**← HTML Questions →**

Answer 1 -> HTML

NO, <!DOCTYPE html> is not a tag of html. It is used to tell the web browsers which version of HTML your document is using and it ensure that your web pages are displayed correctly.

Answer 2 -> HTML

Semantic tags are those tags in html which gives meaningful information to both user as well as the browser about the content.

For example: Header, Footer, Aside, Article etc.

Answer 3 -> HTML

HTML Tags is a keyword surrounded by angle bracket that defines how content is displayed on a webpage .

Ex <p>, <h1>…..<h6>, <img> etc

Answer 4 -> HTML

GitHub->

Live Link-> https://placement-assignments.vercel.app

Answer 5 -> HTML

GitHub->

Live Link->

Answer 6 -> HTML

**Enhanced Forms and Input Types:** HTML5 introduces new form input types, including

date pickers, email fields, number inputs, and more. Additionally, it provides built-in

form validation, reducing the need for JavaScript-based validation and enhancing the user experience.

**Improved Semantics:** HTML5 introduces new semantic elements such as <header> <nav> <article> and <footer> which provide better structure and meaning to web content. This helps search engines and accessibility tools understand the document structure more accurately.

**Media Support:** HTML5 provides native support for audio and video playback without requiring third-party plugins like Flash. This enables developers to easily embed multimedia content and create engaging experiences on websites.

Answer 7 -> HTML

GitHub->

Live Link->

Answer 8 -> HTML

<img> tag: The <img> tag is used to insert an image into an HTM document. It is a self-closing tag that required the src attribute, which specifies the URL or path to the image file.

**<figure>** tag: The **<figure>** tag is used to encapsulate self-contained content, typically representing images,

illustrations, diagrams, code snippets, or other media objects. It provides a way to group related content and

associate a caption or description with it using the **<figcaption>** tag

Answer 9 -> HTML

HTML Tags is a keyword surrounded by angle bracket that defines how content is displayed on a webpage .

Ex <p>, <h1>….<h6>, <img> etc.

Where as Attribute tag provides additional information about an HTML element . Always specified in opening tags and can modify an element behavior or appearance.

Ex: href and src in <img> tag.

Answer 10 -> HTML

GitHub->

Live Link-> <https://html-table-kappa.vercel.app>

**← CSS Questions →**

Answer 1-> CSS

By default when the browser shows element it automatically shows like a box where every element is surrounded by a invisible box around it . There are 4 different properties of this box are content, padding , margin and border.

Answer 2-> CSS

There are 2 kind of different selectors are their in the css but most important are id selector and class selector.

**Id Selector** is used to provide style to particular single element which contains same id name, id’s are always unique and used # before id for styling.

For ex: <h1 id=”text”> I am a Text <h1 />

#text {

Color: #fff

}

**Class Selector** is used to provide style to multiple elements containg same class name at a time and used dot before class name.

For ex: <h1 class=”text”> I am a Text <h1 />

.text {

Color: #fff

}

Answer 3-> CSS

**VW/VH** are CSS units used to measure view width and view height respectively in percentage form in the responsive design technique.

**PX-** Pixel value provide so precise and fixed measurement that is not dependent on the size of the user’s screen.

Answer 4 -> CSS

Inline, Inline-block and Block are the display property in the css .

The main difference between inline and block element is:

Block element starts with a new line and can take space for a entire row and width but inline element doesn’t starts with new line and take fixed space with respect to content of the body.

Block Elements ex: div tag, p tag etc.

Inline Elements ex: span tag, img tag etc.

Answer 5-> CSS

**Border-Box** is used toprovide the inner dimension for the element in the documents by providing padding and border with respect to the length and width of the content.

**Content Box**

Answer 6-> CSS

Answer 7-> CSS

Grid and Flex are two important display property of the CSS which is used to create a responsive layout of a webpage .

The main difference between them are Grid is a two dimensional layout system along with row and columns where as flex is only one dimensional system either row or column.

Grid is used for creating large sized layout where as flex is used for the component of an application.

