**Interview Questions**

1. **What Is HTML ?**

**A)** HTML stands for Hyper Text Markup Language.

HTML is the standard markup language for creating Web pages

HTML describes the structure of a Web page

HTML consists of a series of elements

HTML elements tell the browser how to display the content

1. **What Are The HTML Feutures ?**
2. **semantic** elements like <header>, <footer>, <article>, and <section>.

**control attributes** like number, date, time, calendar, and range.

**graphic** elements: <svg> and <canvas>.

**multimedia** elements: <audio> and <video>.

1. **What Is Struture Of the HTML ?**

**A)** The Basic Structure of The Html is Html ,Meta Tag, head,and

Body tag ..in the html

1. **What is Meta Tag ?**
2. The <meta> tag defines metadata about an HTML document. Metadata

is data (information) about data.

<meta> tags always go inside the <head> element, and are typically used to specify character set, page description, keywords, author of the document, and viewport settings.

1. **What do You Mean By Seletors ?**
2. A CSS selector selects the HTML element(s) you want to style.

CSS selectors are used to "find" (or select) the HTML elements you want to style.

Simple selectors (select elements based on name, id, class)

1. **What is Formatting Elements or Tags ? What Are They ?**

**A)** Formatting elements were designed to display special types of text:

* <b> - Bold text
* <strong> - Important text
* <i> - Italic text
* <em> - Emphasized text
* <mark> - Marked text
* <small> - Smaller text
* <del> - Deleted text
* <ins> - Inserted text
* <sub> - Subscript text
* <sup> - Superscript text

1. **What is Block Level Elements & Tags ?**
2. Most HTML elements are defined as block level elements or inline elements.Block level elements normally start (and end) with a new line, when displayed in a browser.Examples: <h1>, <p>, <ul>, <table>
3. **Layout Struture ?**

**A)** Formatting elements were designed to display special types of text:

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* <strong> - Important text
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1. **What Do you Mean By Div ?**
2. The <div> element is often used as a container for other HTML elements.

The <div> element has no required attributes, but both style and class are common.

When used together with CSS, the <div> element can be used to style blocks of content

1. **What are the Postions Explain ?**

**static -**Default value. Elements render in order, as they appear

in the document flow

**Fixed –**The element is positioned relative to the browser window

**Sticky-**The element is positioned based on the user's scroll

position

**Absolute –** The elements Which takes the Parent intiall postions to child.

**Relative-** The elements Which Takes the Child Intiall postions to Parent.

1. **What is pseudo Class ,Some Examples ?**

**A)** A pseudo-class is used to define a special state of an element.

For example, it can be used to:

* Style an element when a user mouses over it
* Style visited and unvisited links differently
* Style an element when it gets focus
* In indicates ‘ : ’ Symbol

1. **What Psedo Elements , Some Examples ?**

**A)** A CSS pseudo-element is used to style specified parts of an element.

For example, it can be used to:

* Style the first letter, or line, of an element
* Insert content before, or after, the content of an element

1. **What is Responsive Web ?**
2. Responsive Web Design makes your web page look good on all devices (desktops, tablets, and phones).

Responsive Web Design is about using CSS and HTML to resize, hide, shrink, enlarge, or move the content to make it look good on any screen:

1. **What is Media ?**

**A)** The media attribute specifies what media or device the linked document is optimized for.

This attribute is used to specify that the target URL is designed for special devices (like iPhone), speech or print media.

This attribute can accept several values.

Only used if the href attribute is present.

1. **What About Media Querry ?**

* width and height of the viewport
* width and height of the device
* orientation (is the tablet/phone in landscape or portrait mode?)
* resolution

Using media queries are a popular technique for delivering a tailored style sheet to desktops, laptops, tablets, and mobile phones (such as iPhone and Android phones).

1. **What Is Flex ?**

**A)** The flex property is a shorthand property for:

* [flex-grow](https://www.w3schools.com/cssref/css3_pr_flex-grow.asp)
* [flex-shrink](https://www.w3schools.com/cssref/css3_pr_flex-shrink.asp)
* [flex-basis](https://www.w3schools.com/cssref/css3_pr_flex-basis.asp)

The flex property sets the flexible length on flexible items.

It is One Dimenstion Either Column Or Row

1. **What is Grid ?**

**A)**A **grid** is a series of rows where the developer specifies the content. Define a **grid** block by specifying rows from a cPlan and the strings in those rows.

* [grid-template-rows](https://www.w3schools.com/cssref/pr_grid-template-rows.asp)
* [grid-template-columns](https://www.w3schools.com/cssref/pr_grid-template-columns.asp)
* [grid-template-areas](https://www.w3schools.com/cssref/pr_grid-template-areas.asp)
* [grid-auto-rows](https://www.w3schools.com/cssref/pr_grid-auto-rows.asp)
* [grid-auto-columns](https://www.w3schools.com/cssref/pr_grid-auto-columns.asp)
* [grid-auto-flow](https://www.w3schools.com/cssref/pr_grid-auto-flow.asp)

1. **What Do you Mean By Tag ? types**

**A)** The <html> tag represents the root of an HTML document.

The <html> tag is the container for all other HTML elements (except for the [<!DOCTYPE>](https://www.w3schools.com/tags/tag_doctype.asp) tag).

Basic HTML Root Tags, Formatting tags, Audio and Video Tags, Form and Input Tags, Frame Tags, Link Tags, List Tags, Table Tags, Style Tags, Meta Tags, etc.

1. **What Is CSS ?how many ways we are used in HTML 5 ?**

**A)C**SS Stands for Cascading Stylee Sheet -it will use beutify by code in Html elements it Allows inline internal,external Css .

