HTML

1. What is the difference between html4 and html5?

Ans: The main difference between html4 and html5 is the version. Html4 is the older version with fewer features whereas html5 is the new version with advanced features. Html4 provides moderate consistency but html5 provides high consistency. Due to the older version html4 is less mobile and multimedia friendly than html5. Html5 contains drags and drop effects whereas html4 doesn't. And the main feature is that Html5 allows JavaScript to run in a browser. But html4 doesn't allow running JavaScript in the browser.

2. What are semantic tags in HTML? Give me some examples.

   Ans: Semantic Html contains not only the representation of tags but also the meaning of the tags. For example, <p> tag indicates that the enclosed tag is a paragraph. This is both semantic and presentational because people know this tag

means the paragraph and the browser also knows to display them.
The semantic tags are <figure>, <footer>, <header>, <main>, <mark>, <nav>, <section>, <summary>, <section>

3. What is the purpose of Article, div, section, nav, aside?
   Ans:
   Article: The article element defines independent and self-contained content. The <article> element defines an article in the webpage. This is a semantic element in HTML.

   Div: The div element in HTML is a non-semantic element. The non-semantic element tells nothing about the content. It only displays the data. The div element mainly defines multiple divisions in a web page.

   Section: Section tag is a semantic tag in Html. The section element defines the different sections in a web page.

Aside: The aside HTML element represents a portion of the document that is indirectly related to the main content. This element is related to the primary content and doesn't mix up with the main content in the webpage.

Nav: Nav in HTML element defines the navigation links in a web page.

4. Why will you use metatag?
   Ans: Metatag is mainly used in browsers. This tag defines the metadata that means information about data. Metatag declared in the head section In HTML code. Metadata will not be displayed on the webpage but it works on the browser and search engines. Metatag has some attributes like charset, content, HTTP-equiv, name, etc. This all of the attributes have different values and different execution.

5. What is the difference between inline, inline-block, and block?

   Ans:

   Inline: The inline element contains an element to inline on the web page. Height and width properties don't affect the inline element. Some of the default inline elements are span, anchor(a), and, image.

   Inline-block: To display an inline element into a block element is called an inline-block. After setting an inline element into an inline-block element the height and width property can be set then.

   Block: Block element always contains a full block in the webpage. Block element always starts with the new line and takes up the full width. This means block elements will be set for the entire width of the parent element.

6. Difference between strong, b, bold, em, I?

   Ans:

   Strong: Strong or em tag means the text rendered in a way that the user thinks is important. The strong

and em tag always takes as important a whole to the webpage section.
bold tag only just offset text conventionally describes in the webpage.

7. What are properties and attributes in HTML?

Ans:
Attributes: Attributes are defined by HTML and used to modify the HTML tag. Attributes are used to display web pages better look using HTML tag. Attributes value doesn't change. It's always constant.
Properties: Properties are defined by the DOM element. And Dom elements belong to JavaScript Object.

8. What is a Viewport?

Ans: A viewport is a term for the visible area of a webpage. It's also a meta tag. This meta tag is an important part of matching page compatibility to a device screen. The viewport is always defined as

the device screen size for the webpage. It varies depending on the screen size.

9. What are some of the key new features in html5?
   Ans: The new key features of html5 are embedded graphics, audio, video canvas tag. The extension for the JavaScript API such as geolocation, drag and drop option as well as storage such local and session and also caching.
   The semantic tags are also included in Html5. These are main, article, nav, section, etc.

10. What is the difference between HTML elements and tags?

Ans: Html elements are the individual component in a webpage. This contains a tag and some text or numbers. Whereas HTML tag is either opening or closing that is used to remark in HTML. Elements always contain a start tag and end tag and some content. But tags have only start tag or and tag and both.

11. What are void elements in HTML?

Ans: The void elements in the HTML tag define that they have no more closing tags. This means without the closing tag all of the tags are void elements. They don't need to be closed. Ex:
, <img/>, <hr/> etc.

12. What is collapsing white space and what is the advantage of collapsing white space?

    Ans: In HTML several blank spaces are being treated as a single whitespace. This theory is called collapsing whitespace. A minimum number of black whitespaces is collapsed by the browser and converted to a single space. That clarifies the code readability and understandability to the user.

