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◆ Current Skill Life Cycle

LifeCycle

Every React Component has a lifecycle of its own.

component lifecycle can be defined as the series of methods that are invoked in different stages of the component's existence.

A React Component can go through three life stages.

Each component in React has a lifecycle which we can monitor and manipulate during its three main phases.

The three phases are:

- Mounting: The first phase of the component lifecycle is when the elements are put in the DOM.
- 2. **Updating**: The second phase in the lifecycle is when a component gets updated.
- 3. **Unmounting**: The final phase in the lifecycle is when a component gets removed from the DOM.

Mounting

This phase is the first phase of the component lifecycle. It contains four methods that are invoked in this order, when an instance of a component is being created and inserted into the DOM:

- 1. Constructor(): This method is called when the component is initiated. The constructor method is the place where we declare the state and pass the props as arguments.
- 2. getDerivedStateFromProps(): This method is called before rendering the elements in the DOM. getDerivedStateFromProps exists for only one purpose. It enables a component to update its internal state as the result of changes in props.
- 3. render(): This method is the only required method when working with classes. It examines the props and the states and returns the element to render.
- 4. ComponentDidMount(): This method is invoked immediately after the component gets rendered and it's the perfect place to call the setState method.

When the state or the props get updated, the component enters this phase of its lifecycle. This phase contains five methods invoked in this order:

- 1. getDerivedStateFromProps(): This method is the same as the one in the mounting phase. It returns an object to update the state or returns null if there is no update.
- 2. shouldComponentUpdate(): This method is the second method to invoke in this phase. It will either define the component that will be updated or not, depending on whether or not the props or the state get modified.
- 3. render(): The same as the one in the mounting phase, except it will re-render according to the new props/state.
- 4. getSnapshotBeforeUpdate(): This method is invoked right before the most recently rendered element is committed. It gives us the possibility of capturing some information from the DOM, before it potentially changes.
- 5. componentDidUpdate(): this method is called immediately after the update occurs.

Unmounting

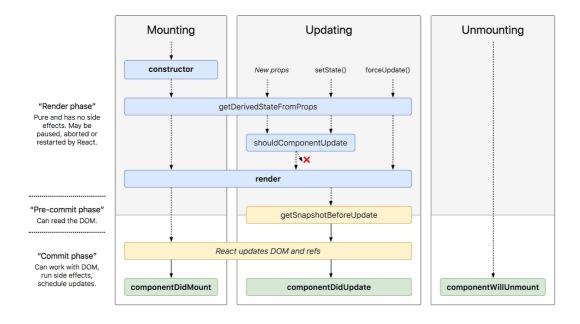
The component enters this phase at the end of its life, meaning that it will be removed from the DOM.

1. componentWillUnmount(): This method is called immediately before the component's end of its lifecycle. It's the perfect place to clean up our component.

Recap:

Let's sum up what we have seen, the component passes through three major phases during its lifecyle. Each phase contains methods to be invoked in a certain order. In some cases we need to change the behavior of these methods in order to accomplish specific tasks.

In the image below, there is a visual description of these phases.



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