**What is useState?**

useState is a React Hook that helps in managing states of components. It returns an array with two elements: the current state value and a function to update that state. It helps in managing and updating the local component without needing to re-render the whole application. Instead, it only re-renders the local component.

**What are Props Drilling and State Lifting?**

Props Drilling: Props drilling refers to the process of passing data from a parent component down through multiple levels of nested child components via props. This often occurs when deeply nested components need to access data or functions that are defined in higher-level components.

function Grandparent() {

const data = "Hello from Grandparent";

return <Parent data={data} />;

}

function Parent({ data }) {

return <Child data={data} />;

}

function Child({ data }) {

return <div>{data}</div>;

}

State Lifting: State lifting is a technique used in React to share state between multiple components. When two or more components need to share state, the common state is lifted up to their closest common ancestor. The ancestor component then manages the state and passes it down to the child components via props.

function Parent() {

const [sharedState, setSharedState] = useState("");

return (

<div>

<ChildA sharedState={sharedState} setSharedState={setSharedState} />

<ChildB sharedState={sharedState} />

</div>

);

}

function ChildA({ sharedState, setSharedState }) {

return (

<input

value={sharedState}

onChange={(e) => setSharedState(e.target.value)}

/>

);

}

function ChildB({ sharedState }) {

return <div>{sharedState}</div>;

}

**What is “Key” attribute?**

Key attribute basically gives identity to the list elements. It is an unique identifier of each element in a list and is used to identify which items in a list have changed, been added, or removed. It helps React optimize the rendering of lists.

Without a unique key, React would need to re-render every item in the list whenever there is a change. This can be inefficient, especially for large lists. With a unique key, React can quickly identify which items have changed and update only those specific items.

**What is Synthetic Event?**

A synthetic event in React is a way for React to handle events (like clicks, typing, etc.) in a way that works the same across all web browsers. This makes it easier for developers because they don’t have to worry about differences between browsers when writing event-handling code.

**What is Virtual Dom?**

Virtual Dom is a concept of React that represents the real DOM and is responsible for optimizing the UI update. It is saved in the memory, and it's synced with the real DOM. When an update happens, react will generate a new version of the virtual DOM, and compare it (using diffing algorithm) with the previous virtual DOM and updates the parts of real DOM where changes took place. The process React uses to update the actual DOM is called reconciliation.