13. Why do we use alternate text in the image mapping?

    Ans: Alter text is used in image mapping and to remove the confusion about the image. It clarifies the content to the user if the user can interface with the image content. This descriptive text clarifies the image content to the user.

14. What are applets?

    Ans: Applets are small programs that are embedded into the webpage rather than perform different tasks including animation, data processing, and also computation.

15. What do you mean by Doctype?

    Ans: Doctype defines the version of Html to the web browser. Doctype written on the top of HTML code. And it also told that it is an identity tag of HTML.

CSS

1. What is Flex-Layout? Difference Flex and Grid Layout?

   Ans: The flex layout in CSS mainly makes the webpage flexible. The Flex layout provides an efficient way to layout, align, and distribute spaces according to their size.

   The basic difference between CSS grid layout and CSS flexbox layout is that flexbox is designed only for one-dimension layout, either it is measured in a column or the Row. But CSS grid layout is different

from this. The CSS grid layout is designed for a two-dimensional layout. Rows and Columns were designed at the same time.

2. Explain CSS position property? What are the differences between absolute position and relative position?
   Ans: The Position property in CSS provides the position of an element in web layout. This position property sets for how the elements are being positioned in a document.

   Relative Position provides an element relative to its current position without changing the whole layout. Whereas Absolute position provides the element relative to its parent position and changes the layout around it.
3. What is the box model? And What are the different elements of a box model?
   Ans: Box model is a complete layout model in CSS. It creates to design the layouts more attractive. The four different elements of the box model are borders, padding, margin, and the main content.

These elements are described below:
Border: The border is used to cover the whole content. It allows the style color and width.
Padding: The padding property provides the spaces among the layout. The spaces are always created inside the border.
Margin: The margin property contains the spaces outside the content and also outside the borders area.
Content: The content property is used to display the text, images, link, paragraph, etc. The content property allows the height and width property.

4. What is the hover Effect? What is the purpose of the active class?
   Ans: Hover effect appears when a user makes a cursor position to something that is being styled by the hover effect. When a hover effect creates, the cursor over the content and automatically the style changes according to the style.

   Active class: When the user makes creates an active class in an element this element is being activated by default on the web page. Or We can say the element

is being selected in the web layout pages. Active class is usually used in the link element or anchor element or lists.

5. What are the different types of selectors in CSS?
   Ans: CSS selector has been used mainly in selecting the element on which a set of rules can be applied. There are some basic selectors in CSS. These are Universal Selector, Type Selector, Class Selector, Id selector.
   These are described below:
   Universal Selector: The universal selector selects all the elements. The syntax for the universal selector is *.
   Class Selector: Class Selector allows a selection of all the elements that have been given the same class in different elements. The syntax of a class selector is a dot (.). The class selector may have been used for multiple elements.
   Id selector: The id selector is unique. It only can be used for a single element in web pages. It Selects the element based on the given id attribute value. A single id can not be used in multiple elements.

6. What is CSS specificity?

   Ans: In case sometimes it happens to conflict with the CSS rules on a single element. When CSS rule conflicts, the browser follows some rules determine to solve this issue. The browser creates a list of specificity to determine which style is being allowed and to apply.

   The universal selector (*) has the lowest specificity and the id selectors have the highest specificity. Besides this, an inline style CSS has more priority than an external link. The id attribute is more priority than classes and attributes and pseudo-classes.

7. What is a CSS preprocessor? What are some benefits of sass?

   Ans: A CSS preprocessor is a scripting language. Sometimes the collection of CSS rules may not able to reuse in different selectors. To overcome this limitation preprocessor was created. It is an advanced way of declaring CSS. CSS that has basic functionalities is being reused in the different selectors in the advanced method is called a CSS preprocessor.

Benefits of Sass: Syntactically Awesome Stylesheet or SASS is a method to write CSS a more powerful way. It lets to use variables, mathematical operations, mixins, loops, functions, imports, and other interesting functionalities. Its CSS syntax is friendly. It offers variables for whatever we want to declare. By using SASS allows customizing Bootstrap 4. SASS has the import rule to customize and handle code easily.

