



Improvements in REACT 19

follow me for
other new react
features



REACT 19

coming soon...



Muhammad Mohsin





refs as a prop

then

Previously, refs were created using `createRef()` outside the component, making it **challenging to pass them down to child** components.

now

React 19 allows **directly passing ref as a prop** to functional components, streamlining ref usage and facilitating communication between parent and child components.

```
1  function ParentComponent() {  
2    const myRef = React.createRef();  
3  
4    return (  
5      <ChildComponent ref={myRef} />  
6    );  
7  }  
8  
9  function ChildComponent(props) {  
10    return (  
11      <div ref={props.ref}>Child component!</div>  
12    );  
13  }  
14
```

pass the ref as a
prop to the child

Access the ref
from props





Context as a provider

then

Without a clear way to define and consume context, sharing data across multiple levels of the component hierarchy required prop drilling, which can lead to **code duplication** and maintenance challenges.

now

React 19 reinforces the concept of Context as a provider, enabling developers to **create a centralized location to store and share application-wide data**. This promotes better code organization and simplifies data management.

```
1  const MyContext = React.createContext(defaultValue);
2
3  function MyProvider({ children, value }) {
4    return (
5      <MyContext.Provider value={value}>
6        {children}
7      </MyContext.Provider>
8    );
9  }
10
11 function ChildComponent() {
12   const value = React.useContext(MyContext);
13   return <div>Context value: {value}</div>;
14 }
15
```

provide context
value

consume context
value





Cleanup functions for refs

then

Memory leaks could occur if refs weren't cleaned up correctly, especially in situations like **uncontrolled components or side effects within useEffect.**

now

React 19 introduces a cleanup function as an optional second argument to `React.createRef()`. This function allows you to **perform necessary cleanup tasks when the component unmounts** or the ref value changes.

```
1  const myRef = React.createRef(() => {  
2    // Cleanup logic here, e.g., removing event  
    listeners  
3  });  
4  
5  useEffect(() => {  
6    // ...  
7  }, [myRef.current]); // Dependency on ref value  
8
```

miro





useDeferredValue initial value

then

Previously, `useDeferredValue` didn't allow specifying an initial value, potentially leading to **unexpected behavior if accessed before the initial value** was resolved.

now

React 19 now accepts **an initial value as an argument to `useDeferredValue`**, preventing potential issues when reading the value before it's settled.

```
1  const deferredValue = useDeferredValue(initialValue);  
2
```

miro





Diffs for hydration errors

then
now
Debugging hydration **mismatches**, which occur when the server-rendered HTML doesn't match the client-side rendered output, could be difficult due to a lack of clear error messages.

React 19 provides **more detailed diffs for hydration errors**, making it easier to identify and fix discrepancies between server and client rendering. This helps in ensuring a seamless user experience.

Document Metadata, stylesheets, Async Scripts, Preloading Resources

then
now
While React doesn't directly provide APIs for these features, the improvements in React 19 **enable better integration with browser capabilities** for managing document metadata, stylesheets, async scripts, and preloading resources.

Modern browsers offer APIs like `document.head.append()` and `link` and `script` elements with the `rel` and `as` attributes for these purposes.





Follow me for more content.

