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***REPORT #: W:7,D:4***

***TASK TITLE Custom Hooks (basic intro)***

A **custom hook** in React is a **JavaScript function** whose name starts with "use" and allows you to reuse stateful logic between components without repeating code.

### ****1. Why Use Custom Hooks?****

* To **avoid duplicate logic** in multiple components.
* To **keep components clean** by moving logic into separate files.
* To **share logic** without affecting component structure.

### ****2. Basic Rules****

* The function **must** start with use (e.g., useFetchData).
* Can use other hooks like useState, useEffect inside it.
* Must follow React’s **Rules of Hooks** (only call hooks at top level, only call from React functions).

### ****3. Example: A Simple Custom Hook****

// useCounter.js

import { useState } from "react";

function useCounter(initialValue = 0) {

const [count, setCount] = useState(initialValue);

const increment = () => setCount(count + 1);

const decrement = () => setCount(count - 1);

const reset = () => setCount(0);

return { count, increment, decrement, reset };

}

export default useCounter;

**Usage in a component:**

import React from "react";

import useCounter from "./useCounter";

export default function CounterComponent() {

const { count, increment, decrement, reset } = useCounter(5);

return (

<div>

<p>Count: {count}</p>

<button onClick={increment}>+</button>

<button onClick={decrement}>-</button>

<button onClick={reset}>Reset</button>

</div>

);

}