8. What is a pseudo Element? What is pseudo-class?
   Ans: Pseudo Element is a CSS element that can be used to style the specific part of an element.
   The syntax of pseudo-element is

```
selector::pseudo-element{
        property:value
}
```

   Pseudo Classes are normally said to the keywords. A pseudo-class adds to the selector for specifying a special state.
   For example, : hover effect can be used to change the initial state of the selected element.

9. How will you use media queries to make the website responsive?

   Ans: In the CSS technique media query is used to make the website responsive. It's a CSS technique introduced in css3. By using breakpoint CSS based website can be made as responsive. Inside the breakpoint area declaring the attribute and property according to the style make responsive webpages.

10. How will you make font size responsive?

    Ans: The font size can be customized by the "VW" content. VW means the viewport width. The viewport is the browser window size. 1vw means 1% of the viewport width.

11. What are gradients in CSS?

    Ans: Gradient is a property that allows displaying transformation among different colors. There are two different types of gradients.
    These are Linear gradient and radial gradient.

12. What are the properties of flexbox?
    Ans: the properties of flexbox are flex-direction, flex-wrap, flex-flow, justify-content, align-items, align-content.

13. What is CSS opacity?
    Ans: The opacity property mainly specifies for customizing element transparent. The opacity property has a range of values from 0 to 10.

14. What are all the position state used in CSS?
    Ans: In CSS there are four-position states. Static(default), Relative, Fixed, Absolute.

15. Define “Important” declarations used in CSS.
    Ans: Important declarations are defined as the declaration that is more important than other declarations. The important declaration always overrides the original declaration.

16. What is the Inheritance concept in CSS?

Ans: Inheritance means that the properties of child class allow inheriting the properties of the parent class. The parent class is always the top-level element and the child class are the lower level element. And the child classes get all access to the parent element.

17. What is the purpose of CSS?
    Ans: CSS is mainly used to customize the HTML code and makes the web pages more attractive look.

18. Define Z-index.
    Ans: Z-index is mainly used for the stack over the concept. It stacks over the elements that overlap each other. Its default value is 0 and contains both negative and positive values. Z-index takes the following values like auto, number initial and inherit.

19. What are the ways to integrate CSS in a web page?
    Ans: Three ways to integrate CSS in a web page. These are Embedded, Inline, and linked.

20. What is CSS float property?

    Ans: The CSS float property provides the element to be floated on the web page. It places the element right or left to the container. The element is easily removed from its original flow by using float property.

JavaScript

1. What is a JavaScript Event loop?

   Ans: The Event loop has only one task that is its just monitors the call back queue and the callback stack. Generally, JavaScript programs are being executed by the google browser v8 engine or in node js. The JavaScript engine moves the code in a callback stack. Naturally, the stack is a LIFO system. All the functions and code go through to the stack. And then serially the code is being executed. But when an asynchronous function occurs like a set timeout. The JavaScript engine pops out the function and sends it to the web API for the browser or c++ API for node-js. After pop up, the stack works normally as before. Besides this, the web API also executed

the function given from the callback stack. And after execution, the response is being transferred to the callback queue. And all the responses get and executed by the web API from the callback stack are being transferred to the callback queue. The callback queue stores the execution code and when the call stack is free it sends the code to the callback stack again. The monitoring between the callback queue and callback stack is done by the event loop.

2. How does JavaScript code is executed in Browser?
   Ans: To execute JavaScript code in a browser, first put the JavaScript code into a scripting file including .js extension, and link the scripting file into an HTML document. Though JavaScript has no compilation process the browser's interpreter interprets the code and executes it.

3. What is the difference between "==" and "==="?
   Ans: The "==" and "===" operator is the comparison operator. The main difference between "==" and "===" are "==" compares only two variables without checking the datatype of the variable. Whereas the "===" operator compares two variables in strict

modes, such as comparing the variable with checking the datatypes.

4. What is the callback function?
   Ans: A callback function is a function that passes into another function as an argument. The argument function is invoked inside the outer function and completes the task.

5. How will you return more than one value from a function?
   Ans: We can return more than one value from a function by using an object property. The values or variables that are being returned are declared into an object and return the object property. This is how we can return multiple values from the function.

6. How many arguments do call apply bind take?
   Ans: Call Apply and Bind method can be used to set this keyword independently. The call or apply function can be invoked immediately. Bind returns a bound function that is being executed later. Call invokes the function and passes the arguments one

by one. Apply invokes the function and pass the argument as an array. Bind always returns a new function and allows to pass the function in the array and any number of arguments.