1. **What are CSS Ways ?**

**A) inline Selector it used inline of element with using Stryle atrribute in side of html element**

**Internal Selector it Used Internal of element with using Stryle tag**

**External Selctor it used in exteranal of javascriprt it used in separate file locations just one Link**

1. **What is Target Blank ?**
2. The target attribute specifies where to open the linked document.The target attribute can have one of the following values:\_blank - Opens the linked document in a new window or tab\_self - Opens the linked document in the same window/tab as it was clicked (this is default)
3. **Which tag are Using Build A table ?**
4. Table , thead, th, tbody, tr, td these are athe tags to build a table in HTML.
5. **What is Border ?**
6. CSS border properties allow us to set the style, color, and width of the border.   
   **Note:** Different properties can be set for all the different borders i.e.top border, right border, bottom border, and left border.
7. **What Are Margin Properties ?**
8. The margin property sets the margins for an element, and is a shorthand property for the following properties:

[margin-top](https://www.w3schools.com/cssref/pr_margin-top.asp)

[margin-right](https://www.w3schools.com/cssref/pr_margin-right.asp)

[margin-bottom](https://www.w3schools.com/cssref/pr_margin-bottom.asp)

[margin-left](https://www.w3schools.com/cssref/pr_margin-left.asp)

1. **What Is Margin ?**
2. Margins are used to create space around elements, outside of any defined borders. There are properties for setting the margin for each side of an element (top, right, bottom, and left).
3. **What Is Padding ?**
4. Padding is used to create space around an element's content, inside of any defined borders. There are properties for setting the padding for each side of an element (top, right, bottom, and left).
5. **What Are Display Properties ?**
6. The display property is the most important CSS property for controlling layout. The display property specifies if/how an element is displayed.

The default display value for most elements is block or inline.

Inline, block, contents, flex, grid, inline-block, inline-flex, inline-grid, inline-table, list-item ,table,table-row ,table Column ,intila ..etc

1. **Differ Between Display block & Display None ?**

**A)**

1. **What is Postions Relative & Postions Absolute ?**

**A)**An element with position: relative; is positioned relative to its normal position.Setting the top, right, bottom, and left properties of a relatively-positioned element will cause it to be adjusted away from its normal position.

An element with **position**: **absolute**; is positioned relative to the nearest positioned ancestor (instead of positioned relative to the viewport, like fixed).

1. **What Is Fieldset ?**

**A)** The <fieldset> tag is used to group related elements in a form.

The <fieldset> tag draws a box around the related elements.

1. **What Is Legend ?**

**A)** The <legend> tag defines a caption for the [<fieldset>](https://www.w3schools.com/tags/tag_fieldset.asp) element.

1. **What Do you mean by Hover & Active ?**

**A)** The :active selector is used to select and style the active link.

A link becomes active when you click on it.

**Tip:** The :active selector can be used on all elements, not only links.

1. **Semantic Elements & Non- Semantic Elements ?**

**A)** there definition in the code tells the browser and the developer what they are supposed to do. Framing in simpler words, these elements describe the type of content they are supposed to contain.

* article
* aside
* figcaption
* figure
* footer
* form
* header
* mark
* nav
* table
* section

**Non-Semantic elements:** Unlike, semantic elements they don’t have any meaning. They don’t tell anything about the content they contain.

* div
* span

1. **What is DocType ?**
2. All HTML documents must start with a <!DOCTYPE> declaration.

The declaration is not an HTML tag. It is an "information" to the

browser about what document type to expect.

1. **Differ Between HTML & HTML 5 ?**

**A)**

|  |  |
| --- | --- |
| HTML | HTML5 |
| It didn’t support audio and video without the use of flash player support. | It supports audio and video controls with the use of <audio> and <video> tags. |
| It uses cookies to store temporary data. | It uses SQL databases and application cache to store offline data. |
| Does not allow JavaScript to run in browser. | Allows JavaScript to run in background. This is possible due to JS Web worker API in HTML5. |
|  |  |
| It does not allow drag and drop effects. | It allows drag and drop effects. |
| Not possible to draw shapes like circle, rectangle, triangle etc. | HTML5 allows to draw shapes like circle, rectangle, triangle etc. |
| It works with all old browsers. | It supported by all new browser like Firefox, Mozilla, Chrome, Safari, etc. |
| Older version of HTML are less mobile-friendly. | HTML5 language is more mobile-friendly. |
| Doctype declaration is too long and complicated. | Doctype declaration is quite simple and easy. |
| Elements like nav, header were not present. | New element for web structure like nav, header, footer etc. |
| Character encoding is long and complicated. | Character encoding is simple and easy. |
|  |  |
|  |  |

1. **What is Div And Span ?**

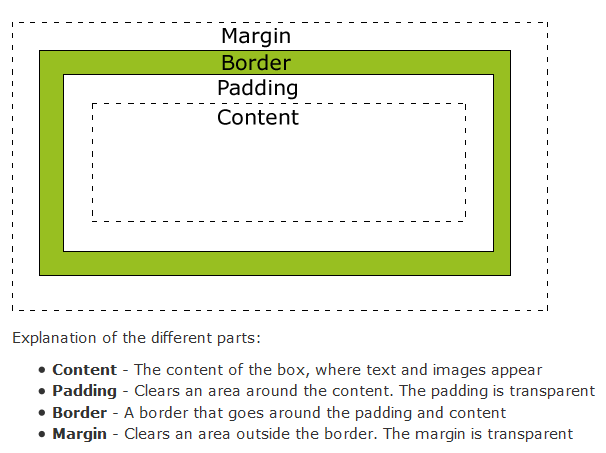
**A)** Both the tags ([**<div>**](https://www.geeksforgeeks.org/div-tag-html/) and [**<span>**](https://www.geeksforgeeks.org/span-tag-html/)) are used to represent the part of the webpage, <div> tag is used a as block part of the webpage and <span> tag is used as a inline part of the webpage like below:

1. **Differ Between Display Block & Visibiliaty Hidenden ?**

**A)** visibility:hidden will keep the element in the page and occupies that space but does not show to the user.

display:none will not be available in the page and does not occupy any space.

1. **What Is Box Model ?**

**A)**

1. **What is Boostrap ?**
2. Bootstrap is the most popular CSS Framework for developing responsive and mobile-first websites.

Bootstrap 5 is the newest version of Bootstrap

1. **Which Sytling Property is Better than CSS And in Boostrap ?**

**A)**Boostrap5 is best for beatify and design a web Page ..Because We save time And Simpliy of code And Also Better for Html elements.css is As used any extra beutify then we will use.

