

Assignment - 1

- ① Define - HTML, CSS, Javascript. Give four characteristic of each.

→ HTML stands Hyper text Markup language
HTML is the standard markup language for creating web pages.

* characteristic of HTML

- 1] New tags for better structure - HTML introduces new tags like <header>, <footer>, <article>, & <section> to help organize content more clearly.

- 2] Graphics with canvas - the <canvas> tag lets you draw & create graphics, like charts or games, directly in the browser.

- 3] Storage for data - HTML provides options to save data in the browser with localStorage & sessionStorage. So data can be saved even when offline.

- 4] Better forms - HTML has new form inputs like email, date, & tel, making it easier to collect the right information from users.

- * CSS stands for cascading style sheets. It describes to the user how to display HTML elements on the screen in proper format. CSS is the language that is used to style HTML document.

* characteristic of CSS

- 1] Selections - New & advanced selections like

attribute, pseudo-classes, & pseudo-elements

- 2] Box model - improved layout control with properties like box-sizing & flexible box layout.
- 3] Transitions - smooth animations when properties change (eg. color, size)
- 4] Animation - keyframes for creating complex animations without javascript.

- javascript is a programming language used to create dynamic content for website. it is a lightweight, cross-platform & single threaded programming language. javascript is an interpreted language that executes code line by line providing more flexibility.
- characteristics of javascript
 - 1] light-weight scripting language -
javascript designed for client-side execution, making it light-weight for web applications.

- 2] platform independent -
javascript can run on any platform or browser without affecting functionality.

- 3] Single-threaded -
javascript executes one task at a time by default, but asynchronous features allows for parallel execution.

4] Dynamic typing -

javascript variables' types are determined by the value assigned, without needing explicit type declarations.

Q] Define the following tags with syntax eg

- a) Image tag → tag → this tag is used to insert align & size an image. An image can be put in an HTML document using tag's SRC attribute as follows.

eg -

- b) list tag → the tag defines a list item. This tag is used inside ordered list unorderd list & in menu list <menu>

① unorderd HTML list -

An unorderd list starts with the tag. Each list item starts with the tag.

eg.

<html>

<body>

<h2> An unorderd HTML list </h2>

 coffee

 tea

 milk

</body>

</html>

⑥ Ordered HTML list -

An ordered list starts with `` tag. Each list item starts with the `` tag.

e.g.

```
<html>
<body>
<h2> an ordered HTML list </h2>
<ol>
<li> Coffee </li>
<li> tea </li>
<li> milk </li>
</ol>
</body>
</html>,
```

C table tag -

The `<table>` tag is used to create table in HTML.

Syntax - ~~<table border="1">~~

```
<tr>
```

```
<th> Header 1 </th>
```

```
<th> Header 2 </th>
```

```
</tr>
```

```
<tr>
```

```
<td> Data 1 </td>
```

```
<td> Data 2 </td>
```

```
</tr>
```

```
</table>
```

example

<html>

<style>

table, th, td {

border: 1px solid black;

}

</style>

<body>

<table style="width: 100%">

<tr>

<th> Company </th>

<th> Contact </th>

<th> Country </th>

</tr>

<tr>

<td> Contac Comercial meteZuma </td>

<td> Francisco Chang </td>

<td> Mexico </td>

</tr>

</table>

</body>

</html>

□ 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.

Ex -

```
<html>  
<head>  
<div style="border: 2px solid pink;">  
  <p> Welcome to javatpoint Core. Here you get  
  tutorials on latest technologies </p>  
  <p> This is second paragraph </p>  
</div>  
</body>  
</html>
```

e] text formatting tags -

text formatting tags are used to format the text displayed on the web page. Formatted text includes changing font size, pattern, color, etc.

```
<form> _____ </form>
```

f) list of form elements -

~~form elements~~

```
<form> _____ </form>
```

This is used to create form if the web browser which part of the web page content is part of a form.

