

Assignment-1

1. What is Javascript.

- Javascript is used provide dynamic Webpage behaviour hence its is called "scripting language"
- Javascript is represent by using Syntax. hence it is called as "programming language".
- Dynamic Webpage behaviour is Nothing but user can observes the changes in the Webpage without Refreshing or Reloading.
- It is present in human Readable format which means it contains Alphabets, Numbers, special characters (-, \$) hence it is called as the "high level language"
- Programmers will write code on each and every Real-time easily. which means by using Objects hence it is Referred as the "Object oriented language"

2. What is high level language.

- Javascript is present in human Readable format which means it contains Alphabets, Numbers, special characters. hence it is called as the "high level language".
- The features of the highlevel language are Human-Readable Syntax, portability.

3. What is programming, what is oops?

- Programming refers to technological process for telling to a computer which tasks to perform in order to solve problems.
- you can think of programming as a collaboration between humans and computers, in which humans create instructions for a computer to follow in language computer can understand.
- programming is set of instructions passing to the computer
- oops is the Nothing But Object-oriented programming programmers will write code on each and every Real Time entity (examples: Car, Mobile, projector...etc)

Concepts:

- 1. Class
 - 2. Objects
 - 3. Inheritance
 - 4. polymorphism
 - 5. Abstraction
 - 6. Encapsulation
 - 7. Methods.
- pillars of oop's

4. What does HTML stands for?

- HTML stands hyper-Text Markup language
- Markup language is Nothing But to describes the its structure and presentation.
- hyper text refers to links that the connect

Webpages to one to another.

→ HTML is Represented by the Tags, Tags are Represented <>.

5. What is the purpose of HTML?

→ To develop structure of Web page programmers are using the "HTML"

→ The purpose of HTML is to create the Webpages and tells the browser how to display them.

6. What is HTML element?

→ Technically element is collection of starting Tag, also end Tag, between Content.

Example: <tag Name> Content </tag Name>

→ Some HTML elements have no Content, These elements are called "empty elements".

→ Empty elements don't have an end tag.

Example:
, <hr>

7. HTML Attribute:-

→ HTML attribute is a piece of Markup language used to adjust the behaviour or display of an HTML element.

→ attributes can be used to change the color, size, Background Color..etc

Ex: style="color: Red";

8. difference between a Block-level element and inline element

- Inline elements will appear on same line, block elements will appear on different line on web page.
- It will acquire required space on the webpage as per Content but Block elements will acquire exact width of webpage.
- Programmers can't change width and height of the inline elements. But Block level elements are ^{possible} modify width and height of these elements.
- Examples of inline elements are ``, ``, `<mark>` and examples of Block level elements are `<fieldset>`, `<h1>`

9. Common block-level elements :-

- | | |
|----------------------------------|--------------------------------|
| 1) <code><form></code> | 7) <code><p></code> |
| 2) <code><fieldset></code> | 8) <code><header></code> |
| 3) <code><hr></code> | 9) <code><nav></code> |
| 4) <code><div></code> | 10) <code><list></code> |
| 5) <code><h1></code> | |
| 6) <code><section></code> | |

10. Common Inline elements :-

- | | |
|--------------------------------|--------------------------------|
| 1) <code><a></code> | 5) <code><select></code> |
| 2) <code></code> | 6) <code></code> |
| 3) <code><button></code> | 7) <code></code> |
| 4) <code><i></code> | 8) <code><mark></code> |

11. purpose of `<head>` element in HTML document?

- It consists of Coding which is responsible to appear on the header section of web page.
- It is used to Mention information about the web page.

12. Create a hyperlink in HTML

- hyperlink means to link from one page to another.
- To Create the hyperlinks in html, programmers can use in three ways. Mostly.
 1. Text Content
 2. Buttons.
 3. Images.

→ Hyperlinks can be created by using `` Tag.

→ anchor Tag takes two important attributes

1. `href` (hyperlink reference) :-

→ used to Mention the Next html file name/url which has to be displayed after user clicks.

2. `Target` :-

→ Used to open the hyperlink in new tab of browser and takes value as "`_blank`"
`"blank"`

Ex: `New`

13. Role of <meta> tag in HTML:

- The <meta> tag defines metadata about an html document: metadata is nothing but information about data.
- Metadata is used by browsers, because of the how to display Content or Reload page
- The important use of <meta> tag use is Controlling the tab width below is the example
Ex: <meta name="viewport" content="width=device-width, initial-scale=1.0">

"width=device-width" part sets the width of page to follow the screen-width of device (which will vary depending on the device)

"initial-scale=1.0" part sets the initial zoom level when page is first loaded by browser.

14. What does CSS stands for?

- C.S.S stands for Cascading Style sheet.