7. What is closure in JavaScript?
   Ans: A closure is a combination of functions. In JavaScript, an inner function always takes some reference of the outer function. In general, a closure makes access to an outer function from an inner function. When the function is created a closure is also being created in JavaScript. A parent function always sends the value or variable to its child function. But The parent can't access the child's element.

8. What does this keyword indicate in JavaScript?
   Ans: This keyword refers to the object that it belongs to. In a method this refers to the owner object, in a function this refers to the global object.

9. What is Event bubbling in js? Or How does event delegate work in JS?

Ans: Event bubbling is a method in which an event is propagated to one element inside another element and both elements is being registered and handled. The event is first captured to the inside element and then propagated to the outside element. We can terminate the event bubble by using the stopPropagation method.

10. Explain Hoisting in JavaScript.

Ans: JavaScript hoisting is the process in which the JavaScript interpreter moves the declaration function, variables, and classes on the top of the execution. Function and classes are being referenced before they can be declared.

11. What is a recursive function?

Ans: A function become recursive when it calls itself for a certain period. Recursion means the process of calling the own function itself.

12. Difference between Undefined and Null.

Ans: Undefined means in JavaScript that a variable is being declared with no value. In other words, without value, declaring a variable is so-called undefined.
Null means zero. That is the absence of value and a variable. Neither variable nor value declared the JavaScript returns null.

13. What are the different data types in JavaScript?

Ans: There are two different data types in JavaScript. These are primitive types and non-primitive types. Further Primitive types are classified into five types. These are:
String: represent the sequence of characters.
Number: represent the number
Boolean: return the value true or false
Undefined: variable without the value
Null: represent null, not a value at all.

The non-primitive data types are classified into three more types. These are Object, Array, and RegExp.

14. What is DOM?

Ans: DOM stands for Document Object Model. DOM represents the content or document visually to the web browser. It's a programming interface for web documents. The Dom is not a part of the JavaScript language but is instead a Web API used to build the websites.

15. Is JavaScript a static or Dynamic Type?

Ans: JavaScript is mainly a Dynamic type of language. It's easy to assign the values to the variable in JavaScript. You don't care about the type of the variable because the type of each variable can be set dynamically. For example, if we declare a variable a with value of 10 we can reassign the variable a by 'ABC'. The first assigned was a number and the second one is a string. Thus, we can say that JavaScript is a dynamic type of language.

16. What is the use of is Nan function?

Ans: is Nan function decides that the argument provided by the programmer is not a number. And is a function that returns true if the argument is not a number and becomes false if the argument is being false.

17. What is negative Infinity?
Ans: Negative infinity occurs when a negative number is divided by zero.

18. What is the working of the timer in JavaScript?
Ans: Timers are mainly asynchronous callback functions. The set timeout, setInterval, clear interval; are a few types of the timer in JavaScript. These all are callback functions.

19. What is the difference between local storage and session storage?
Ans: Local Storage: A special type of storage in a browser that doesn’t send back the data to the server for every HTTP request and reduces the traffic between client and server. It contains all the information until the admin clears the storage.

Session Storage: The main difference between local and session storage is that local storage contains info until the admin clears it. Whereas session storage only kept the temporary data. When the user closes the pages, the storage becomes clear.

20. What is Window and Document in JavaScript?

Ans: Window is a global object and contains all the variables, functions, classes and history, and location.

The document is also a part of the window and as considered the part of the Window.

21. What is the type of operator?

Ans: The type of operator provides the type of the operator. After assigning the variables the type of operator tells the user what type of variable is this.

22. What are the features of JavaScript?

Ans: JavaScript has some features like it is lightweight, interpreted language, single-threaded scripting language, open-source of the platform, complementary to java, complementary for HTML, etc.

23. What is an anonymous function?

Ans: An anonymous function is a type of function that has no name. A function without a name is called an anonymous function.

24. What is the difference between java and JavaScript?

Ans: Java is completely a programming language. Whereas JavaScript is a client-side scripting language. Java creates applications that can run any virtual machine or browser, JavaScript only runs in browser or NodeJS runtime programs. The java code needs to be compiled, but the JavaScript code doesn’t need to be compiled. Java objects are class-based, JavaScript is prototype-based. Java Supports multithreading, but JavaScript is a single-threaded programming language.

