th C.E. Department </footer>

</article>

5. <aside> Tag

- ❖ This Tag used to navigation link, latest news ,user login etc.. Can be placed inside <aside> Tag.

- ❖ **Example**

```
<aside>
```

```
    <h3> Latest News </h3>
```

```
    <marquee direction="up"> New Programs  
    Added</marquee>
```

```
</aside>
```

6. <footer> Tag

❖ The <footer> element allows user to define a section which define footer of web page.

❖ Example

```
<footer>
```

```
<p align="center"> copyright &copy;2016. All  
Right Reserved </p>
```

```
</footer>
```

1.9 INTRODUCTION TO HTML 5.0 FORM INPUT TYPE ,ELEMENTS & ATTRIBUTES.

- ❖ HTML Forms are required when you want to collect some data from the site visitor.
- The HTML **<form>** tag is used to create an HTML form and it has
- following syntax:
- ❖ **<form action="Script URL" method="GET | POST">**
</form>

1.10. HTML 5.0 FORM INPUT TYPE

1. Color

- ❖ The input color type allows user to select color. It returns Hex value of the selected color.
- ❖ Example
- ❖ `<input type="color" name="hexff">`

2. Date

- ❖ The date input type allows user to enter or select date.
- ❖ Example
- ❖ `<input type="date" name="BDate">`

3. Datetime

- ❖ The Datetime input type allows user to enter or select date & time with time zone.
- ❖ For Example
- ❖ `<input type="datetime" name="bdaytime">`

4. Datetime-Local

- ❖ The Datetime input type allows user to enter or select date & time without time zone.
- ❖ For Example
- ❖ `<input type="datetime-local" name="bdaytime">`

5. email

- ❖ The email input type allows user to enter valid Email address.

- ❖ **Example**

<input type="email" name="email">

6. month

- ❖ The month input type allows user to enter or select a month of the year.

- ❖ **Example**

<input type="month" name="Month">

7. number

- ❖ The number input type allows user to enter a numeric value.
- ❖ Example 1
- ❖ `<input type="number" name="number" />`

8. range

- ❖ The range input type allows user to select numeric value between specify range.

- ❖ Example

`<input type="range" name="range" min=1 max=5 />`

9. search

- ❖ The search input type allows user to create a text field using which users can search for various contents of the web site.

- ❖ Example

`<input type="search" name="search" />`

10. tel

- ❖ The tel input type allows user to enter a telephone number.
- ❖ Example
- ❖ `<input type="tel" name="M.no.">`

11. time

- ❖ The time input type allows user to enter valid time.
- ❖ Example
- ❖ `<input type="time" name="STime">`

12. url

- ❖ The url input type allows user to enter valid url.
- ❖ It does not allow user to submit invalid URL. Valid URL must starts with http:// .
- ❖ Example
- ❖ `<input type="url" name="url">`

13. week

- ❖ The week input type allows user to enter or select week number of the year.
- ❖ Example
- ❖ `<input type="week" name="week" >`

1.11 FORM INPUT TYPE ELEMENTS

- ❖ **HTML 5 introduces several new form elements.**
- ❖ **The new form elements introduced By HTML 5 as given below.**

1. <datalist> Element

- ❖ **The <datalist> element allows user to define a list of options which can be associated with the input element.**
- ❖ **We create a list then the use <option> tag.**

Example

```
<html>
```

```
<body>
```

```
  <form action="action_page.php">
```

```
    <input list="browsers" name="browser">
```

```
      <datalist id="browsers">
```

```
        <option value="Internet Explorer">
```

```
        <option value="Firefox">
```

```
        <option value="Chrome">
```

```
      </datalist>
```

```
    <input type="submit">
```

```
  </form>
```

```
</body>
```

```
</html>
```

2. <keygen> Element

- ❖ The <keygen> element allows user to define key generator in the web page.
- ❖ The <keygen> tag specifies a key-pair generator field used for forms.
- ❖ When the form is submitted, the private key is stored locally, and the public key is sent to the server.