1. **What Is Box Shadow And Text Shadow ?**

**A)** The text-shadow - property can take up to four values:

* the horizontal shadow
* the vertical shadow
* the blur effect
* the color

The box-Shadow property can take up to six values:

* (optional) the inset keyword (changes the shadow to one inside the frame)
* the horizontal shadow
* the vertical shadow
* the blur effect
* the spreading
* the color

1. **What do you mean by Graphics ?**

**A)** Web graphics are visual representations used on a Web site to enhance or enable the representation of an idea or feeling, in order to reach the Web site user. Graphics may entertain, educate, or emotionally impact the user, and are crucial to strength of branding, clarity of illustration, and ease of use for interfaces.

1. **What is SVG ?**
2. SVG stands for Scalable Vector Graphics

SVG is used to define vector-based graphics for the Web

SVG defines the graphics in XML format

Every element and every attribute in SVG files can be animated

SVG is a W3C recommendation

SVG integrates with other W3C standards such as the DOM and XSL

1. **What Is Tooltip ?**
   1. A tooltip is often used to specify extra information about something when the user moves the mouse pointer over an element:
2. **What do you mean by HTML elements ?**
3. An HTML element is a component of an HTML document that tells a web browser how to structure and interpret a part of the HTML document.

An HTML element is defined by a start tag, some content, and an end tag.

**46.What is Attribute ?**

**A)** Attributes provide additional information about HTML elements.

HTML elements can have **attributes**

Attributes are always specified in **the start tag**

Attributes come in name/value pairs like: **name="value"**

1. **What is Inline ,Internal,External CSS ?**

* **Inline CSS**

An inline style may be used to apply a unique style for a single element.

To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

## Internal CSS

An internal style sheet may be used if one single HTML page has a unique style.

The internal style is defined inside the <style> element, inside the head section.

* **External CSS**

With an external style sheet, you can change the look of an entire website by changing just one file!

Each HTML page must include a reference to the external style sheet file inside the <link> element, inside the head section.

1. **What is Span Element ?**
2. The <span> element is often used as a container for some text.

The <span> element has no required attributes, but both style and class are common.

When used together with CSS, the <span> element can be used to style parts of the text

1. **What is Method Attribute In Form ?**

**A)**The method attribute specifies how to send form-data (the form-data is sent to the page specified in the action attribute).

The form-data can be sent as URL variables (with method="get") or as HTTP post transaction (with method="post").

1. **When to Use GET ?**

**A)** You can use GET (the default method):

If the form submission is passive (like a search engine query), and

sensitive information.

When you use GET, the form data will be visible in the page address:

GET is best suited to short amounts of data. Size limitations are set in your

browser.

1. **When to Use POST ?**
2. You should use POST:

If the form is updating data, or includes sensitive information (password).

POST offers better security because the submitted data is not visible in the page address.

1. **What is New HTML 5 -API’s ?**

**A)** The most interesting new API's are:

▶ HTML Geolocation ▶ Drag and Drop ▶ Local Storage ▶ Application Cache ▶ Web Workers ▶ SSE

1. **What is Multimedia ?**

**A) Audio**

**Video**

**Iframe**

These are the Multimedis in newly introduced in HTML5

1. **Can You Explain HTML 5 Drag &Drop ?**

**A)** Drag and drop is a very common feature. It is when you "grab" an object and drag it to a different location.

1. **What do you Mean by Local Storage & Sesctional Storage ?**
2. With local storage, web applications can store data locally within the user's browser.

Local storage is per origin (per domain and protocol). All pages, from one origin, can store and access the same data.

1. **What do you mean by Property Value & Property Key ?**

**A)** A **property** is a “**key**: **value**” pair, where **key** is a string (also called a “**property name**”), and **value** can be anything. We can imagine an object

1. **What Are CSS selectors ?**
2. **ID –** it indicates (#) notation .it is Single Selector used in html

**Class –** it indicates (.) notation.it is Group Selector used in html

**Universal-** it indicates(\*) notation.it is Global Selector used in html

1. **What is CSS Combinators ?**

**A)** A combinator is something that explains the relationship between the selectors.

A CSS selector can contain more than one simple selector. Between the simple selectors, we can include a combinator.

* descendant selector (space)
* child selector (>)
* adjacent sibling selector (+)
* general sibling selector (~)

1. **What is CSS Media Types ?**

**A)** @media is media type one set of style rules for computer screens, one for printers, one for handheld devices, one for television-type devices, and so on.

Unfortunately these media types never got a lot of support by devices, other than the print media type.

1. **What do you Know By Column and Row ?**

**A)** , **the "row" class is used mainly to hold columns in it**. Bootstrap divides each row into a grid of 12 virtual columns. In the following example, the col-md-6 div will have the width of 6/12 of the "row"s div, meaning 50%. The col-md-4 will hold 33.3%, and the col-md-2 will hold the remaining 16.66%

1. **What is NAN & Null ?**

**A) NaN-** In JavaScript, NaN is short for "Not-a-Number".

In JavaScript, NaN is a number that is not a legal number.

The initial value of NaN is Not-A-Number — the same as the value of [Number.NaN](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Number/NaN). In modern browsers, NaN is a non-configurable, non-writable property.

**Null -** Null means **having no value**; in other words null is zero, like if you put so little

sugar in your coffee that it's practically null. Null also means invalid, or having no binding force

1. **What is Null & Undefined ?**

* **Null:** It is the intentional absence of the value. It is one of the primitive values of JavaScript. It is Zero Value.
* **Undefined:** It means the value does not exist in the compiler. It is the global object.

1. **Why we use Boostrap ?**

**A)** Bootstrap is a framework **to help you design websites faster and easier**. It includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels, etc. It also gives you support for JavaScript plugins

1. **Why we CSS ?**

**A)** CSS is the language we use to style a Web page.

* CSS stands for Cascading Style Sheets
* CSS describes how HTML elements are to be displayed on screen, paper, or in other media
* CSS saves a lot of work. It can control the layout of multiple web pages all at once
* External stylesheets are stored in CSS files

1. **How to get Div In the middle Page ?** 
   1. There are three ways to center a div within a div. With each method, you can center the div within a div horizontally, vertically, or both.

#### Using the Position, Top, Left, and Margin Properties

1. **Differ Between ID And Class ?**

**A)Id-** The id selector uses the id attribute of an HTML element to select a specific element.The id of an element is unique within a page, so the id selector is used to select one unique element .it Indicates (#) Symbol.