25. What is the difference between events.PreventDefault and event.stopPropagation in JavaScript?

Ans: In JavaScript, the event.PreventDefault is used to stop the default behavior of the element.
But event.stopPropagation is used to stop propagation to the element. It's used mainly to stop event bubbling in JavaScript.

ES6

1. What ES6 features did you use?

   Ans: The extended feature of JavaScript in ES6 are let and const keyword
   Arrow Function
   Classes
   Promises
   Default Parameters
   Template Literals
   Multiline Strings
   Modules etc.

2. What is the difference between let, const, and var?

Ans: Var is a global scope variable. Once the declaration of var is global can redeclare and reassign from anywhere to the code.
Let variables can be assigned or updated further but neither being re-declared.
Const variables were neither re-assigned nor re-declared.

3. Why will you use the default parameter?
   Ans: When no value was passed to the function a default parameter is being sent to the function.

4. How does the spread operator work?
   Ans: The spread operator is generally used in the array. The spread operator just copies the previous array element with assigned the new array element.

5. Difference between class and Object.
   Ans: class is a template for creating the object. Whereas An object is the instance of the class. After creating classes no memory is being allocated, but when an object is created memory space is also being created. Classes are used to customize the data. Objects are the variable of the class.

6. How does inheritance work in JavaScript or what is the prototype chain?
   Ans: Inheritance denotes that the child element can be easily accessed to the parent element. The child element also easily used the variable and function of the parent element.

7. Explain Call by value and call by reference.
   Ans: Call by value indicates the different memory locations on which the actual and formal arguments are being created. Call by value always makes a copy of the variable and passed away.
   Whereas Call by reference indicates its memory location for being declared and also passed by itself.

8. What is the scope of JavaScript?
   Ans: Scope means the area. Which refers to the current context of code always. Scope determines the accessibility of variables to JavaScript. There are two scopes introduced to JavaScript. These are global and local scope.

9. What is the Higher-Order function?

Ans: Higher-order function is a special type of function which takes a function as an argument or returns it inside the function.

10. What is API? Difference between “Get” and “Post”.

Ans: API stands for Application Program Interface. API is a set of definitions to declare develop and integrate an application.

The get and Post methods are mainly used for the servers. By using get, something that is viewing in the web pages. For server get method used to get a request from the server.

By using the post method data can be posted or sent to the server.

11. What are cookies? And why will you use it?

Ans: Cookies are used to store users’ information on the web page. JavaScript can create delete or read cookies using documents. cookie property.

We will use a cookie for storing the user information In the browser.

12. What is object-oriented programming?

Ans: According to the name Object-oriented programming is mainly Object-based. Generally, The whole program is being enclosed by the object property is known as object-oriented programming.

13. Difference between array and linked list.

Ans: An array is a collection of similar data types. A linked list is a collection of objects known as a node. A linked list has two major parts. The first part is the data and the second part contain the address of the data. Array elements become independent of each other. The linked lists element is dependent.

14. How will you debug a JavaScript application?

Ans: Setting breakpoint, using debugger, and using console.log we can debug a JavaScript application easily.

15. Give a thorough comparison between ES5 and ES6

Ans: ES5 is the fifth edition of ECMAScript. ES6 is the sixth edition of ECMAScript. In ES5 var variables are being introduced, In ES6 addition with varlet and const being introduced. While ES5 uses the normal

function ES6 uses the Arrow function. The spread operator is also introduced in ES6.

16. What is destructuring in ES6?
Ans: Destructuring is being used to extract an element from the array and object in Ecmascript6.

17. Define Map and filter function method.
Ans: Above all of the function are the callback function, Map function return all the arrays inside an array or object.
filter function returns a single array under some conditions.

18. How can you traverse an object in JavaScript?
Ans: By using the forOf method a JavaScript object is being iterable and also traversed.

19. What is Babel?
Ans: Babel is one of the most use JavaScript transpilers. Which converts the source code into machine code and also browser standard.

20. What is set?

Ans: Set is the collection of unique values. Set removes all the duplicate values. The values can be primitive types or object references.