Answer 8-> CSS

Periodic table

GitHub->

Live Link->

Answer 9-> CSS

Flex layout

GitHub->

Live Link->

Answer 10-> CSS

GitHub->

Live Link->

Answer 11-> CSS

iNeuron

GitHub->

Live Link->

Answer 12-> CSS

**Pseudo Classes** are the type of Pseudo-elements that don’t exist in a normal document tree.

It allow selecting the regular element under certain condition especially when we try to hover over the links .

Ex: a:hover{

Color: #000;

}

Pseudo Elements provides special effects to some selectors. CSS find it useful in applying styles in HTML markups if additional markups or styles is not feasible for a document the pseudo-elements help by allowing extra markup without interfering with the original document.

Ex: before, after etc.

**← JavaScript Questions →**

Answer 1-> JavaScript

Hoisting refers to the process whereby the interpreter appers to move the declaration of function, variable or classes to the top of their scope prior to the execution of the code. It allows functions to be safely used in code before they are declared.

Answer 2-> JavaScript

HOC are the function which take another function as an argument and returns a new function map, filter, reduce are the example of higher order function in JavaScript.

Map is used to illiterates through every element of the array and do some necessary operations on it.

**Difference between map and forEach:-**

forEach is also same as map but the main difference between them is forEach return undefine and it mutates the original array but map doesn’t mutate and always returns a new output array.

Answer 3-> JavaScript

Call, Apply And Bind help in the function borrowing, we can borrow a function from some object and can use it with data of some other object.

**Difference: -**

**Call** takes two argument first is the reference of the objects which this keyword is pointing and the second is the argument of the function .

**Example:**

const people = {

    name: "Krishna",

}

function sayHello(age){

    return "Hy" + " " + "my name is " + *this*.name + " " + "and my age is" + " " + age;

}

console.log(sayHello.call(people, 22));

*//Output  Hy my name is Krishna and my age is 22*

**Apply** is same as the call the only difference is the argument it takes. It takes in the form of an array where as call take it explicitly.

**Exmple:**

console.log(sayHello.apply(people, [36]));

*//Output  Hy my name is Krishna and my age is 123*

**Bind** is also same as the call instead of just immediately invoking the function it returns the copy of the function which we can invoke later on the code.

**Example:**

const bind = sayHello.bind(people);

console.log(bind(12));

*//Output Hy my name is Krishna and my age is 12*

Answer 4 -> JavaScript

Event Bubbling – JavaScript allows DOM elements to be nested inside each other. In such a case if the handler of the child is clicked the handler of parent will also work as if it were clicked to.

Event Capturing – It is just reverse of the event bubbling the only difference is when handler of parent Is clicked the handler of child will also work as if were clicked to .

Answer 5-> JavaScript

Currying is the process of taking a function with multiple argument and returning it into a sequence of function each with only a single argument.

Example:

function curry(a){

    return function(b){

        return function(c){

            console.log(a+b+c);

        }

    }

}

*// curry(2)(3)(4)*

*// Output 9*

Answer 6-> JavaScript

Output – First

Third

Second

Answer 7-> JavaScript

Promises are the objects in the java script representing the eventual completion or failure of an asynchronous operation.

It has 3 different stages: -

1. Fulfill
2. Rejected
3. Pending
4. console.log("Start");
5. const promises = new Promise((resolve, reject) => {
6. setTimeout(()=> {
7. const result = true;
8. if(result){
9. resolve("Promise is resolved")
10. }else reject(new Error("Promise Rejected"));
11. }, 2000)
12. });
13. promises
14. .then((res) => {
15. console.log(res);
16. })
17. .catch((err) => {
18. console.log(err);
19. })
20. console.log("Stop");
21. *// Output*
22. start
23. Stop
24. Promise is resolved

Answer 8-> JavaScript

This keyword in JavaScript refers to the object and which object it will refer to it depends on how this is being invoked or called.

In an object method this will refer to object.

Alone this refers to the global object.

In a function this refer to the global object.