**Class-** The class selector selects HTML elements with a specific class attribute.To select elements with a specific class, write a period (.) character, followed by the class name.

1. **Differ Between Block And InLine Block ?**

**A) Block -**A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element.

**Inline-**An inline element does not start on a new line.An inline element only takes up as much width as necessary.

**InlineBlock-**that display: inline-block allows to set a width and height on the element.

Also, with display: inline-block, the top and bottom margins/paddings are respected, but with display: inline they are not.

inline-block does not add a line-break after the element, so the element can sit next to other elements.

1. **What is An Object ?**

**A)** Objects, in JavaScript, is it’s most important data-type and forms the building blocks for modern JavaScript. These objects are quite different from JavaScript’s primitive data-types(Number, String, Boolean, null, undefined and symbol) in the sense that while these primitive data-types all store a single value each (depending on their types

1. **What is Javascript ?**
2. JavaScript is the **Programming Language** for the Web.

JavaScript can update and change both **HTML** and **CSS.**

JavaScript can **calculate**, **manipulate** and **validate** data.

1. **What do yo mean By Promise ?**
2. A Promise is a JavaScript object that links producing code and consuming code

"Producing code" is code that can take some time

"Consuming code" is code that must wait for the result

1. **What do you Mean by Async ?**
2. The keyword async before a function makes the function return a promise:
3. **What is Await ?**
4. The keyword await before a function makes the function wait for a promise:
5. **What is An Array ? Methods of Array**
6. An array is a special variable, which can hold more than one value:

Java Script Arrays Are Collection of the Objects or values . Each Object will be having Similar kind of its own properties as we have seen in Early Slides

The Data Inside this Square Brackets are related to this Array

* + Pop ()
  + Push ()
  + Sort ()
  + Slice ()
  + Splice ()
  + Shift ()
  + Unshift ()
  + Reverse ()
  + Reduce()
  + Find ()
  + Filliter ()

1. **What is Call Back ?**

**A)** A callback is a function passed as an argument to another function

This technique allows a function to call another function

A callback function can run after another function has finished

1. **What Is “THIS ” Keyword ?**
2. In JavaScript, the this keyword refers to an **object**.

**Which** object depends on how this is being invoked (used or called).

The this keyword refers to different objects depending

1. **What do you Mean By Hoisting ?**
2. Hoisting is JavaScript's default behavior of moving declarations to the top.

In JavaScript, a variable can be declared after it has been used.

1. **What do you Mean By IIFC ?**
2. **An Immediately-invoked Function Expression (IIFE for friends) is a way to execute functions immediately, as soon as they are created.**

**IIFEs are very useful because they don’t pollute the global object, and they are a simple way to isolate variables declarations.**

1. **What is HOC ?**
2. Higher-order components or HOC is the advanced method of reusing the component functionality logic. It simply takes the original component and returns the enhanced component.
3. **What is AJAX ?**
4. **A**synchronous **J**avaScript **A**nd **X**ML.

AJAX is not a programming language.

A browser built-in XMLHttpRequest object (to request data from a web server)

AJAX applications might use XML to transport data, get data,post data from API’s

1. **What is Asynchoronos JavaScript ?**
2. Functions running in parallel with other functions are called

Asynchronous. A good example is JavaScript setTimeout().

1. **What is Functional Scope ?**

**A)** JavaScript has function scope: Each function creates a new scope.

Variables defined inside a function are not accessible (visible) from

outside the function.

Variables declared with var, let and const are quite similar when

declared inside a function.

They all have **Function Scope**:

1. **What Is Block Scope ?**
2. A block scope is the area within **if**, **switch** conditions or **for** and **while** loops. Generally speaking, whenever you see **{curly brackets}**, it is a block. In ES6, **const** and **let** keywords allow developers to declare variables in the block scope, which means those variables exist only within the corresponding block.
3. **What is Lexical Scope ?**
4. Another point to mention is the lexical scope. Lexical scope means the children scope have the access to the variables defined in the parent scope. The children functions are lexically bound to the execution context of their parents
5. **What do you mean By let, Const,Var ?**

**A)**

1. **Let -** The let keyword was introduced in [ES6 (2015)](https://www.w3schools.com/js/js_es6.asp)., cannot be Redeclared., must be Declared before use., with let have Block Scope.
2. **Const-** The const keyword was introduced in [ES6 (2015)](https://www.w3schools.com/js/js_es6.asp)., const cannot be Redeclared., const cannot be Reassigned., with const have Block Scope.
3. **Var-** If you want your code to run in older browser, you must use var.Variables are containers for storing data (storing data values).

In this example, x, y, and z, are variables, declared with the var keyword

1. **What is Datatype ? What are They ?**

**A)** [null](https://www.javascripttutorial.net/javascript-data-types/#null)

[undefined](https://www.javascripttutorial.net/javascript-data-types/#undefined)

[boolean](https://www.javascripttutorial.net/javascript-data-types/#boolean)

[number](https://www.javascripttutorial.net/javascript-data-types/#number)

[string](https://www.javascripttutorial.net/javascript-data-types/#string)

[symbol](https://www.javascripttutorial.net/javascript-data-types/#symbol) – available from ES2015

1. **What is Extertnal Javascripts ?**

**A)External JavaScript** is when the *JavaScript* Code(script) is written in another file having an extension.jsand then we link this file inside the <head> or<body> tag of our *HTML* file in which the code is to be added. The use of external JavaScript is more practical when the same code is to be used in many different web pages.

1. **Js Output Display Possiblitites ?**

**A)** JavaScript can "display" data in different ways:

* Writing into an HTML element, using innerHTML.
* Writing into the HTML output using document.write().
* Writing into an alert box, using window.alert().
* Writing into the browser console, using console.log()

1. **What are Javascript pop Up BOXES ?**
2. JavaScript has three kind of popup boxes:

Alert box,

Confirm box,

Prompt box.

1. **What is Variables in JS ?**
2. JavaScript variables and how to use variables to store values in the application.

A variable is a label that references a value like a number or string. Before

using a variable, you need to declare it.