21. Define Promises.

Ans: Promises contain more accurate ways to apply the asynchronous method in JavaScript. It is generally defined as asynchronous computation.

22. Define Variable hoisting.

Ans: The variable that will go to the top of the function and state is known as hoisting.

23. How can you get the list of all properties?

Ans: By using the object. Keys a user can get all the properties of the list.

24. Define Rest Parameter.

Ans: By using the Rest parameter it is possible to represent indefinite parameters as an array. We can

call the function with any number of arguments by using the Rest parameter. We also take the rest of the value by using this.

25. How many states of promises in JavaScript have?

Ans: JavaScript have three state od promises. These are Pending, Fulfilled and Rejected.

React

1. What is react-js? Tell us about the advantages and disadvantages of using react js.

Or Why will you select ReactJS?

Or there are so many different JavaScript frameworks. Why will you use ReactJS for your application

Ans: React is an open-source front-end JavaScript library for building user interfaces.

My preference is React Js because it has an open platform to learn and use easily.

Creating a Dynamic web application is easier than any other.

Reusable components are made by React.

SEO friendly and have a helpful developer toolset.

2. What is JSX? How does it work?

Ans: JSX stands for JavaScript XML. Writing the HTML code with JavaScript is known as JSX. JSX provides the syntactic sugar for the reaction. createElement (). JSX doesn't return multiple parent elements. After compilation, JSX expressions become regular JavaScript function calls and evaluate JavaScript objects. In JSX JavaScript code can be written with curly braces. JSX always allows a single line Code for JavaScript. JSX allows declaring variables with Html.

3. What is Virtual Dom? What are the differences between virtual and real Dom?

Or what is the diff algorithm? How does it work?

Ans: DOM stands for Document Object Model. Dom is very much expensive. When to change one element into the DOM. It changes the whole structure of the model. So, DOM always supervises the changes. Virtual Dom makes a copy of real DOM and compares it. The Virtual Dom compares with the real Dom and identifies only the changes that might occur.

4. Difference between props and state.

Ans: Props are used for passing the data from one component to another. The state is something that passed the data within the component only. Props are immutable and can not be modified, where the state is mutable and can be updated or modified. Props can be used

with state and functional components. Both of them hold the information.

5. What is the purpose of the use state? When and why will you use it?

Or manage State

Ans: The useState() hook allows to store the state variables in functional components. By using useState we can state the variables in some places. useState holds the variable information and may change over the lifetime of the component.

6. What is prop drilling?

Or What is the best way to pass data 4-5 layers down?

Or What is a context API? How does it work?

Ans: In React sometimes the props are being sent to the 3rd,4th, and nth, component. But the intermediate component has no connection with the props. It's called prop drilling. To solve this problem context API is introduced. Context API is a way to produce global variables effectively. This is the process of alternating prop drilling. These are also mentioned as props transferred from grandparents to children to parents and so on.

7. Difference between use Effect and useState?

Or why do we need to inject dependency for use Effect?

Ans: use state is used for holding the variables, array, or object from inside of the elements.

useEffect is used to load information outside of the element or code. useEfeect just load the information by default one single time. We need to use the inject dependency to load the information multiple times under some condition.

8. What other hooks have you used other than useState and use effect?

Ans: There are a few hooks that are being used in React. These are useRef, useCallBack, useParam, useMemo, useContext, useReducer etc.

9. Tell us about react component lifecycle.

Ans: Three phases introduce the react component life cycle. The phases are Mounting, Updating, and Unmounting.

Mounting means adding elements into the DOM. Four built in method react has been called for Mounting. These are constructor (), getDerivedStateFromProps (), render (), componentDidMount ().

The next phase in the lifecycle is updating. A react component is updated when its state or props are being updated.

The last phase of react life cycle is Unmounting. Unmounting happens when a component is removed from the virtual DOM.

10. What is the purpose of a custom hook? How will you create a custom hook? Give us an example.

Ans: The custom hook is created by the user. The custom hook is a JavaScript function that is created by the programmer or developer. To share logic among some components and other JavaScript functions custom hook is very useful. Custom hook allows sharing a piece of code to share different levels of several parts of the app.

useAuth is one kind of example for the custom hook. It is created for using the context API.