Example

<html>

<body>

<form action="action_page.php" method="get">

Username: <input type="text" name="usr_name">

Encryption: <keygen name="security">

<input type="submit" name="submit"
value="submit">

</form>

</body>

</html>

3. <output> Element

❖ The <output> tag represents the result of a calculation. (like one performed by a script).

❖ Example

```
<html>
```

```
<body>
```

```
<form   oninput="x.value = parseInt(a.value) +  
                                     parseInt (b.value) " >
```

```
A: <input type="number" id="a" min="1" max="100"  
   value="1">
```

```
B: <input type="number" id="b" min="1" max="100"  
   value="1">
```

```
C: <output name="x" for="a b"></output>
```

```
</form>
```

```
</body>
```

```
</html>
```

1.12 HTML 5.0 NEW ATTRIBUTE

❖ New Attribute of Form Type

1 autocomplete

- ❖ When autocomplete is on, the browser automatically complete values based on value that the user has entered before.

- ❖ Example

< form action="home.html" autocomplete="on">

2. novalidate

- ❖ The novalidate attribute is used to specify that the data entered in input elements are not validated at the time of submitting form.
- ❖ It represent the Boolean value.

Example

```
<form action="home.html" novalidate="false">  
</form>
```

3.formaction

- ❖ The form action attribute is used to specify the filename or url to which the contents of input element will be send for processing when user submit form.

- ❖ Example

```
<form action="home.html" >
```

4. formmethod

- ❖ The formmethod attribute is used to specify HTTP method for sending form data to the file specified in action attribute of the form element or formaction attribute of the input element.
- ❖ HTTP use 2 method first is GET method & second is POST method.
- ❖ Example
<form method="POST" action="home.html" >

❖ New Attribute of Input Type

❖ 1.autocomplete

- ❖ When autocomplete is on,the browser automatically complete values based on value that the user has entered before.

❖ Example

```
<input type="text" name="username"  
autocomplete="on">
```

2. autofocus

- ❖ The autofocus attribute is used to set focus automatically on input element when web page.

Example

❖ `< form action="home.html" autocomplete="on">`

User Name: `<input type="text" name="uname"
autofocus="true">`

`</form>`

3. formtarget

- ❖ The formtarget attribute is used to specify target window for the file is open & that is specified in action attribute of form element or formaction attribute of input element.

- ❖ The formtarget attribute can be used only with submit & input type.

- ❖ Example

- ❖ `< form action="display.html" autocomplete="on">`
`<input type="submit" name="submit"`
`value="submit" formaction="save.html"`
`formtarget="_blink"/>`
`</form>`

4. Height & width

- ❖ The height & width attribute are used to specify the height & width of an input element whose type is set of image.
- ❖ Example
- ❖ `<input type="image" src="book.jpg" width="100" height="100">`

5. List

- ❖ The list attribute is used to associate a list of option with a particular input element.
- ❖ The `<datalist>` tag allows user to create list of option.

Example

```
<form action="display.html">
```

```
Select Branch: <input list="Branch" name="branch">
```

```
<datalist id="Branch">
```

```
<option value="Computer">
```

```
<option value="Civil">
```

```
<option value="Mechanical">
```

```
<option value="Electrical">
```

```
</datalist>
```

```
</form>
```

6.Min & Max

- ❖ The min & max attribute are used to specify the minimum & maximum limit for the value to be entered in an input element.

- ❖ Example

- ❖ `<form action="display.html">`

- `<input type="number" name="mark" min="0"`
`max="70">`

- `</form>`

7. multiple

- ❖ It is used to user insert the multiple value of the web page.
- ❖ Its represent the Boolean value.

