MODULE: 6

(JavaScript Basic & DOM)

1] What is JavaScript?

A] Javascript is a high-level, versatile programming language primarily used for adding interactivity and behavior to websites. It is commonly used for client-side web development, allowing developers to create dynamic content, manipulate the document object model (DOM), and handle user interactions within web browsers.

2] What is the use of isNaN function?

A] The ‘isNaN’ function in Javascript is used to determine weather a value is NaN (Not-a-Number) or not. It returns ‘true’ if the value is NaN, and ‘false’ if it is a valid number or can be converted to one.

Eg: -

javascript

isNaN(10); //false

isNaN(“Hello”); //true

3] What is negative Infinity?

A] Negative Infinity is a special numeric value in javascript representing negative infinity, which is a value smaller than any other number. It is often the result of arithmetic operations that yield a value that is too small to be represented in javascript.

Number.NEGATIVE\_INFINITY.

4] Which company developed JavaScript?

A] Javascript was developed by Netscape Communications corporation, now known as Mozilla corporation

5] What are undeclared and undefined variables?

A]

* Undeclared Variables:

These are variables that have been used in code without being declared using ‘var’, ‘let’, or ‘const’. using an undeclared variable can lead to unexpected behavior or errors.

* Undefined Variables:

These are variables that have been declared but have not been assigned a value. They have the value ‘undefined’ until a value is assigned to them

6] Write the code for adding new elements dynamically?

A] To add new elements to the DOM dynamically using JavaScript, you can create elements, set their attributes and content, and then approved them to an existing element.

* Here’s an example to add a new paragraph element to a div with the id “mydiv”:

Javascript

//create a new div element

Var newDiv = document.createElement(“div”);

//set some attributes or properties for the new div

newDiv.className= “new-div”;

newDiv.innerHTML = “This is new div element.”;

//Append the new div to an existing element with id “container”

Var container = document.getElementById(“container”)

container.appendChild(newDiv);

7] What is the difference between ViewState and SessionState?

A]

* ViewState:

ViewState is a client-side state management technique used in ASP.NET to store the state of controls on a web page across postbacks. It is stored in a hidden field on the page and is specific to a single page request.

* SessionState:

SessionState is a server-side state management technique used to store user-specific data across multiple page requests. . It is stored on the server and is available to multiple pages during a user's session.

8] What is === operator?

A] The `===` operator in JavaScript is the strict equality operator. It compares two values for equality without performing type coercion. It returns `true` if both the value and the type of the operands are the same, and `false` otherwise.

9] How can the style/class of an element be changed?

A] You can change the style or class of an HTML element using JavaScript:

* To change the style:

Javascript

Document.getElementById(“elementid”).style.

Property = “value”;

* To change the class:

Javascript

Document.getElementByid(“elementid”).

className “newClassName”;

10]How to read and write a file using JavaScript?

A] In a web browser environment, JavaScript cannot directly read or write files on the user's system due to security restrictions. However, you can work with files using server-side JavaScript (e.g., Node.js) or through HTML file input elements and server-side processing.

const fs = require("fs");

fs.readFile("filename.txt", "utf8", (err, data) => {

if (err) {

console.error(err);

return;

}

console.log(data);

});

11]What are all the looping structures in JavaScript?

A] JavaScript provides several looping structures, including:

* ‘for’ loop
* ‘while’ loop
* ‘do…while’ loop
* ‘for…in’ loop
* ‘for…of’ loop

12]How can you convert the string of any base to an integer in JavaScript?

A] You can convert a string representing a number in a specific base to an integer in base 10 (decimal) using the `parseInt` function with a radix parameter.

For example, to convert a binary string to an integer:

Javascript

var binaryString = “1010”;

var decimalNumber = parseInt(binaryString, 2); // 10

13] What is the function of the delete operator?

A] The ‘delete’ operator in JavaScript is used to remove a property from an object or to delete an element at a specified index in an array. It does not work on variables or function declarations. It sets the deleted property or array element to `undefined` and does not change the length of the array.

14] What are all the types of Pop-up boxes available in JavaScript?

A] JavaScript provides three types of pop-up boxes:

* ‘alert’: Displays a simple message with an "OK" button.
* ‘confirm’: Displays a message with "OK" and "Cancel" buttons, allowing the user to confirm or cancel an action.
* ‘prompt’: Displays a message with an input field for the user to enter data.

15] What is the use of Void (0)?

A] ‘void(0)’ is often used in JavaScript to create a hyperlink that doesn't perform any action when clicked. It prevents the browser from navigating to a new page when a link is clicked. It's typically used in cases where you want to execute JavaScript code without leaving the current page.

16]How can a page be forced to load another page in JavaScript?

A] You can force a page to load another page in JavaScript by setting ‘window.location’ to the URL of the page you want to navigate to.

Javascript

window.location.href = "https://www.example.com/newpage.html";

17]What are the disadvantages of using inner HTML in JavaScript?

A] Using ‘innerHTML’ to manipulate the DOM in JavaScript can have some disadvantages:

* Security risk:

It can expose your application to cross-site scripting (XSS) attacks if you insert user-generated content directly into the HTML using ‘innerHTML’.

* Performance:

Replacing the entire content of an element with ‘innerHTML’ can be less efficient than using other DOM manipulation methods for making small changes.

* Parsing:

‘innerHTML’ requires parsing the provided HTML, which can be slower than directly creating and appending DOM elements.

18] Create password field with show hide functionalities

A]