

Props and State

Question 1: What are props in React.js? How are props different from state?

Props are inputs to a component, passed from a parent component. They are immutable (cannot be changed) within the component.

State is a component's own data that can change over time. Unlike props, state is mutable and can be updated by the component itself.

Difference: Props are for passing data to a component, while state is for managing data that changes within the component.

Question 2: Explain the concept of state in React and how it is used to manage component data.

State is a component's internal data that can change over time, affecting the component's behavior and rendering. It's managed within the component and can be updated using `setState` (class components) or `useState` (functional components). Changes in state trigger a re-render.

Question 3: Why is `this.setState()` used in class components, and how does it work?

`this.setState()` is used to update the state in class components. It merges the new state with the current state and triggers a re-render. It's asynchronous, meaning React batches updates for performance.