1. **What is An Array ?**
2. An array is a collection of items stored at contiguous memory locations. The idea is to store multiple items of the same type together. This makes it easier to calculate the position of each element by simply adding an offset to a base value
3. **What do you mean by Functions ?**
4. A JavaScript function is a block of code designed to perform a particular task.

A JavaScript function is executed when "something" invokes it (calls

Inside the function, the arguments (the parameters) behave as local variables.

1. **What is mean by Loop ? Types ?**

**A)** 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

1. **What is mean By Conditional Statement ?**
2. Conditional statements are used to perform different actions based on different conditions.

Use if to specify a block of code to be executed, if a specified condition is true

Use else to specify a block of code to be executed, if the same condition is false

Use else if to specify a new condition to test, if the first condition is false

Use switch to specify many alternative blocks of code to be executed

1. **What is Javascript Operators ?**

* **Arithmetic Operators**- Arithmetic operators are used to perform arithmetic on numbers
* **Assignment Operators** - Assignment operators assign values to JavaScript variables.

## Comparison Operators - Comparison operators are used in logical statements to determine equality

## Logical Operators - Logical operators are used to determine the logic between variables or values.

## Type Operators - JavaScript variables can be converted to a new variable and another

data type:

By the use of a JavaScript function

**Automatically** by JavaScript itself

## Bitwise Operators - Any numeric operand in the operation is converted into a 32 bit

## number. The result is converted back to a JavaScript number.

1. **Assignenment Operators And Comparisions Operators ?**

* **Assignment Operators** - Assignment operators assign values to JavaScript variables.

**For Example:**- =, +=, -=, \*=, /=, %=, <<, >>,>>>,&= ,!= ,\*\*=,=| etc…

## Comparison Operators - Comparison operators are used in logical statements to determine equality

## For Example :-==, ===, != ,!==, <, >, <= , >= … etc

1. **What is An Events ?for Example**
2. when events happen, you may want to do something.

JavaScript lets you execute code when events are detected.

HTML allows event handler attributes, **with JavaScript code**, to be

added to HTML elements.

**Onclick**

**Onchange**

**OnMousehover**

**OnMouseOut**

**Onload**

**OnkeyDown**

**OnkeyUp**

1. **What is Scope ?**
2. Scope in JavaScript defines as Locations .Scope in JavaScript defines accessibility of variables, objects and functions. Is Called Scope
3. **What is String ? What Methods ?**
4. JavaScript strings are for storing and manipulating text.

A JavaScript string is zero or more characters written inside quotes.

**Methods :-** String Slice()

String SubString()

String Substr()

1. **What is Number & Global Method ?**
2. JavaScript has only one type of number. Numbers can be written with or without decimals.

All number methods can be used on any type of numbers (literals, variables, or expressions):

1. **JavaScript Errors Throw And Try to Catch ?**
2. The try statement allows you to define a block of code to be tested for errors while it is being executed.

The catch statement allows you to define a block of code to be . executed,if an error occurs in the try block.

The throw statement allows you to create a custom error

Technically you can **throw an exception (throw an error)**.

The finally statement lets you execute code, after try and catch,

regardless of the result:

1. **What is DOM ?**
2. The Document Object Model (DOM) is a platform and language-neutral interface that allows programs and scripts to dynamically access and update the content, structure, and style of a document."

 DOM is a standard for how to get, change, add, or delete HTML elements.

1. **What Is BOM ?**
2. The Browser Object Model (BOM) allows JavaScript to "talk to" the browser.

There are no official standards for the **B**rowser **O**bject **M**odel (BOM).

Since modern browsers have implemented (almost) the same methods and properties for JavaScript interactivity.

1. **What is Window Size ?**
2. Two properties can be used to determine the size of the browser window.

* window.innerHeight - the inner height of the browser window (in pixels)
* window.innerWidth - the inner width of the browser window (in pixels)

1. **How to Stop the executions ?**
2. To stop the execution of a function in JavaScript, use the clearTimeout() method. This function call clears any timer set by the setTimeout() functions.
3. **What are Cookies ?**
4. Cookies let you store user information in web pages

Cookies are data, stored in small text files, on your computer.

When a browser requests a web page from a server, cookies belonging to the page are added to the request. This way the server gets the necessary data to "remember" information about users.

1. **Differe Between ES6, ES7 ?**
2. **ES6**

With this release, JS has made the developers life easy in many ways and reached the expectations of a **modern programming** language. Features in this include :-

* Let and Const keywords
* For..of
* Default Parameters
* Rest and Spread operators (…)
* Arrow functions
* Promises
* Classes, and more

**ES7**

ES7 or ECMAScript 2016 was released in the year 2016. This version gives suitable **alternatives** to already used functionalities. Features include :-

* Exponentiation operator
* Includes function, and more

1. **What Is React ?**

**A)** React is a JavaScript library for building user interfaces.

React is used to build single-page applications.

React allows us to create reusable UI components.

React, sometimes referred to as a frontend JavaScript framework, is a JavaScript library created by Facebook.

1. **About Redux State Mangement ?**
2. Redux is an open-source JavaScript library

 Redux was inspired by Flux but it omitted the unnecessary complexity

it does not have Dispatcher concept, has a single Store and the Action objects is received and handled directly by Store in the Redux

1. **What is Arrow Functions ?**
2. Arrow Functions — also called “fat arrow” functions, are relatively a new way of writing concise functions in JavaScript. They have been introduced by the ECMAScript 6 specifications and since then become the most popular ES6 feature. Arrow functions allow us to use the fat arrow => operator
3. **What is Stateless & Stateful Component ?**
4. The literal difference is that one has state, and the other doesn’t. That means the stateful components are keeping track of changing data, while stateless components print out what is given to them via props, or they always render the same thing.
5. **What Is Fuctions And Class ?**
6. JavaScript treats functions as first-class objects, so being an object, you can assign properties to a function.

a class-based object-oriented language, in general, state is carried by instances, methods are carried by classes, and inheritance is only of structure and behavior. In ECMAScript, the state and methods are carried by objects, and structure, behavior, and state are all inherited.

1. **What is Props And State ?**

* React components has a built-in state object.
* The state object is where you store property values that

belongs to the component.

* When the state object changes, the component re-

renders.

* Props are arguments passed into React components.
* Props are passed to components via HTML attributes.
* props stands for properties.