Cascading is algorithm for solving conflicts where multiple C.S.S rule apply to an HTML element. Style sheet is structure of code controls webpage.

15. purpose of C.S.S:-

- C.S.S is styling language which is specially developed to decorate webpages.

→ C.S.S is used to describe look of webpage.

16. how do apply C.S.S to HTML document?

→ C.S.S will applying to HTML in 3 ways.

1. Inline C.S.S

2. Internal C.S.S

3. External C.S.S

→ Inline C.S.S Coding is done by using "Style" attribute with in html tag.

Example: <fieldset style="Color: red"> Username</fieldset>

→ Internal C.S.S Coding all the properties and its corresponding values are given within <style></style> which must be in html file inside <head></head>

Example: - <style>

Tag names

C.S.S property1 : value1 ;

C.S.S property2 : value2 ;

</style>

→ External C.S.S Coding all properties and its corresponding values are given in separate C.S.S file and linked with html file by using <link></link>"

Example:

<link rel="stylesheet" href="C.S.S file name.css">

</link>

17. C.S.S Selector

→ They are used to Select html tag in C.S.S Code for providing different C.S.S properties.

These are four types of selectors .

- a. Tag name selector
- b. Id selector
- c. Class selector
- d. Group selector

18. difference between a class selector and Id selector in C.S.S

- class selector is used to applies the C.S.S for more than one tag but not for all tags
- Id selector is basically prefered if C.S.S has to be applied on only one html tag.
- class selector is represented in C.S.S file by using " ." dot
- Id selector is represent in C.S.S file by using the "#abc"
- for class selector declare "class" attribute with some identifier for html tags.
- for Id selector declare "id" attribute to the html tag to which C.S.S has to be applied.

19. how do you center a block element horizontally in C.S.S.

- using the "flex" property for the placing the block-level element horizontally at center
- if you want to place vertically at center by using the flex.

Example :-

• Container {

(element is place in a row) display: flex;

(element place at center hori..) justify-content: center;

-zontally align-items: center;

}

20. What is the box Model in C.S.S?

→ As a programmer we are using C.S.S box Model to provide space around the html elements and make the element look nest and clean.

→ C.S.S Box Model involves three important C.S.S properties

1. Border

2. Margin

3. padding

→ Border property is used to prosovide border for html elements.

→ It consist three important Values.

i) Border-type : Solid, dashed, dotted, double.

- 2) Border-Color: red, yellow -- etc ;
- 3) Border-Size: (as per requirement) 3px;

Example:- form {

 Border: Solid blue 10px;

 Border-Right: Solid red 2px;

 Border-bottom: 0px;

 Border-top : 2px;

}

→ Margin property is used to Create space around html elements but outside of the border.

→ programmers Can apply Margin to all sides as well as specific side of element.

→ To apply Margin for specific side of the element we have to Make use of following C.S.S property.

1. Margin-left
2. Margin- Right
3. Margin- bottom
4. Margin- top

Example: div {

 margin: 50px;

 Margin-top: 20px;

 Margin-bottom: 0px;

}

- Padding property is used to create space around the html elements or text content but inside the border.
- It can apply for all four sides as well as specific side

Example: `fieldset`

```
padding: 10px;  
padding-right: 20px;  
padding-bottom: 0px;
```

}

21. How can you add a background color to an HTML element using C.S.S?

- To add the background-color to an HTML element using C.S.S, you can use "background-color" property and specify the color you want.

Example: `.element`

```
background-color: #ff0000;
```

}

22. What is a C.S.S pseudo-class? What are media queries in C.S.S?

- Pseudo classes are used to provide C.S.S properties depends on user action as well as to give special effect for

html element.

→ There are some of pseudo classes are given below.

1. hover :-

→ To apply C.S.S properties when user place the cursor on html element.

Example: `form:hover { background-color: blue; }`

2. Active :-

→ To apply C.S.S properties if user click on html element.

Example `button:active { background-color: Silver; border: solid red 2px; }`

3. link and visited :-

→ "link" is used to apply C.S.S property before click on the hyperlink, whereas "visited" is used to apply C.S.S property once user can open the hyperlink to visit webpage i.e after click on hyperlink.

Example: `a:link { color: green (before click) }`
 `a:visited { color: red (after click) }`

Media-Queries in C.S.S :-

- Media Queries in C.S.S are used to apply different styles based on characteristics of the device or browser displaying the page.
- Media Queries are commonly used in web development for creating "Responsive design".
- Major advantage is adjusting layout, adapting Typography, hiding or showing content as per device requirement.

Example :

① media only screen and (max-width: 600px)

```
{  
  body {  
    font-size: 14px;  
  }  
}
```

```
.container { width: 100%;  
}  
}
```

- In above example the styles within the media query will only apply when screen width is 600 pixels or less.

- You can use media queries after all C.S.S properties only.