1.12 HTML 5.0 VIDEO & AUDIO TAG

- ❖ HTML 5.0 <video> Tag
- ❖ It is used to play a video file in HTML 5.0.
- ❖ The video file is support the MP4,ogg,WebM etc...
- ❖ The src attribute is compulsory used to this tag.
- ❖ Example

```
<video width="320" height="240" autoplay>  
  <source src="movie.mp4" type="video/mp4">  
  <source src="movie.ogg" type="video/ogg">  
</video>
```

❖ HTML 5.0 <Audio> Tag

- ❖ It is used to play a audio file in HTML 5.0.
- ❖ The audio file is support the MP3,ogg,wav etc...
- ❖ The src attribute is compulsory used to this tag.
- ❖ Example

```
<audio autoplay="true">
```

```
  <source src="song.mp3" type="audio/mpeg">
```

```
  <source src="theame.ogg" type="audio/ogg">
```

```
</audio>
```

❖ 1.14 Introduction to DHTML/CSS

- ❖ **DHTML stands for Dynamic Hypertext Markup language.**
- ❖ DHTML allows the facility of combining HTML & CSS(Cascading Style Sheet) & Scripting Languages.(javascript , vbscript etc..)
- ❖ **DHTML USE to**
- ❖ **HTML use to Specify actual content of a website using various tags such as paragraph, table, list, hyperlink etc...**

❖ CSS(Cascading Style Sheet)

- ❖ CSS stands for Cascading Style Sheets.
- ❖ CSS describes how HTML elements are to be displayed on screen, paper, or in other media

❖ Use of CSS

- ❖ 1. it allows designer to separate HTML content from their design.
- ❖ 2. CSS provide Efficiency in Design & Updates.
- ❖ 3. CSS provides Faster page Downloads.
- ❖ 4. CSS provides consistency & uniformity.

❖ Syntax of CSS

❖ Css consist of three part:

- ❖ 1. selector
- ❖ 2. Property Name
- ❖ 3. Value

General Syntax of CSS is

selector

{

property-name: value;

}

Selector

Declaration

Declaration

h1

{ color:blue; font-size:12px; }

Property

Value

Property

Value

Example

p

{

color: red;

text-align: center;

}

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❖ Type of CSS

- ❖ Based on the location of css style there are three type of CSS available.
- ❖ 1. Internal CSS/ Embedded CSS
- ❖ 2. External CSS
- ❖ 3. Inline CSS

1. Internal CSS /Embedded CSS

- ❖ An internal style sheet may be used if one single page has a unique style.
- ❖ Internal styles are defined within the <style> element, inside the <head> section of an HTML page

Example

```
<html>
  <head>
    <title>HTML Internal CSS</title>
    <style type="text/css">
      .red{
        color: red;
      }
      p{
        color:green;
      }
    </style>
  </head>
```

```
<body>  
<p class="red">This is red</p>  
<p>This is green</p>  
</body>  
</html>
```

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2. External CSS

- ❖ With an external style sheet, you can change the look of an entire website by changing just one file!
- ❖ Each page must include a reference to the external style sheet file inside the <link> element. The <link> element goes inside the <head> section.

Example

- ❖ Consider we define a style sheet file **style.css** which has following

```
.red{  
    color: red;  
}  
p{  
    color:green;  
}
```

- ❖ These file name is **stylesheet1.css**


```
<html>
<head>
<title>HTML External CSS</title>
<link href="stylesheet1.css" rel="stylesheet"
  type="text/css" >
</head>
<body>
<p class="red">This is red</p>
  <p>This is green</p>
</body>
</html>
```

3. Inline CSS

- ❖ An inline style may be used to apply a unique style for a single element.
- ❖ To use inline styles, add the style attribute to the relevant element.

Example

```
<html>  
<head>  
<title>HTML Inline CSS</title>  
</head>  
<body>  
<p style="color:red;">This is red</p>  
<p style="color:green;">This is green</p>  
</body>  
</html>
```

1.16 CSS margin, Padding, Text, Font Property

1. CSS Margin Property

- ❖ The *margin* property defines the space around an HTML element.
- ❖ The **margin** specifies a shorthand property for setting the margin properties in one declaration.