In an event this refers to the global object receiving the event.

var obj = {

    name: 'Krishna',

    getName: function(){

        console.log(*this*.name);

    }

}

obj.getName();

*// Krishna*

Answer 9-> JavaScript

Basically, it’s a runtime model present in the JS engine and it continuously keeps on checking the call stack and the call back queue and if it finds any callback function is waiting to be executed either in call stack or micro task queue then event loop will check the callback is either empty or not. If it is empty then it pushes the callback function giving priority to micro task queue first into the call stack queue for its execution.

Answer 10-> JavaScript

Debouncing

Answer 11-> JavaScript

Closures is a function bundled together with reference to its lexical environment. Closures are essential concept in programming because they allow us to create function that can remember and access the variable that were present inside the parent scope even after the parent function has been returned.

Answer 12-> JavaScript

**← React Questions →**

Answer 1-> React

React is an open-source front-end JavaScript library that is used for building user interfaces, especially for single-page applications.

The major features of React are:

1. It uses Virtual DOM instead of Real DOM considering that Real DOM manipulations are expensive.

2. Supports server-side rendering.

3. Follows Unidirectional data flow or data binding.

4. Uses reusable/composable UI components to develop the vie

Answer 2-> React

Virtual DOM is a light weight memory representation of the actual DOM. When a component in react updates initially it will get updated in the virtual DOM then React will compare the virtual DOM and the actual DOM and updates only the component that changed on the actual Dom.

By this process react reduces the loading time of the web app and make the application faster.

Answer 3-> React

Life Cycle Method

Component will Mount () -> render when react component loads for the first time.

Component did Mount () -> render state of the component gets updated in the react.

Component will unmount () -> render when state of the component get removed.

Answer 4 -> React

Functional Components are the plain JS functions which return JSX whereas Class Components are JS classes which extends classes.

Answer 5-> React

React hooks are simple JS functions that we can use to isolate the reusable part from a function components .

Different hooks presents in react are: -

useState, useEffect, useCallback, useMemo, useRef,useReducer,useSelector, useDispatch, useContext etc

No, we cannot use hooks in the class components can be only used in function component.

Answer 6-> React

Life Cycle Method play very important role in the react application it helps in performing the side effect when state of any component get updated or removed.

Initially before introduction of hooks in react only class based components were used to perform the life cycle method but after react 16.8 version we can perform all the life cycle method in functional component using use Effect hook only.

Answer 7-> React

useState hooks is use to hold some information of the state that can be changed anytime during the life cycle of the component.

Answer 8-> React

useEffect is import hook in the react function component for performing life cycle method.

Answer 9-> React

Context Api is used to create a global state which can be used in the entire application and accessible to any part of the component. It prevents prop-drilling problem in the react.

Answer 10-> React

useReducer

Answer 11-> React

Calculator

GitHub ->

Answer 12-> React

Counter App

GitHub ->

Answer 13-> React

Calculator

GitHub ->

Answer 14-> React

Tic Tac Toe Game using Class Component of React

GitHub ->

Answer 15-> React

Props are use to communicate between the component and passing the data from one component to another is called Prop drilling in react. Props are immutable .

Answer 16-> React

Task Manager

GitHub ->

**← Express Questions →**

Answer 1-> Express

Create server with /post endpoint to send 20 posts.

Answer 2-> Express

Middleware

Answer 3-> Express

Blog app CRUD

Answer 4 -> Express

Difference between authentication and authorization:-

Answer 5-> Express

difference between common JS and EJS module

Answer 6-> Express

Jwt Login

GitHub ->

Answer 7-> Express

We can use becrypt library in express to encrypt the user password before storing it into the database for user security purpose.

Answer 8-> Express

Basically, it’s a runtime model present in the JS engine and it continuously keeps on checking the call stack and the call back queue and if it finds any callback function is waiting to be executed either in call stack or micro task queue then event loop will check the callback is either empty or not. If it is empty then it pushes the callback function giving priority to micro task queue first into the call stack queue for its execution.

Answer 9-> Express

E-commerce App