

Theory Assignment

➤ Lifecycle

Question 1: What are lifecycle methods in React class components? Describe the phases of a component's lifecycle.

Lifecycle methods are special methods in React **class components** that get called at different stages of a component's life – from creation to deletion.

React component lifecycle has **3 main phases**:

1. **Mounting** (Component is being created and added to the DOM)
 - Methods: constructor(), render(), componentDidMount()
2. **Updating** (Component is being updated due to state/props changes)
 - Methods: shouldComponentUpdate(), render(), componentDidUpdate()
3. **Unmounting** (Component is being removed from the DOM)
 - Method: componentWillUnmount()

Question 2: Purpose of componentDidMount(), componentDidUpdate(), and componentWillUnmount()

Method	Purpose
componentDidMount()	Called once after the component is added to the DOM. Use it to fetch data or start timers.
componentDidUpdate()	Called after the component updates (due to props or state changes). Use it to react to updates, like updating the DOM or sending a network request again.
componentWillUnmount()	Called just before the component is removed from the DOM. Use it to clean up , like clearing timers or removing event listeners.