1. The **margin-bottom**

2. The **margin-top**

3. The **margin-left**

4. The **margin-right**

Example

P

{

Margin-top:10px;

Margin-bottom:10px;

Margin-right:10px;

Margin-left:10px;

}

Or

<p style="margin: 10px, 10px, 10px, 10px">

2. CSS Padding Property

- ❖ The *padding* property allows you to specify how much space should appear **between the content of an element and its border**.
- ❖ The **Property of box using the following properties –**
 1. The **padding-bottom**
 2. The **padding-top**
 3. The **padding-left**

4. The **padding-right**

5. The **padding**

Example

P

{

Padding-top:10px;

Padding-bottom:10px;

Padding-right:10px;

Padding-left:10px;

}

Or <p style="padding: 10px, 10px, 10px, 10px">

3. CSS Text Property

- ❖ This chapter teaches you how to manipulate text using CSS properties. You can set following text properties of an element –

1. The **color**
2. The **direction**
3. The **letter-spacing**
4. The **word-spacing**
5. The **text-indent**
6. The **text-align**

Example

P

{

color:red;

text-align:center;

vertical-align:middle;

letter-spacing: 10px;

}

4.CSS Font Property

- ❖ This chapter teaches you how to set fonts of a content, available in an HTML element. You can set following font properties of an element –

1. The **font-family**
2. The **font-style**
3. The **font-variant**
4. The **font-weight**
5. The **font-size**
6. The **font**

Example

```
p  
{  
font-style:italic;  
font-size:24px;  
font-weight:500;  
font-variant: small-caps;  
}
```

5. CSS Background Property

- ❖ This chapter teaches you how to set backgrounds of various HTML elements. You can set the following background properties of an element –

1. The **background-color**
2. The **background-image**
3. The **background-repeat**
4. The **background-position**
5. The **background-attachment**
6. The **background**

Example

```
h1  
{  
Background-color:red;  
}
```

6. CSS Border Property

- ❖ The *border* properties allow you to specify how the border of the box representing an element should look. There are three properties of a border you can change:

1. The **border-color**
2. The **border-style**
3. The **border-width**

❖ border using the properties –

1. **border-bottom-color**

2. **border-top-color**

3. **border-left-color**

4. **border-right-color**

Example

p

{

border:4px solid red;

}

7. CSS Height Property

- ❖ The height property sets the height of an element.
- ❖ The min-height and max-height properties override height.

1. The max-height property is used to set the maximum height of an element.

- ❖ **2. The min-height property** is used to set the minimum height of an element.

Example

```
p {  
  
    min-height: 100px;  
    max-height: 500px;  
}
```

8. CSS Width Property

- ❖ The width property sets the width of an element.
- ❖ The width property does not include padding, borders, or margins; it sets the width of the area inside the padding, border, and margin of the element.

1. **The max-width property** is used to set the maximum width of an element.
2. **The min-width property** is used to set the minimum width of an element.

❖ **Example**

```
p {  
    max-width: 500px;  
    min-width: 150px;  
}
```


8. CSS Float Property

- ❖ The float property specifies whether or not a box (an element) should float.

Value	Description
none	The element is not floated, and will be displayed just where it occurs in the text. This is default
left	The element floats to the left
right	The element floats the right

Example

img

```
{  
    float: right;  
}
```

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CSS Link

- ❖ This chapter teaches you how to set different properties of a hyper link using CSS. You can set **following five state of hyper link**

1.Link

2. Visited

3. Hover

4.Active

5.Focus

Example

a : link

```
{  
  color:red;  
}
```

a : visited

```
{  
  color:green;  
}
```

a : hover

```
{  
  color:maroon;  
}
```

a : active

```
{  
  color:blue;  
}
```

a : focus

```
{  
  color:yellow;  
}
```

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1.17 CSS3

- ❖ CSS3 is the latest standard for CSS.
- ❖ CSS3 is completely backwards-compatible with earlier versions of CSS.
- ❖ CSS3 is collaboration of CSS2 specifications and new specifications, we can call this collaboration is **module**.
- ❖ Some of the modules are shown below
 1. New Selectors
 2. New Background & Border Property
 3. Gradient Property
 4. Box Shadow & Text Shadow Property
 5. Transformation
 6. Transition
 7. Animation

1.17.1 Opacity

- ❖ The opacity-level describes the transparency-level, where 1 is not transparent at all, 0.5 is 50% see-through, and 0 is completely transparent.
- ❖ Setting opacity property to 0 indicates that the element is fully transparent & Setting opacity property to 1 indicates that the element is fully opaque.
- ❖ Its default value is 1 means fully opaque.

