TechCarrel

HIGH ORDER COMPONENT

A higher-order component (HOC) is a function that takes a component as an argument and returns an enhanced version of that component with additional functionality. In React, HOCs are a way to reuse component logic and provide cross-cutting concerns such as state management, authentication, or data fetching.

HOCs are not built-in features of React but are a pattern commonly used in React development. They are regular JavaScript functions that follow a specific convention: they accept a component as input and return a new component. The returned component usually wraps the original component, providing additional props, state, or behavior.

e.g.

```
import React ,{useRef} from "react";
import { useState } from "react";
function  App(){
   return (
      <div>
        <h1> HOC</h1>
       {/* <Conuter></Conuter> */}
        <HOCRed component={Conuter}></HOCRed>
        <HOCGreen component={Conuter}></HOCGreen>
      </div>
    );
}
function HOCRed(props){
   return <h2
style={{backgroundColor:"red",width:100}}>RED<props.component></props.component></h2>
}

function HOCGreen(props){
   return <h2
style={{backgroundColor:"green",width:100}}>Green<props.component></props.component></h2>
}
function  Conuter(){
   const [count,setCount] = useState(0)
   return (
      <div>
        <h1> {count} </h1>
        <button onClick={()=>{setCount(count+1)}}>udpate</button>
      </div> );}
export default App;
```