**Module 6 JAVASCRIPT BASIC & DOM**

1. What is JavaScript?

JavaScript is a scripting language that enables you to create dynamically updating content, control media, animate images etc.

1. What is the use of isNaN function?

This Function is used to check whether the given value is illegal number or not.

It returns true if the number is NaN else return false.

1. What is negative Infinity?

Negative infinity means it is a constant value that is used to represent a value that is the lowest available.

1. Which company developed JavaScript?

JavaScript was created at Netscape Communications by Brendan eich in 1995.

1. What are undeclared and undefined variables?

Undefined variable: When a variable has been declared but has not been assigned any value.

Undeclared variable: When we try to access any variable that is not initialized or declared earlier using var or const keyword.

1. Write the code for adding new elements dynamically.

Code for adding new elements dynamically is given below:

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.0/jquery.min.js"></script>

</head>

<body>

    <script>

    //  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 a new div element.";

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

var container = document.getElementById("container");

container.appendChild(newDiv);

</script>

</body>

</html>

1. What is the difference between ViewState and SessionState?

|  |  |  |  |
| --- | --- | --- | --- |
| View state | Session state |  |  |
| Maintained at page level only | Maintained a session level |  |  |
| Information is stored on the clients end only | Information is stored on the server |  |  |
| It can be used to store information that you wish to access from same web page | It can be used to store information that you wish to access on different web page |  |  |

1. What is === operator?

This is strict equally operator. It is used to check whether its two operands are equal.

For example: <!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

</head>

<body>

<script>

    console.log(1===1)

</script>

</body>

</html>

1. How to read and write a file using JavaScript?

To read a file using JavaScript is shown below:

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

To write a file using JavaScript is shown below:

Fs.writeFile("filename.txt", "utf8", (err, data).

10.What are all the looping structures in JavaScript?

Different kinds of loops are mentioned below:

For loop

While loop

Do..while loop

For..in loop(loop through the properties of an object)

For..off(loops through the values of an iterable object)

11.How can you convert the string of any base to an integer in JavaScript?

In JavaScript parselnt() function is used to return an integer of the base which is specified in the second argument of the parselnt() function.

For Example:

<script>

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

document.getElementById("demo").innerHTML =

parseInt("10") + "<br>" +

parseInt("10.00") + "<br>" +

parseInt("10.33") + "<br>" +

parseInt("34 45 66") + "<br>" +

parseInt(" 60 ") + "<br>" +

parseInt("40 years") + "<br>" +

parseInt("He was 40");

</script>

Output will be:

10

10

10

34

60

40

NaN

12. What is the function of the delete operator?

Function of the delete operator is to remove a property from an object.

For example:

Delete object

Delete object.property

13. What are all the types of Pop up boxes available in JavaScript?

<script>

// alert box

// function a() {

// alert("404")

// }

// confirm box

// var txt

// function a() {

// if (confirm("enter your name")) {

// txt = "ok"

// }else{

// txt = "No"

// }

// document.getElementById("one").innerHTML = txt

// }

// prompt box

function a() {

var txt

var per=prompt("plz enter your name")

if (per == ""|| per == null) {

txt="plz enter your name"

} else {

txt="hii "+per+" how are you"

}

document.getElementById("one").innerHTML=txt

}

</script>

14. What is the use of Void (0)?

Void(0) means returning undefined as a primitive value.

15. How can a page be forced to load another page in JavaScript?

In JavaScript we can use window location object to force a page to load another page.

By using window.location.href = “url”;

16. What are the disadvantages of using innerHTML in JavaScript?

Disadvantages of using innerHTML is given below:

-Breaks the document.

-Used for cross-site scripting

-Replacement is done everywhere

17. How can the style/class of an element be changed?

To changed styele/class of an element we can use

Document.getElementById(“id”).style.property = new\_style.

Document.getElementById(“id”).classList.