Example-1

```
h1  
{  
Opacity : 0.9;  
}
```

1.17.2. Box-Shadow

- ❖ **Box-shadow property is used to apply shadow effects to the Box.**
- ❖ **Using this property multiple shadow effect can be applied.**
- ❖ **The general syntax is**

box-shadow : insert h-offset v-offset blur spread color;

Example

```
h1
{
border : double;
box-shadow : 5px 5px 2 px #888888;
}
```


1.17.3. Border-radius

- ❖ The border-radius property is **used to add rounded corners to an element.**
- ❖ User can specify radius for top left, top right, bottom right & bottom left corners.

Example

```
h1
{
border: double;
border-top-left-radius: 12px;
border-top-right-radius: 2px;
border-bottom-right-radius: 12px;
border-bottom-left-radius: 2px;
}
```

1.17.4 Gradient

- ❖ Gradients displays the combination of two or more colors.
- ❖ CSS3 supports two type of gradients

1. Linear Gradient

2. Radial Gradient

1. Linear gradients

- ❖ Linear gradients are used to arrange two or more colors in linear formats like top to bottom.

Syntax

background: linear-gradient(*direction*, *color-stop1*, *color-stop2*, ...);

Example

```
h1
{
Background : linear-gradient(to left, red , blue);
}
```

❖ Linear Gradient have following Property

❖ 1. Direction

❖ It indicate the direction of color.

value	Purpose
To left	Transition takes place from right to left(Horizontally)
To right	Transition takes place from left to right(Horizontally)
To top	Transition takes place from bottom to top(Vertically)
To bottom	Transition takes place from top to bottom(Vertically)

2. Angle

- ❖ It indicate direction in a terms of degree.
- ❖ It represents an angle between a horizontal line & the gradient line ,going counter – clockwise.

3. Color-stop

- ❖ It represent name of colors between which you want smooth transition.
- ❖ It must use at lease two color.

2. Radial Gradient

- ❖ A radial gradient is defined by its center.
- ❖ To create a radial gradient you must also define at least two color stops.
- ❖ Syntax
- ❖ **background: radial-gradient(*shape size at position, start-color, ..., last-color*);**

Example-1

```
h1
{
Background: radial-gradient(red, yellow, green);
}
```

Example-2

h1

{

Background: radial-gradient(circle closest-side,red,
yellow, green);

}

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1.17.5 Transform

- ❖ This property allows you to rotate, scale, move, skew, etc., elements.
- ❖ The transform property applies a 2D or 3D transformation to an element.
- ❖ CSS support following method for transformation
- ❖ 1. Translate
- ❖ This method is used to move an element horizontally as well as vertically from its current position.
- ❖ Syntax
 - webkit-transform : translate(+ or - X-pos,Y-pos)
 - Translate X: move element Horizontal direction.
 - Translate Y: move element Vertical direction.

2. rotate

❖ This is used to rotate an element by specify degree either clock wise or counter clock wise.

❖ Syntax

-webkit-transform : rotate (+ or --Degree)

+ (positive) value rotate element clock wise

- (negative) value rotate element counter clock wise

3. Scale

- ❖ This is used to scale an element horizontally as well as vertically by specific scale factor.
- ❖ Syntax
 - webkit-transform : scale (X-scale,Y-scale)**
- ❖ **X-scale** is used horizontally scale factor.
- ❖ **Y-scale** is used Vertically scale factor.

4. Skew

- ❖ This is used to turn an element horizontally as well as vertically by specific angle passed as a parameter.
- ❖ Syntax
 - webkit-ransform : skew (X-Turn,Y-Turn)**
- ❖ **X-Turn** is used element turn X-axis.
- ❖ **Y-scale** used element turn Y-axis.

1.17.6 Animation & Keyframe

1.Animation

- ❖ **CSS3 animations allows animation of most HTML elements without using JavaScript ,Flash!,GIF images.**
- ❖ **To use CSS3 animation, you must first specify some keyframes for the animation.**

- ❖ **Syntax**

@keyframe animation_name

{

Keyframe_selector

{

CSS style;

}

}