



Conditional Rendering

Conditional rendering allows you to dynamically display different UI elements based on certain conditions

Ternary Operator

A concise way to render different UI elements based on a boolean condition.



Short Circuit Evaluation

A technique to efficiently render UI elements based on conditional expressions.





Event Handling

Handling Events

A way to define functions that respond to specific user interactions, such as clicks, form submissions, and input changes.



useState with Event Handling

Integrating event handlers with useState to dynamically update component state based on user input.

```
const [inputValue, setInputValue] = useState("");
const handleChange = (e) => {
   setInputValue(e.target.value);
};
```



Hooks

useState

A hook for managing component state, allowing you to keep track of data within the component and update it as needed.



```
const [count, setCount] = useState(0);
```

useEffect

A hook for handling side effects, such as data fetching, subscriptions, and cleanup logic.



```
useEffect(() ⇒ {
// Effect logic here
}, [dependencies]);
```

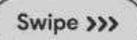
useContext

A hook for sharing data across components without the need for prop drilling



```
const value = useContext(MyContext);
```





Components and Props

Functional Components

The fundamental building blocks of Ul construction in React.



Destructuring Props

A concise way to access prop values directly within the functional comp.



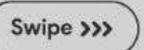
Default Props

A mechanism to provide default values for props.



```
MyComponent.defaultProps = {
   message: "Default Message",
};
```





useReducer

A hook for managing complex state, providing a more structured approach to state updates.



useCallback

This hook memoizes a callback function, preventing unnecessary re-renders of child components.

```
const memoizedCallback = useCallback(() → {
// callback logic
}, [dependencies]);
```



useMemo

useMemo memoizes the result of a computation, preventing it from being recalculated on every render.

```
const value useHemo(() ⇒ computeValue(a, b), [a, b]);
```

useRef

useRef returns a ref object with a current property that can be used to hold a mutable value.

```
const myRef = useRef(initialValue);
```





