

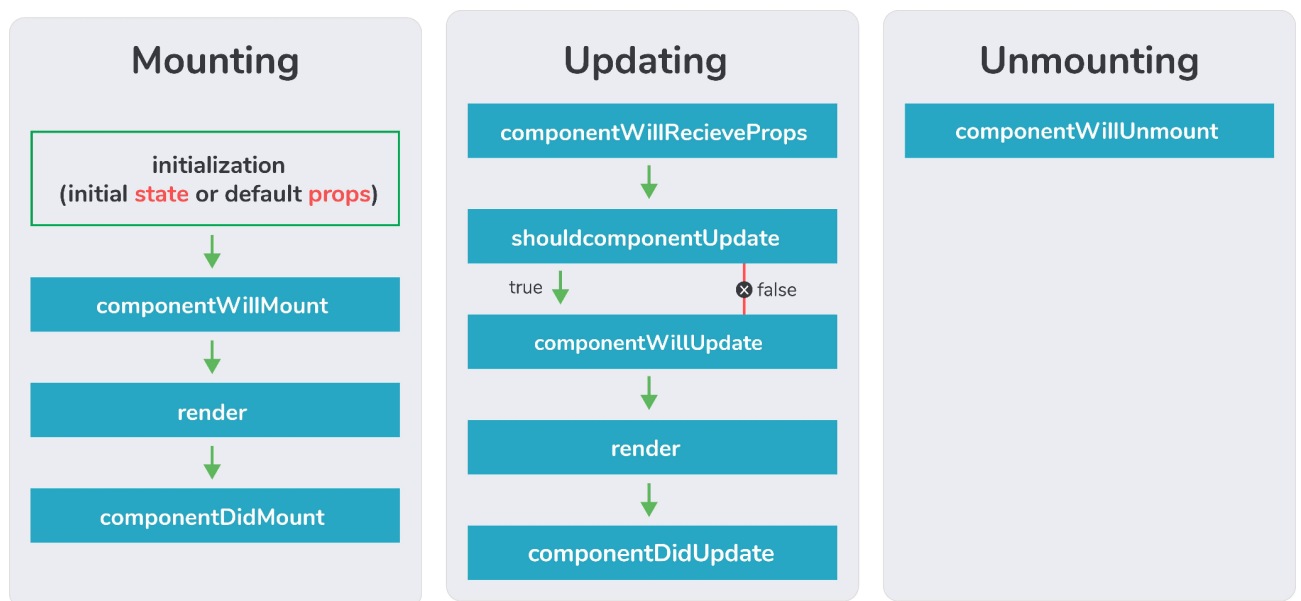
Interview Questions

Q1.What are the different lifecycle methods in React? (Gojek)

Answer: Every component in React has lifecycle methods that we can tap into, to trigger changes at a particular phase of the life cycle.

Each component in react goes through three phases: Mounting, Updating and Unmounting.

There are corresponding lifecycle methods for each of the three phases:



Mounting:

There are four built-in lifecycle methods that are called in the following order when a component is mounted:

constructor() - This is called before anything else. We can set the initial state of the component inside this method. The constructor method is used to set the initial state and bind methods to the component.

getDerivedStateFromProps() - This is called before rendering the elements in the DOM.

In this method, we can set the state of the component based on the props we received. This method is used very rarely.

`render()` - This is the only required method in the class component. This method returns the HTML elements which are going to be rendered inside the DOM.

`componentDidMount()` - It is called right after the component is rendered inside the DOM. All the statements which require the DOM nodes can be executed in this method. Network requests from a remote end-point can also be instantiated in this method.

Updating:

Updates in react are caused by changes in state or props. Update leads to re-rendering of the component. The following methods are called when a component is re-rendered:

`getDerivedStateFromProps()` - This method is called again when a component is being re-rendered.

`shouldComponentUpdate()` - This method is called before rendering the component when new props are received. It lets React know if the component's output is affected by the newly received props or by the state change. By default, it returns true.

`render()` - To re-render the HTML inside the DOM, the `render()` method gets called again.

`getSnapshotBeforeUpdate()` - This method is called just before the newly rendered HTML gets committed to the DOM. It stores the previous state of the component so that React has an idea of what parts of the DOM need to be updated.

`componentDidUpdate()` - It is called after the component gets re-rendered. This method works just like the `componentDidMount()` method, the difference is that this method does not get called on initial render.

Unmounting:

`componentWillUnmount()` - This method is called just before the component gets destroyed. Any cleanup statements should be executed inside this method.

Q2.What Is the concept of Mounting in React.JS? (Amazon)

Answer: The name is self-explanatory. Mounting is the phase in which our React component mounts on the DOM (i.e., is created and inserted into the DOM).

This phase comes onto the scene after the initialization phase is completed. In this phase, our component renders the first time. The methods that are available in this phase are:

1. **componentWillMount()**

This method is called just before a component mounts on the DOM or the render method is called. After this method, the component gets mounted.

Note: You should not make API calls or any data changes using this.setState in this method because it is called before the render method. So, nothing can be done with the DOM (i.e. updating the data with API response) as it has not been mounted. Hence, we can't update the state with the API response.

2. **componentDidMount()**

This method is called after the component gets mounted on the DOM. Like componentWillMount, it is called once in a lifecycle. Before the execution of this method, the render method is called (i.e., we can access the DOM). We can make API calls and update the state with the API response.

Q3.What is the Difference Between Rendering And Mounting? (OYO)

Answer: In a React component, initial rendering happens before mounting. Rendering returns the elements which are supposed to be mounted in the DOM. Mounting a react component means the actual addition of the DOM elements created by the react component into the browser DOM for the first time.

Following are some of the React life cycle functions associated with 'mounting'.

- **componentWillMount()**
- **componentDidMount()**
- **componentWillUnmount()**

componentWillMount() will be invoked right after constructor(), but before **render()**.

componentDidMount() will be called after the first time **render()** method is called in a component and the result is updated in the DOM. This function invokes only once in the lifetime of a react component.

componentWillUnmount() too will be called only once in the lifetime of a react component, but that happens right before the component is unmounted from the DOM. You can use this method to write the cleanup code for the component if any.

render() function will be invoked every time rerendering happens in the component. It may happen either through a state change or a prop change.

The main difference between mounting and rendering is that mounting happens once, but rendering can happen any number of times.