* Method = "get"

* Method = "post"

g) span tag -

The `` tag is an inline container used to mark up a part of a text, or a part of a document.

the tag is easily styled by CSS or manipulated with JavaScript using the class or id attribute.

example -

```
<html>
<body>
<h2> the span element </h2>
<p> my mother has <span style = "color: blue">
>blue </span>
eyes & my father has <span style = "color:
red; dark green"> eyes </p>
</body>
</html>
```

b) frame tag - <frame> tag is used to divide web browser window into multiple sections each capable of loading content independently. This is achieved using a collection of frames within a frameset tag.

ex -

```
<html>
<body>
<h1> the frame element </h2>
<p> frameset = " https://www.w3schools.com"
title = " w3Schools free online web tutorial"
als ">
<i Frame>
<i framesrc = " https://www.w3schools.com/
html/default.asp" title = "facebook">
</body>
</html>
```

Q3 Design a log in Form using HTML, CSS &

JavaScript

→ <html>

<head>

<title> login page </title>

</head>

<body background="powderblue">

<center>

<h2> Assignment </h2>

<form>

<h2> student login form
 </h2>

</h1>

<label> username </label>

<input type="password" id="pass";

name="password" maxLength="2">

<button type="submit" "check length">

login </button>

</form>

</center>

<script>

function check login

{

var u = document.getElementById("User")
 .value

var p = document.getElementById("Pass")
 .value

if (u == "admin" && p == "bc@123")

{

 alert("Login successful");

}

```
else  
{  
    alert ("Login unsuccessful");  
}  
</script>  
</html>
```

Q4] Explain the levels of style sheet in CSS.

→ ~~a~~ Internal CSS - An internal style sheet may be used if one single HTML page has a unique style the internal style is defined inside the `<style>` element inside the head section.

General form:

```
<style type = "text/css">  
rule list  
</style>
```

ex:

```
<html>  
<head>  
<style>  
body
```

{

```
background-color: linen;
```

h2

{

```
color: blue;
```

```
margin-left: 40px;
```

}

```
< | styles>
< | head>
< body>
< h1> this is a heading < h1>
< p> this is a paragraph < p>
< | body>
< | html>
```

* External CSS - The external style sheet is generally used when you want to make changes on multiple pages. External style are defined with the `<link>` element, inside the `<head>` section of an HTML page. The external style sheet can be written in any text editor, & must be saved with a .css extension.

General form :

```
< link rel = "stylesheet" type = "text/css"
      href = "http://www.whenever.org/tempo-
      oper.css">
< | link>
```

ex :

```
< html>
< head>
< link rel = "stylesheet" href = "mystyle.css">
< | head>
< body>
< h1> this is a heading < h1>
< p> this is a paragraph < p>
< | body>
< | html>
```

Body {

background-color: lightblue;

}

h1 {

color: navy;

margin-left: 30px;

}

c] Inline CSS - In inline style may be used

to apply a unique style for a single element

- To use inline style add the style attribute to the relevant element. the style attribute can contain any CSS property
- General format

Style = "property-1: value-1;
property-2: value-2;

.....
property-n: value-n;

- ex:

<html>

<body>

<h1 style="color: blue; text-align: center;">

">

this is a heading </h1>

<p style="color: red;"> this is a parag-

naph. </p>

</body>

</html>

Q3] explain Screen output & keyboard input in

javascript

→ using HTML

To access an HTML elements javascript
Can use to document.getElementById("id")
Method.

- example

<html>

<body>

<h1> my first web page </h1>

<p> my first paragraph </p>

<p> id = "demo" ></p>

<script>

document.getElementById("demo").innerHTML

HTML =

</script>

</body>

</html>

* Using document.write()

example

```
<html>
<body>
<h1> my first web page </h1>
<script>
</body>
</html>
```

* using window.alert()

ex:

```
<html>
<body>
<script>
window.alert('ts');
</script>
</body>
</html>
```

* using console.write()

ex:

```
<html>
<body>
<p> F12 on your keyboard will activate
debugging
<p> then select "Console" in the debugg
ing menu </p>
<script>
console.log('ts');

```

```
</script>  
</body>  
</html>
```

Keyboard I/O in JavaScript

- * Using `prompt()` for user I/O.
In `prompt()` function is one of the simplest ways to get user I/O in JavaScript.

This built-in function opens a dialog box where the user can type something. The value is returned as string.

• ex:

```
<html>  
<body>  
<script>
```

```
let username = prompt("what is your name")
```

```
alert("Hello", + username + " !");
```

```
</script>  
</body>
```

(~~error~~)

