JAVA SCRIPT & DOM ASSIGNMENT

1. What is Javascript ?

- JavaScript is the Programmimg Language that allows web pages to be more interactive and dynamic.

JavaScript is a scripting or programming language that allows you to implement complex features on web pages.

2. What is the use of NaN function?

- NaN stands for Not a Number , it is a value in javascript used to represent an undefined or unrepresntable value.

The NaN method returns true if a value is NaN.

The NaN method converts the value to a number before testing it.

3. What is negative Infinity?

- Negative Infinity is a special numeric value that is returned when a arithmetic operation or mathematical function generates a negative value greater than the largest representable number in javascript.

4. Which company developd Javascript ?

- JavaScript was created at Netscape Communication by Brendan Eich in 1995.

Netscape and Eich designed javascript as a scripting language for use with the company’s flagship web browser, Netscape Navigator.

5. What are undeclared and undefined variables ?

- In Javascript , an underclared variable is a variable that has not been declared with a keyboard like var , let, or const, while an undefined variable is a variable that has been declared but has not been assigned.

Undeclared

A variable is undeclared when it has not been created. Accessing an undeclared variable will throw a ReferenceError. For example, console.log(x); will throw a ReferenceError: x is not defined.

Undefined: It occurs when a variable has been declared but has not been assigned any value. Undefined is not a keyword. Undeclared: It occurs when we try to access any variable that is not initialized or declared earlier using the var or const keyword.

6. Write the code for adding new elements dynamically?

- <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content=

"width=device-width, initial-scale=1.0">

<style>

html,

body {

height: 100%;

width: 100%;

}

.button {

display: flex;

align-items: center;

justify-content: center;

}

.tasks {

display: flex;

justify-content: center;

align-items: center;

flex-direction: column;

margin-top: 20px;

}

</style>

</head>

<body>

<div class="button">

<button id="addTask">Add task</button>

</div>

<div class="tasks"></div>

<script type="text/javascript">

}

})

</script>

</body>

</html>

7. What is the difference between ViewState and SessionState ?

- View State : Stores data that’s specific to a web form and doesn’t need to be shared across pages. It’s useful for non-sensitive data that needs to maintained between postbacks.

- SessionState : Stores data that’s specific to a single user and a session, and dosen’t need to be persisted after the session ends. It’s useful for short- lived data, like temporary data in multi-page forms.

8. What is ===operator ?

- In JavaScript ==== is a strict equality operator . It checks if two values are equal and also ensures they are of the same type.

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

- The fs.readFile() method is used to read files on your computer.

The file is read using the fs.readFile() function , which is an inbuilt method. This techniques ready the full file into memory and stores it in a buffer.

filename: It contains the filename to be read, or the whole path if the file is saved elsewhere.

encoding: It stores the file’s encoding. ‘utf8’ is the default setting.

callback function: This is a function that is invoked after the file has been read. It requires two inputs:

err: If there was an error.

data: The file’s content.

Return Value: It returns the contents contained in the file, as well as any errors that may have occurred.

-The fs.writeFile function is used to write data to write data to a file in an asynchronous manner. If the file already exists , it will be replaced.

file\_name: It’s a string, a buffer, a URL, or a file description integer that specifies the location of the file to be written. When you use a file descriptor, it will function similarly to the fs. write() method.

data: The data that will be sent to the file is a string, Buffer, TypedArray, or DataView.

options: It’s a string or object that may be used to indicate optional output options. It includes three more parameters that may be selected.

encoding: It’s a string value that indicates the file’s encoding. ‘utf8’ is the default setting.

mode: The file mode is specified by an integer number called mode. 0o666 is the default value.

flag: This is a string that indicates the file-writing flag. ‘w’ is the default value.

callback: This function gets invoked when the method is run.

err: If the process fails, this is the error that will be thrown.

10. What are all the looping structures in JavaScript?

- JavaScript supports different kinds of loops:

for - loops through a block of code a number of times

for/in - loops through the properties of an object

for/of - loops through the values of an iterable object

while - loops through a block of code while a specified condition is true

do/while - also loops through a block of code while a specified condition is true.

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

-There’s a function called parseInt() in JavaScript, this is used for parsing a string as an argument and it returns an integer of the specified radix (basically the base of the numerical system) as output.

There's a function called parseInt() in JavaScript, this is used for parsing a string as an argument and it returns an integer of the specified radix (basically the base of the numerical system) as output.

12. What is the function of the delete operator ?

- The delete operator in JavaScript removes a property from an object, along with its value. If the property's value is an object, and there are no more references to it, the object will be automatically released.

It can only be used on object properties, and it has no effect on variables or functions.

It should not be used on predefined JavaScript object properties, such as window, Math, and Date, as it can cause your application to crash.

It returns true when it removes a property, and false otherwise.

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

- JavaScript has three kind of popup boxes: Alert box, Confirm box, and Prompt box.

Alert Box

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

When an alert box pops up, the user will have to click "OK" to proceed.

Syntax

window.alert("sometext");

The window.alert() method can be written without the window prefix.

Example- alert("I am an alert box!");

Confirm Box

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

When a confirm box pops up, the user will have to click either "OK" or "Cancel" to proceed.

If the user clicks "OK", the box returns true. If the user clicks "Cancel", the box returns false.

Syntax

window.confirm("sometext");

Example- if (confirm("Press a button!")) {

txt = "You pressed OK!";

} else {

txt = "You pressed Cancel!";

}

Prompt Box

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

When a prompt box pops up, the user will have to click either "OK" or "Cancel" to proceed after entering an input value.

If the user clicks "OK" the box returns the input value. If the user clicks "Cancel" the box returns null.

Syntax

window.prompt("sometext","defaultText");

Example- let person = prompt("Please enter your name", "Harry Potter");

let text;

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

text = "User cancelled the prompt.";

} else {

text = "Hello " + person + "! How are you today?";

}

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

- This is where the JavaScript:void(0) will come in handy. When you use JavaScript void 0, it will return an undefined primitive value. This will prevent the browser from opening a new or reloading the web page and allowing you to call the JavaScript through it.

- The void operator is used to evaluate an expression and returns the undefined. Generally, this operator is used for obtaining the undefined primitive value. It is often used with hyperlinks. Usually the browser refreshes the page or loads a new page on clicking a link. The javascript:void(0) can be used when we don't want to refresh or load a new page in the browser on clicking a hyperlink.

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

- In JavaScript, you can force a page to load another page by using the window.location object. There are a few methods to achieve this. To force a page to load another page in JavaScript, we have multiple approaches:

Below are the approaches used to force a page to load another page in JavaScript:

Table of Content

Using window.location.replace

Using window.location.assign Property

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

- There are some disadvantages to using innerHTML in JavaScript. Disadvantages of using innerHTML property in JavaScript: The use of innerHTML very slow: The process of using innerHTML is much slower as its contents as slowly built, also already parsed contents and elements are also re-parsed which takes time.

- The use of innerHTML very slow: The process of using innerHTML is much slower as its contents as slowly built, also already parsed contents and elements are also re-parsed which takes time.

Preserves event handlers attached to any DOM elements: The event handlers do not get attached to the new elements created by setting innerHTML automatically. To do so one has to keep track of the event handlers and attach it to new elements manually. This may cause a memory leak on some browsers.

Content is replaced everywhere: Either you add, append, delete or modify contents on a webpage using innerHTML, all contents is replaced, also all the DOM nodes inside that element are reparsed and recreated.

Appending to innerHTML is not supported: Usually, += is used for appending in JavaScript. But on appending to an Html tag using innerHTML, the whole tag is re-parsed.