1. What is React.js?

Answer:

React.js is a **JavaScript library** developed by Facebook for building **user interfaces**, especially **single-page applications (SPAs)**. It allows developers to create reusable UI components.

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2. What are components in React?

Answer:

Components are **independent, reusable pieces of UI**. They can be **class components** or **functional components**.

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4. What is the Virtual DOM?

Answer:

The **Virtual DOM** is a lightweight copy of the **real DOM**. React updates the Virtual DOM first, then efficiently updates only the changed parts in the real DOM — improving performance.

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5. What are props in React?

Answer:

Props (short for "properties") are **read-only inputs** passed from a parent component to a child component. They help make components **dynamic and reusable**.

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6. What is state in React?

Answer:

State represents **data that can change over time** in a component. When state changes, React automatically re-renders the component to reflect the new data.

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advantages of using React:

Component-Based Architecture we can Reuse components. **So it** Reduces code duplication.

Virtual DOM – Efficient updates and faster rendering.

Difference between Virtual DOM and Real DOM?

Virtual DOM updates only changed elements; real DOM re-renders the entire UI.