1. **What do you Mean By Hook ?**

**A)** Hooks were added to React in version 16.8.

Hooks allow function components to have access to state and other React features. Because of this, class components are generally no longer needed.

Although Hooks generally replace class components, there are no plans to remove classes from React.

1. **Tell me About LifeCycle ?**
2. Component in React has a lifecycle which you can monitor and manipulate during its three main phases.

The three phases are: **Mounting**, **Updating**, and **Unmounting**.

1. **Differ Between Virtual DOM & Real DOM ?**
2. React creates a VIRTUAL DOM in memory.

Instead of manipulating the browser's DOM directly, React creates a

virtual DOM in memory, where it does all the necessary

manipulating, before making the changes in the browser DOM.

1. **What Is Call Stack ?**
2. The call stack is **used by JavaScript to keep track of multiple function calls**. It is like a real stack in data structures where data can be pushed and popped and follows the Last In First Out (LIFO) principle. We use call stack for memorizing which function is running right now.
3. **What Is Premitive Data Types ?**
4. JavaScript variables can hold different data types:

* numbers,
* strings,
* objects
* Boolen
* Null
* Undefined

1. **What is NameSpace ?**
2. Namespace **refers to the programming paradigm of providing scope to the identifiers (names of types, functions, variables, etc) to prevent collisions between them**. For instance, the same variable name might be required in a program in different contexts.
3. **What is mean By Layout tree ?**
4. There is Tree Layout Structure in Html :-

Html ,meta tag, head ,body

1. **What is Call,Apply,Bind ?**

* With the bind() method, an object can borrow a method from another object. When a function is used as a callback, **this** is lost.
* The call() method is a predefined JavaScript method.It can be used to invoke (call) a method with an owner object as an argument (parameter).With call(), an object can use a method belonging to another object.
* The apply() method is similar to the call()The apply() method takes arguments as an **array**.

1. **Prototype Inheritance ?**
2. **Inheritance-** Inheritance is useful for code reusability: reuse properties and methods of an existing class when you create a new class.

**ProtoType-** All JavaScript objects inherit properties and methods from a prototype. The Object.prototype is on the top of the prototype inheritance chain.

1. **Prototype Chain ?**
2. created a sequence of inheritance. Until ES2015, the language didn’t implement a category. Instead, they used the prototype chain. The new ES6 “class” hides the inner workings of the prototype chain.
3. **What is Map ?**

map() **creates a new array from calling a function for every array element**

* map() calls a function once for each element in an array.
* A Map holds key-value pairs where the keys can be any datatype.
* A Map remembers the original insertion order of the keys.
* You can create a Map by passing an Array to the new Map() constructor

1. **What Is Reduce ?**

**A)** The reduce() method executes a reducer function for array element.

It returns a single value: the function's accumulated result.

It does not execute the function for empty array elements.

It does not change the original array.

1. **What Is Fillter ?**

**A)**The filter() method creates a new array filled with elements that

pass a test provided by a function.

It does not execute the function for empty elements.

It does not change the original array.

1. **What is CloSures ?**

**A)** JavaScript variables can belong to the **local** or **global** scope.

Global variables can be made local (private) with **closures**.

 In other words, a closure gives you access to an outer function's scope from an inner function.

1. **About Polymorphism and Code Re Us ?**

**A)** Javascript is based on OOPs Concept, i.e, Javascript is an object-oriented programming language which uses classes and objects for computations.Polymorphism is the OOPs principle which provides the facility to perform one task in many ways.

1. **What is Mean By SetTimeout & SetTimein ?**

**A) SetTimeout :-** The setTimeout() method is used to call a function or evaluate an expression after a specified number of milliseconds.

**SetTimein :-** The window object allows execution of code at specified . time intervals.These time intervals are called timing events.

1. **What is Object Assign ?**

**A)** The Javascript Object assign() method copies enumerable and own properties from a source object to a target object. The whole operation (assignment and copy) is done by reference.

1. **What Is Marque ?**

**A)** The HTML <marquee> tag is **used for scrolling piece of text or image displayed either horizontally across or vertically down your web site page depending on the settings**.

1. **What is Promise In JavaScript ?**

**A)** "Producing code" is code that can take some time

"Consuming code" is code that must wait for the result

A Promise is a JavaScript object that links producing code and

consuming code.

1. **Map and Object is Similar or Not ? Why**

**A)**[Map](https://www.geeksforgeeks.org/map-in-javascript/) is a data structure which helps in storing the data in the form of pairs. The pair consists of a unique key and a value mapped to the key. It helps prevent duplicity.  
[Object](https://www.geeksforgeeks.org/objects-in-javascript/) follows the same concept as that of map i.e. using key-value pair for storing data. But there are slight differences which makes map a better performer in certain situations.

1. **What is Slice And Splice ?**

**A)** The splice() method adds and/or removes array elements.

The splice() method overwrites the original array.

The slice() method returns selected elements in an array, as a new array.

The slice() method selects from a given start, up to a (not inclusive) given end.

The slice() method does not change the original array.

The slice() is an ECMAScript1 (ES1) feature.

1. **How to Use HTML elements in JavaScript ?**

* Get element by Id
* Get element by className
* Get element by Name
* Get element by tagName
* Get element by CSS Selector
* Get element by QuerySelector
* Create element

1. **Spread Opterators ?**

**A)** The JavaScript spread operator (...) allows us to quickly copy all or part of an existing array or object into another array or object.

The spread operator is often used in combination with destructuring

1. **What is React-Router ?**

**A)** Create React App doesn't include page routing.

React Router is the most popular solution.

To add React Router in your application, run this in the terminal from the

root directory of the application:

1. **What is React-Redux ?**

**A)React Redux** is the official React binding for Redux. It allows React components to read data from a Redux Store, and dispatch Actions to the Store to update

1. **What is Global Executions Context ?**

**A)   
Execution Context:** Everything in JavaScript is wrapped inside Execution Context, which is an abstract concept (can be treated as a container) that holds the whole information about the environment within which the current JavaScript code is being executed.

1. **What are Advantage of Closure ?**

* They allow you to attach variables to an execution context.
* Variables in closures can help you maintain a state that you can use later.
* They provide data encapsulation.
* They help remove redundant code.
* They help maintain modular code.

