**Basic React JS QUESTIONS**

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**১. What is reactjs?**

Ans: React is a front-end JavaScript library. It works based on component approach which helps in building reusable UI components. It helps to develop complex and interactive web and mobile UI

**2.Tell us about advantages and disadvantages of using react js.**

advantages and disadvantages of using react js are given below:

Advantages of React:

* It improves the application’s performance
* code’s readability increases because of JSX.
* It is easy to integrate with other frameworks.
* It gives a beautiful and smooth experience of using website without reload everytime.

Disadvantages of React:

* React is just a library, not a full-blown framework
* It can be little difficult for the new learner programmers to understand
* It is not good for SEO.

===============End ================

**3. Why will you select ReactJS?**

Ans: We select react because it helps to improve the performance of applications. It can run a website without reloading the page everytime whice gives the user a smooth experience of using the website. It is so fast, scalabe and simple. we can reuse component as per our need. It provides totally Hassle-free reusability of components.

========End =========

**4. What is Virtual dom? What are the** **differences between virtual and real dom?**

Ans:

A virtual DOM is a lightweight JavaScript object which originally is just a copy of the real DOM.It kept in the memory and synced with the real DOM by libraries such as ReactDOM. This is an Reconciliation process. both virtual DOM and real DOM belongs to same properties.

The differences between virtual and real dom are given below:

1. Real Dom update state slow but vitual dom update state fast.
2. Real DOM can directly update HTML code but virtual dom can not update HMTL code directly.
3. Vitual Dom is easy to use for dom menupulation. But Real DOM is not so easy like virtual DOM.

========End ========

**5.Can you change props?**

Ans: No. props is read only in react Js. We can not change props. We can change states of react js. But we can pass props to one component to other component.

========End ========

**6. What is the purpose of useState? When and why will you use it?**

Ans: The useState Hook allows us to manage state in a function component. State generally refers to data or properties that need to be manage in an application. It helps us to change data state as per our need. It works similar like a variable that can be change. We use this hook when we need to store some data that can be change as per our need. It helps to easily update state data in application.

========End========

**7. What is a context API? How does it work?**

Ans: The Context API is a system for a React app to effectively produce global variables that can be passed to the entier app without any issue. It helps to easy do props drilling. If a child component at nth level requires a property from a parent component at any level, the information needs to be passed one level by level through props. In an application with lot of nested components, it is difficult.

Context API helps to directly send an information from a parent component to a child component at any level.

========End ========

8. Difference between useEffect and useState?

Ans:

The useEffect hook lets us to perform side effects in functional components. It helps us to avoid redundant code in different lifecycle methods of a class component. It helps to group related code. on the other hand, the useState Hook allows us to manage state in a function component. It helps us to change data state as per our need.

=========End =========

9. What is JSX? How does it work

Ans:

JSX is a shorthand for JavaScript XML. JSX allows us to write HTML elements in JavaScript and place them in the DOM.It converts HTML tags into react elements. It makes it easier to write React applications.

=========End =========

10. Tell us about React Component lifecycle

Ans:

The development of each component involves the use of different lifecycle methods **i**n ReactJS**.** There are 4phases involved in the lifecycle

1. Initializing
2. Mounting
3. Updating
4. Unmounting

=========End =======

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

Ans:

Custom Hook is a JavaScript function which we create by ourselves, when we want to share the same logic between other JavaScript functions. It allows you to reuse some piece of code in several parts of your app.

to make a custom hook we can create a folders name hook for store our all-custom hook. Then we can make a file based custom hook on this folder as per our need.

for example: we always need to fetch data from API so to write the data fetching code again and again rather we can make a custom hook for fetching data and can use it for any fetching data from API.

=========End ======

12. How would you optimize a react js application?

Ans:

React Js Always re-render the comonent code while chaning a state. When we change something on react in re-render the whole code of our app which is unnecessary sometime for our application. For stop these unnecessary re-renders we can use useMemo. This function will help to not re-render the code always. It will take some dependency for re-render those code. And it will improve out application speed also.

========End ========