## **Assignment**

Course: Meanstack\_May Batch(1&2)

Portions: Html, CSS ,Bootstrap, Git n Github, java script

Faculty: Sajay

1. Define HTML? Explain the layout of HTML?

Ans:

- HTML stands for Hyper Text Makeup Language.
- Used to create web pages, which describe the structure and contents of a web page
- Layout include <doc type>,<head>,<title>and <body>
  - i. <doc type> it define that the document is an HTML
  - ii. <head> includes meta tag which include the information needed for the browser.
  - iii. <title> include the title of the HTML page displayed on the browser
  - iv. <body> contain all data to be displayed on the HTML page.

### 2. Define the terms:

• <u>HTML element & HTML tags</u>: HTML elements define the property, for example, p element describes the paragraph. It is written with an opening tag and a closing tag

Eg: contents

- <u>HTML attributes</u>: it provides additional information about the element. Eg. Class, id, src.etc
- <u>HTML iframe</u>: it is used to display a web page within a web page. <iframe></iframe>

### 3. HTML 5 VS. HTML?

- In HTML videos and audios are not supported, whereas in HTML5 both are supported
- ii. HTML is compatible with almost all browsers, whereas HTML5 is supported by modern browsers.

- iii. HTML is unable to handle errors but HTML5 is capable if handling errors.
- iv. HTML uses browser cache memory as storage but HTML5 has multiple storage options like application cache, SQL database and web storage

#### 4. What is SVG in HTML?

Ans:

SVG stands for Scalable Vector Graphics and it is a language for describing 2D-graphics and graphical applications in XML.

SVG is mostly useful for vector type diagrams like Pie charts, Two-dimensional graphs.

5. Define CSS. What are its components and types?

#### Ans:

- CSS stands for Cascade Styling Sheet which helps to make the web page more presentable. Different styling techniques and color coding can be implemented in html page using CSS.
- Main components of CSS are:
  - i. Selector: select elements using id name or class name.
  - ii. Property: it includes color, text size, alignment etc
  - iii. Values: allocate value for property
- Types:

Inline – the properties of css are included in the same line with html elements.

Internal – css is embedded within the html page in the head section.

External – External css file is created with .css extension which contain only the styling properties.

6. Differentiate CSS box model and flex box with examples.

Ans: Box model is a box which wraps around every HTML elements. It consist of margins, borders, padding and actual contents.

Flex Box is a one dimensional layout model. We can align each block one after the other inline and can provide equal spacing.

7. What is cell spacing and cell padding?

Ans: Cell spacing specifies the spacing between cells, that is, the white space between edges of adjacent cells.

Cell padding specifies the space between the border of a cell and its contents, that is, the white space between the edge of cell and its contents.

## 8. What is bootstrap?

Ans: Bootstrap is a HTML,CSS and JavaScript framework used for advanced styling.

### 9. Define the terms:

- bootstrap carousel: it is a slide show of series of content, which include images, text and custom makeup
- bootstrap grid system: It uses a series of containers, rows and columns to layout and align contents. It is fully responsive.
- bootstrap navbar: It is a navigation header that is placed at the top of the page.
- 10. What is GIT? Explain the Git architecture?

Ans: GIT is a version control system for tracking changes to file.

Three Tree Architecture of Git are:

Working Directory which contains changes that are untracked by Git.

<u>Staging Index</u> which contains changes that need to be committed into the repository.

Repository being tracked by Git

11. Difference between 1. GIT and GitHub 2. git pull and git fetch?

Ans:

 Git is a version control system that lets you manage and keep track of your source code history.

GitHub is a cloud-based hosting service that lets you manage Git repositories.

- ii. Git fetch is the command that tells your local git to retrieve the latest data information from the original where as git pull on the other hand brings (copy) those changes from the remote repository.
- 12. What is java script? List its features.

Ans:

JavaScript is a dynamic computer programming language. It is most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages.

#### Features Include,

- Giving the user more control over the browser.
- It is light weighted.
- JavaScript is a scripting language and it is not java.
- JavaScript is case sensitive.
- JavaScript is object based language as it provides predefined objects.
- Most of the javascript control statements syntax is same as syntax of control statements in C language.
- An important part of JavaScript is the ability to create new functions within scripts
- Declare a function in JavaScript using function keyword.
- 13. What is the difference between Local storage & Session storage?

#### Ans:

LocalStorage is a property that allows JavaScript sites and apps to save key-value pairs in a web browser with no expiration date. This means the data stored in the browser will persist even after the browser window is closed.

The sessionStorage object stores data only for a session. It means that the data stored in the sessionStorage will be deleted when the browser is closed. A page session lasts as long as the web browser is open and survives over the page refresh.

14. What is 'this' keyword in JavaScript?

Ans: this keyword is used to point to current class instance variable.

15. What are all types of Pop-up boxes available in JavaScript?

# Ans:

In JavaScript has three kinds of popup boxes: Alert box, Confirm box, and Prompt box.

An <u>alert box</u> is often used if you want to make sure information comes through to the user.

A confirm box is often used if you want the user to verify or accept something.

A <u>prompt box</u> is often used if you want the user to input a value before entering a page.

16. What is the difference between === operator and == operator? Explain with an example.

Ans: == in JavaScript is used for comparing two variables, but it ignores the data type of variable. === is used for comparing two variables, but this operator also checks data type and compares two values. It returns true only if both values and data types are the same for the two variables.

17. Explain what is pop () and push () method in JavaScript?

```
Ans: pop(): Remove an item from the end of an array.

push(): Add items to the end of an array.
```

18. Explain try n catch concept in java string using examples.

Ans: The try statement lets you test a block of code for errors.

The catch statement lets you handle the error.

```
Eg: try{if(age>18){
Throw error("invalid")}
}
Catch{
console.log(error)
}
```

19. Explain error and exception handling with examples.

Ans:

There are three types of errors in programming: (a) Syntax Errors, (b) Runtime Errors, and (c) Logical Errors.

<u>Syntax errors</u>, also called parsing errors, occur at compile time in traditional programming languages and at interpret time in JavaScript. Eg: window.print(; <u>Runtime errors</u>, also called exceptions, occur during execution (after compilation/interpretation). Eg: trying to call a method that does not exist.

Logic errors can be the most difficult type of errors to track down. These errors are not the result of a syntax or runtime error. Instead, they occur when you make a mistake in the logic that drives your script and you do not get the result you expected. JavaScript implements the try...catch...finally construct as well as the throw operator to handle exceptions. The try block must be followed by either exactly one catch block or one finally block (or one of both). The throw statement to raise your built-in exceptions or your customized exceptions.

### 24. What is DOM?

#### Ans:

DOM stands for Document Object Model. DOM is a programming interface for HTML documents. It represents the page so that programs can change the document structure, style, and content. The DOM is an object-oriented representation of the web page, which can be modified with a scripting language such as JavaScript.