1. **Data Hidding and Encaplations ?**
   1. Data hiding is **the ability of objects to shield variables from external access**. It is a useful consequence of the encapsulation principle. Those variables marked as private can only be seen or modified through the use of public accessor (getter) and mutator (setter) methods.
2. **What is Function Statement ?**
   1. The function statement **declares a function**. A declared function is "saved for later use", and will be executed later, when it is invoked (called). In JavaScript, functions are objects, and they have both properties and methods.
3. **What is Function Expressions ?**
   1. A function\* expression is very similar to and has almost the same syntax as a [function\* statement](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/function*). The main difference between a function\* expression and a function\* statement is the function name, which can be omitted in function\* expressions to create anonymous generator functions.
4. **What is Anymous Functions ?**
   1. An anonymous function is not accessible after its initial creation, it can only be accessed by a variable it is stored in as a *function as a value*. An anonymous function can also have multiple arguments, but only one expression.
5. **What Is Named Functions ?**

**A)** Normal functions (function declaration) having a name or identifier to refer to them are referred to as named functions and are defined as:

function displayMessage(){

// function..body

}

1. **What is Web API’s ?**

**A)** API stands for **A**pplication **P**rogramming **I**nterface.

A Web API is an application programming interface for the Web.

A Browser API can extend the functionality of a web browser.

A Server API can extend the functionality of a web server.

All browsers have a set of built-in Web APIs to support complex operations, and to help accessing data.

1. **What is Z-index ?**

**A)**   
The z-index property specifies the stack order of an element.

An element with greater stack order is always in front of an element with a lower stack order.

 z-index only works on positioned elements (position: absolute, position: relative, position: fixed, or position: sticky) and flex items

1. **What is BootStrap5 ?**

**A)** Bootstrap 5 is the newest version of [Bootstrap](https://www.w3schools.com/bootstrap/default.asp), which is the most popular HTML, CSS, and JavaScript framework for creating responsive, mobile-first websites.

with new components, faster stylesheet,Time Save and more responsiveness.

1. **What is Some And Every ?**

The some() method checks if any array elements pass a test

If the function returns *true*, some() returns true and stops.

If the function returns *false*, some() returns false and stops.

The some() method does not execute the function for empty array elements.

1. **What is Pure Functions ?**
   1. A Pure Function is **a function (a block of code) that always returns the same result if the same arguments are passed**. It does not depend on any state or data change during a program's execution. Rather, it only depends on its input arguments.
2. **What is Collections ?**
   1. Set in JavaScript. **A Set is a collection of unique elements that can be of any type**. Set is also an ordered collection of elements, which means that elements will be retrieved in the same order that they were inserted in
3. **What is ProtoType in JS ?**

**A)** All JavaScript objects inherit properties and methods from a prototype.

The JavaScript prototype property allows you to add new properties to object constructors:

1. **What is Event Loop ?**

**A)** **Event loop:**An event loop is something that pulls stuff out of the queue and places it onto the function execution stack whenever the function stack becomes empty.

1. **What is Component ?**

**A)** Components are independent and reusable bits of code. They serve the same purpose as JavaScript functions, but work in isolation and return HTML.

Components come in two types, Class components and Function components, in this tutorial we will concentrate on Function components.

1. **What is Functional Component ?**

A Function component also returns HTML, and behaves much the same way as a Class component, but Function components can be written using much less code, are easier to understand, and will be preferred in this tutorial.

1. **What is Class Component ?**

**A)** When creating a React component, the component's name must start with an upper case letter.

The component has to include the extends React.Component statement, this statement creates an inheritance to React.Component, and gives your component access to React.Component's functions.

1. **What is State and Setstate ?**

**A) State -** React components has a built-in state object.

The state object is where you store property values that belongs to the component.

When the state object changes, the component re-renders.

**Setstate -**The setState() Method

**State can be updated in response to event handlers, server responses, or prop changes**. This is done using the setState() method. The setState() method enqueues all of the updates made to the component state and instructs React to re-render the component and its children with the updated state

1. **EventHandler ,Bind EventHandler ?**

**A)** Event handlers can be used to handle and verify user input, user actions, and browser actions:

* Things that should be done every time a page loads
* Things that should be done when the page is closed
* Action that should be performed when a user clicks a button
* Content that should be verified when a user inputs data

1. **What is Conditional rendering ?**

**A)** Conditional rendering in React works the same way conditions work in JavaScript. Use JavaScript operators like [if](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/if...else) or the [conditional operator](https://developer.mozilla.org/en/docs/Web/JavaScript/Reference/Operators/Conditional_Operator) to create elements representing the current state, and let React update the UI to match them

1. **What is Hook ? When we Use ?**
   1. Hooks allow us to "hook" into React features such as state and lifecycle methods.

Hooks allow function components to have access to state and other React features.

State generally refers to application data or properties that need to be tracked. For Example,useState and useEfect..etc..

1. **What is Value Types And ReferenceTypes ?**

**A)Value Type -**The value types are **number, symbol, boolean, null and undefined**. string is also a value type although it is implemented with a slightly different behavior to save memory. Apart from symbol, these all have a literal syntax. i.e. you can “literally” write them straight into your program

**Refference Type-**Javascript has 3 data types that are passed by reference: **Array , Function , and Object** .

1. **What is Generator ?**

**A)** **Generator-Function :** A generator-function is defined like a normal function, but whenever it needs to generate a value, it does so with the yield keyword rather than return.

1. **Redux Thunk And Saga ?**
   1. **Redux Thunk** is a middleware that lets you call action creators that return a function instead of an action object. That function receives the store’s dispatch method, which is then used to dispatch regular synchronous actions inside the body of the function once the asynchronous operations have completed
   2. **Redux Saga** leverages an ES6 feature called [Generators](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Generator), allowing us to write asynchronous code that looks synchronous, and is very easy to test. In the saga, we can test our asynchronous flows easily and our actions stay pure.

**162.When we use inline Style in HTMl ?**

A) An inline CSS is used **to apply a unique style to a single HTML element**. An inline

CSS uses the style attribute of an HTML element.

**163.How to Add Javascript to HTML file ?**

**A)** There are Three Ways to Add:-

1. Embedding code
2. Inline code
3. External file

**164.What is Data Attribute ?**

The data-\* attribute is used to store custom data private to the page or application.

