

## **Module 9) React** **Components, State & Props**

### **State & Props**

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

**Answer:**

Props (short for “properties”) are used to pass data from a parent component to a child component. They are read-only, which means the child component cannot change them. In contrast, state is data that belongs to the component itself and can be changed within the component. So, props are for passing data to a component, while state is for managing internal data.

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

**Answer:**

State is a built-in object in React that is used to store data or information about the component. When the state changes, the component automatically re-renders to reflect the new data. In functional components, we use the `useState()` hook to create and update state, while in class components, we use `this.state` and `this.setState()`.

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

**Answer:**

In class components, `this.setState()` is used to update the component's state. It tells React that the state has changed and the component should re-render with the new data. It updates only the part of the state you specify, not the whole state object.