11. What is the most challenging task you have accomplished in react?

Ans: In react I've faced the most challenging task is to create the context API and to create the private Routing content.

12. What is Redux and its uses?

Ans: Redux is a predictable state container for JavaScript. Redux stores the state in a different way and sent it to multiple components.

13. Do You Know about React Native?

Ans: React Native is a platform to build Android and iOS apps.

14. What is a higher-order component. Give us an example.

Ans: The higher-order component is a type in which the selected component can be reused in various components. Besides this, the higher-order component takes another component as a function and returns the new component.

15. How would you optimize a React Js Application?

Ans: There have a few techniques to optimize the React Js Application.

Using immutable Data Structure: revolves around a strict unidirectional dataflow. Immutable data objects are simpler to create, test and use.

Use React. Fragments to avoid additional Element wrapper: react. fragment allows a group of children without adding an extra node.

16. Explain react hooks.

Ans: React hooks are mainly used in functional components. Hooks are one kind of function that lets us hook into react state and lifecycle features.

17. How to pass data between react components.

Ans: By using props we can pass data between react components. Using context API is an alternative method for passing data between react components.

18. What are error boundaries in React?

Ans: The components which use the lifecycle methods are considered as the error boundaries. Three phases where boundary detects an error. These are Render phases, inside a lifecycle method, and including the constructor.

19. What are lifting states in react?

Ans: When the same state is used in several components or sharing the same state in different components a lifting state is used. Sharing the same state in the parent element and passing to the child element lifting upstate is more useful.

20. Why react using class Name instead of class attribute?

Ans: React uses className because react has a keyword named class. So, removing the contradiction className is used instead of class.

21. What is a fragment in React?

Ans: React fragment is used to return multiple elements in the React components. Inside the fragment, a list of children is introduced.

22. Why fragments are better than container divs?

Ans: React fragment is lightweight and takes fewer memory spaces than div. Some mechanisms in CSS like flexbox or grid have a parent-child relationship and using the div inside this relationship makes it harder to create the layout.

23. What are stateless Components?

Ans: The independent state is being called the stateless component.

24. What are stateful components?

Ans: The component which behaves like a dependent component is known as a stateful component. The class component is stateful.

25. What is the purpose of push () and replace () methods of history?

Ans: The history is used for visiting locations. The push () method is used to add a new location and the replace() method is used to replace the current location with the new one.

NodeJs

1. What is Nodejs? Difference between Nodejs and JavaScript.
   Or
   Is NodeJs is blocking or nonblocking?
   Ans: NodeJS is an open-source JavaScript runtime platform. It allows the JavaScript code to run on the server. NodeJS is mainly used for developing web server technologies. NodeJS comes with a lot of modules and is mostly used for servers.
   Difference between JavaScript and NodeJS
   JavaScript only runs in the browser. With the help of NodeJS JavaScript runs outside of the browser. JavaScript is a scripting language whereas NodeJs is JavaScript runtime. JavaScript contains the HTML tag, nodes don't. JavaScript is mainly used in frontend development. NodeJs is used in server-side or backend development.
   NodeJs is nonblocking and allows all of the callback functions.

2. Why did You use react and Mongo DB in your react project?
   Ans: NodeJs is JavaScript runtime, and mongo DB is the database for JavaScript. Using NodeJs runtime react connects to the database. Here Nodejs is the medium to connect database and server-side with react.

3. What is the difference between SQL and NoSQL?
   Ans: SQL stands for the structured query language. No SQL has a dynamic schema with unstructured data. But SQL has a predefined schema with structured data. SQL databases are mainly relational databases, whereas NoSQL database is a nonrelational database. In SQL database schemas are rigid whereas no SQL schemas are flexible. Examples of SQL are Oracle,

MySQL, Microsoft SQL and Server, and PostgreSQL. Example of NoSQL in Mongo DB and CouchDB.

4. What have you done with Mongo DB?
   Ans: Mongo DB is a No SQL database system. Mongo Db is used to store client-side web data. MongoDB has scalability and flexibility. Mongo DB is a non-relational database for storing data.

5. Have You worked out Website Hosting?
   Ans: Yes, I've worked with hosting. I have hosted my website on a free hosting website like Netlify and Firebase.