

1. What are React Hooks and why were they introduced?
2. How do React Hooks improve the functionality and readability of functional components?
3. What is the `useState` hook, and how is it used to manage state in functional components?
4. Explain the syntax and usage of the `useState` hook with an example.
5. What is the purpose of the `useEffect` hook in React?
6. How can you control when the `useEffect` hook runs?
7. Provide an example of using the `useEffect` hook to fetch data from an API.
8. What is the difference between `useEffect` and `useLayoutEffect` hooks?
9. Describe a scenario where `useLayoutEffect` would be preferred over `useEffect`.
10. How does the `useContext` hook simplify accessing context in functional components?
11. Provide an example of using the `useContext` hook to consume a context value.
12. What is the `useRef` hook and what are its typical use cases?
13. How can `useRef` be used to access and manipulate a DOM element directly?
14. Explain the difference between `useRef` and `createRef`.
15. What are the benefits of writing custom hooks in React?
16. Provide an example of a custom hook for fetching data from an API.
17. How can you share logic between components using custom hooks?
18. What is the importance of the dependencies array in the `useEffect` hook?
19. How does the `useEffect` hook handle cleanup for side effects?
20. Explain how to create and use a custom hook for managing form inputs in a React application.