18. Create password field with show hide functionalities

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

Enter Password:<input type="password" value="" id="1234">

<br>

<input type="checkbox" onclick="myFunction()">Show password

<script>

function myFunction() {

var x = document.getElementById("1234");

if (x.type === "password") {

x.type = "text";

} else {

x.type = "password";

}

}

</script>

</body>

</html>

19. Create basic math operation in JS

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<H2>Math Operations</H2>

Enter 1st number: <input type="number" value="number" id="number"></input>

<br>

<br>

Enter 2nd number: <input type="number" value="number" id="number"></input>

<br>

<br>

<div class="buttons\_list">

<button class="op\_button" onclick="addFun()">+</button>

<button class="op\_button" onclick="subFun()">-</button>

<button class="op\_button" onclick="mulFun()">\*</button>

<button class="op\_button" onclick="divFun()">/</button>

<button class="op\_button" onclick="modFun()">%</button>

</div><br>

<p class="center"><span class="restext">Result</span><br><br>

<span id="res"></span>

</p>

</div>

<script>

function addFun() {

var a = document.getElementById("number").value;

var b = document.getElementById("number").value;

var r = +a + +b;

document.getElementById("res").innerHTML = r;

}

function subFun(){

var a = document.getElementById("number").value;

var b = document.getElementById("number").value;

var r = +a - +b;

document.getElementById("Answer is").innerHTML = r;

}

function mulFun(){

var a = document.getElementById("number").value;

var b = document.getElementById("number").value;

var r = +a \* +b;

document.getElementById("Answer is").innerHTML = r;

}

function divFun(){

var a = document.getElementById("number").value;

var b = document.getElementById("number").value;

var r = +a / +b;

document.getElementById("Answer is").innerHTML = r;

}

function modFun(){

var a = document.getElementById("number").value;

var b = document.getElementById("number").value;

var r = +a % +b;

document.getElementById("Answer is").innerHTML = r;

}

</script>

</body>

</html>

20. Create a slider using javascript

<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<style>

\* {box-sizing: border-box}

.mySlides1, .mySlides2 {display: none}

img {vertical-align: middle;}

/\* Slideshow container \*/

.slideshow-container {

max-width: 1000px;

position: relative;

margin: auto;

}

/\* Next & previous buttons \*/

.prev, .next {

cursor: pointer;

position: absolute;

top: 50%;

width: auto;

padding: 16px;

margin-top: -22px;

color: white;

font-weight: bold;

font-size: 18px;

transition: 0.6s ease;

border-radius: 0 3px 3px 0;

user-select: none;

}

/\* Position the "next button" to the right \*/

.next {

right: 0;

border-radius: 3px 0 0 3px;

}

/\* On hover, add a grey background color \*/

.prev:hover, .next:hover {

background-color: #f1f1f1;

color: black;

}

</style>

</head>

<body>

<h2 style="text-align:center">Multiple Slideshows</h2>

<p>Slideshow 1:</p>

<div class="slideshow-container">

<div class="mySlides1">

<img src="img\_nature\_wide.jpg" style="width:100%">

</div>

<div class="mySlides1">

<img src="img\_snow\_wide.jpg" style="width:100%">

</div>

<div class="mySlides1">

<img src="img\_mountains\_wide.jpg" style="width:100%">

</div>

<a class="prev" onclick="plusSlides(-1, 0)">&#10094;</a>

<a class="next" onclick="plusSlides(1, 0)">&#10095;</a>

</div>

<p>Slideshow 2:</p>

<div class="slideshow-container">

<div class="mySlides2">

<img src="img\_band\_chicago.jpg" style="width:100%">

</div>

<div class="mySlides2">

<img src="img\_band\_la.jpg" style="width:100%">

</div>

<div class="mySlides2">

<img src="img\_band\_ny.jpg" style="width:100%">

</div>

<a class="prev" onclick="plusSlides(-1, 1)">&#10094;</a>

<a class="next" onclick="plusSlides(1, 1)">&#10095;</a>

</div>

<script>

let slideIndex = [1,1];

let slideId = ["mySlides1", "mySlides2"]

showSlides(1, 0);

showSlides(1, 1);

function plusSlides(n, no) {

showSlides(slideIndex[no] += n, no);

}

function showSlides(n, no) {

let i;

let x = document.getElementsByClassName(slideId[no]);

if (n > x.length) {slideIndex[no] = 1}

if (n < 1) {slideIndex[no] = x.length}

for (i = 0; i < x.length; i++) {

x[i].style.display = "none";

}

x[slideIndex[no]-1].style.display = "block";

}

</script>

</body>

</html>