The data-\* attribute gives us the ability to embed custom data attributes on all HTML elements.

The stored (custom) data can then be used in the page's JavaScript to create a more engaging user experience

**165.Diffrence Between CSS3 And CSS ?**

**CSS:** CSS stands for Cascading Style Sheet. Its main objective is to provide styling and fashion to the web page. CSS provides color, layout, background, font, and border properties. CSS features allow better content accessibility, enhanced flexibility, and control, as well as the specification of the characteristics of presentation.

**CSS3:** CSS3 stands for Cascading Style Sheet level 3, which is the advanced version of CSS. It is used for structuring, styling, and formatting web pages. Several new features have been added to CSS3 and it is supported by all modern web browsers.

**167.What is BEM ?**

BEM is **a front-end naming method for organizing and naming CSS classes**. The Block, Element, Modifier methodology is a popular naming convention for class names in HTML and CSS. It helps to write clean CSS by following some simple rules

**168.What is SCSS And SASS ?**

SASS (Syntactically Awesome Style Sheets) is a pre-processor scripting language that will be compiled or interpreted into CSS. SassScript is itself a scripting language whereas SCSS is the main syntax for the SASS which builds on top of the existing CSS syntax. It makes use of semicolons and brackets like CSS (Cascaded Style Sheets).  
SASS and SCSS can import each other. Sass actually makes CSS more powerful with math and variable support.

**169.What is Clearfix ?**

A clearfix is **a way for an element to automatically clear or fix its elements so that it**

**does not need to add additional markup**. It is generally used in float layouts where

elements are floated to be stacked horizontally.

**170.What is WebSite Articture ?**

Website architecture refers to **how information is organized and prioritized on your site**. Navigation, breadcrumbs, URLs, and sitemaps help search engines understand your site structure. Intuitive navigation features like a mega menu, filters and faceted search enable customers to quickly find what they want.

**171.What are ES6 New Features ?**

* let and const keywords :
* Arrow Functions.
* Multi-line Strings.
* Default Parameters.
* Template Literals.
* Destructuring Assignment.
* Enhanced Object Literals.
* Promises.

**172.What is Strict Mode ?**

JavaScript's strict mode, introduced in ECMAScript 5, is **a way to opt in to a restricted variant of JavaScript, thereby implicitly opting-out of "sloppy mode"**. Strict mode isn't just a subset: it intentionally has different semantics from normal code

**173.Explain how Map Functions Works ?**

The map() method in JavaScript **creates an array by calling a specific function on each element present in the parent array**. It is a non-mutating method. Generally map() method is used to iterate over an array and calling function on every element of array.

**174.What are template literals and Interpolations ?**

**Template literals :-** literals delimited with backtick (`) characters, allowing for multi-line strings, for string interpolation with embedded expressions, and for special constructs called tagged templates.

**Interpolations :- Template literals** provide an easy way to interpolate variables and expressions into strings.The method is called string interpolation.

**175.What is Eval functions ?**

The eval() method evaluates or executes an argument.

If the argument is an expression, eval() evaluates the expression. If the argument is one or more JavaScript statements, eval() executes the statements.

**176.What is Trim functions ?**

The trim() method **removes whitespace from both ends of a string and returns a new string, without modifying the original string**. Whitespace in this context is all the whitespace characters (space, tab, no-break space, etc.)

**178.What is Diferr between == and === ?**   
== in JavaScript is used for comparing two variables, but it ignores the datatype of variable. === is used for comparing two variables, but this operator also checks datatype and compares two values. Checks the equality of two operands without considering their type.

**179.what is React hook ?**

Hooks were added to React in version 16.8.

Hooks allow function components to have access to state and other React features. Because of this, class components are generally no longer needed.

Although Hooks generally replace class components, there are no plans to remove classes from React.

**180.What are Fragements in React ?**

React Fragments **allow you to wrap or group multiple elements without adding an extra node to the DOM**. This can be useful when rendering multiple child elements/components in a single parent component.

**181.What is Major Features in React ?**

* JSX (JavaScript Syntax Extension)
* Virtual DOM.
* One-way data binding.
* Performance.
* Extensions.
* Conditional statements.
* Components.
* Simplicity.

**182.What is Binary Search ?**

Binary Search is **a searching technique which works on the Divide and Conquer approach**. It is used to search for any element in a sorted array. Compared with linear, binary search is much faster with a Time Complexity of O(logN), whereas linear search works in O(N) time complexity.

**183.What is Rest Operators ?**

The rest operator ( ... ) **instructs the computer to add whatever otherInfo (arguments) supplied by the user into an array**. Then, assign that array to the otherInfo parameter. As such, we call ... otherInfo a rest parameter.

**184.What is Salow copy and Deep Copy ?**

* A shallow copy constructs a new compound object and then (to the extent possible) inserts references into it to the objects found in the original.
* deep copy constructs a new compound object and then, recursively, inserts copies into it of the A objects found in the original.

**185.What is Parametters ?**

The parameters, in a function call, are **the function's arguments**. JavaScript arguments are passed by value: The function only gets to know the values, not the argument's locations. If a function changes an argument's value, it does not change the parameter's original value.

**186.How Redux works ?**

Redux is **a pattern and library for managing and updating application state, using events called "actions"**. It serves as a centralized store for state that needs to be used across your entire application, with rules ensuring that the state can only be updated in a predictable fashion.

**187.What is Context API ?**

The Context API is **a React structure that enables you to exchange unique details and assists in solving prop-drilling from all levels of your application**. React.createContext() is all you need. It returns a consumer and a provider.

**188.What is Purpose Of Middleware ?**

Redux Middleware **allows you to intercept every action sent to the reducer so you can make changes to the action or cancel the action**. Middleware helps you with logging, error reporting, making asynchronous requests, and a whole lot more

**189.What is Lazy Loading ? How Works**

Lazy loading is **a strategy to identify resources as non-blocking (non-critical) and load these only when needed**. It's a way to shorten the length of the critical rendering path.

**190.What is Message Que & Event loop ?**

**Each message in the queue is processed completely before any other message can be processed.** **The whole process of checking this message and processing that it's called an event loop**.