The Component Lifecycle

These functions allow us to tap into the lifecycle of a component and add custom code at given times.

WE'LL COVER THE FOLLOWING

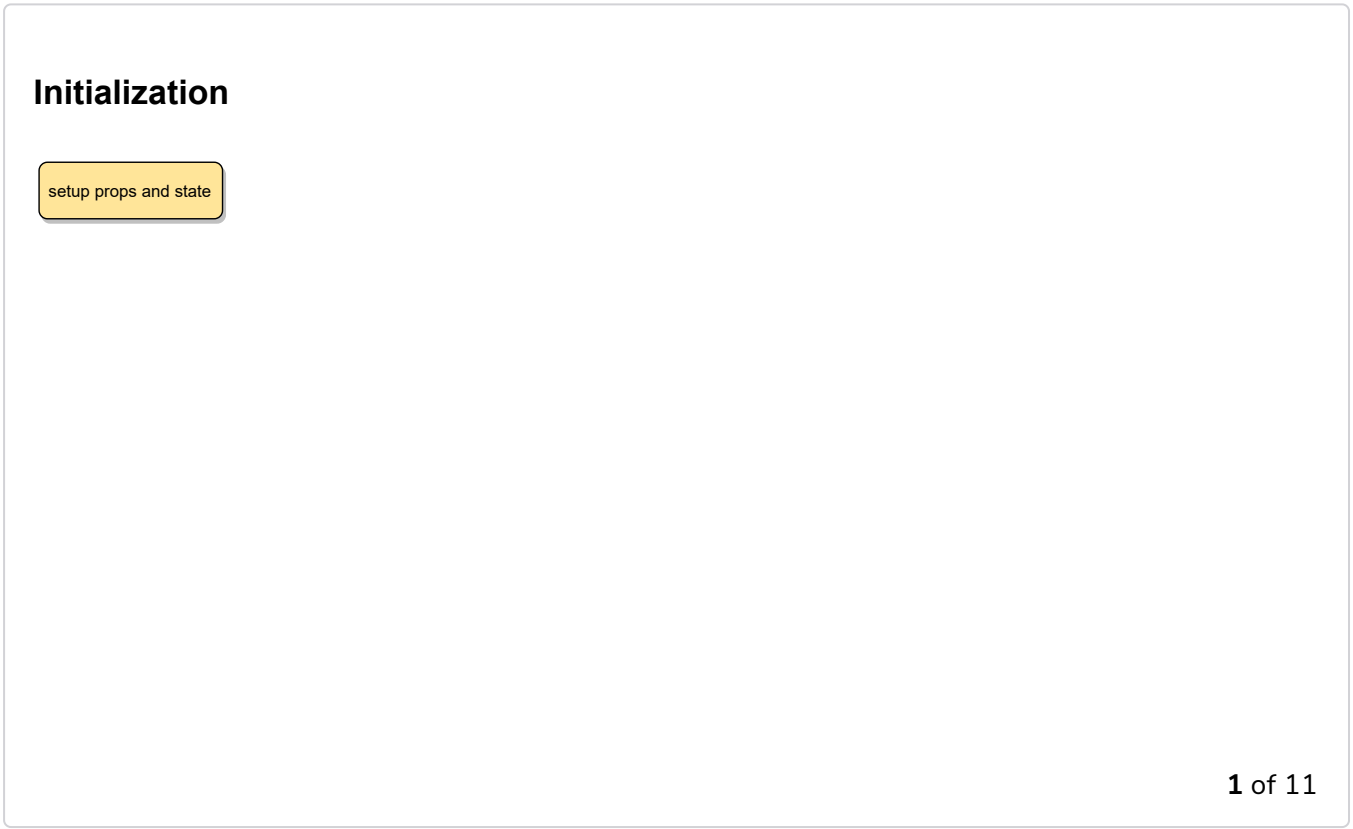
Lifecycle Methods

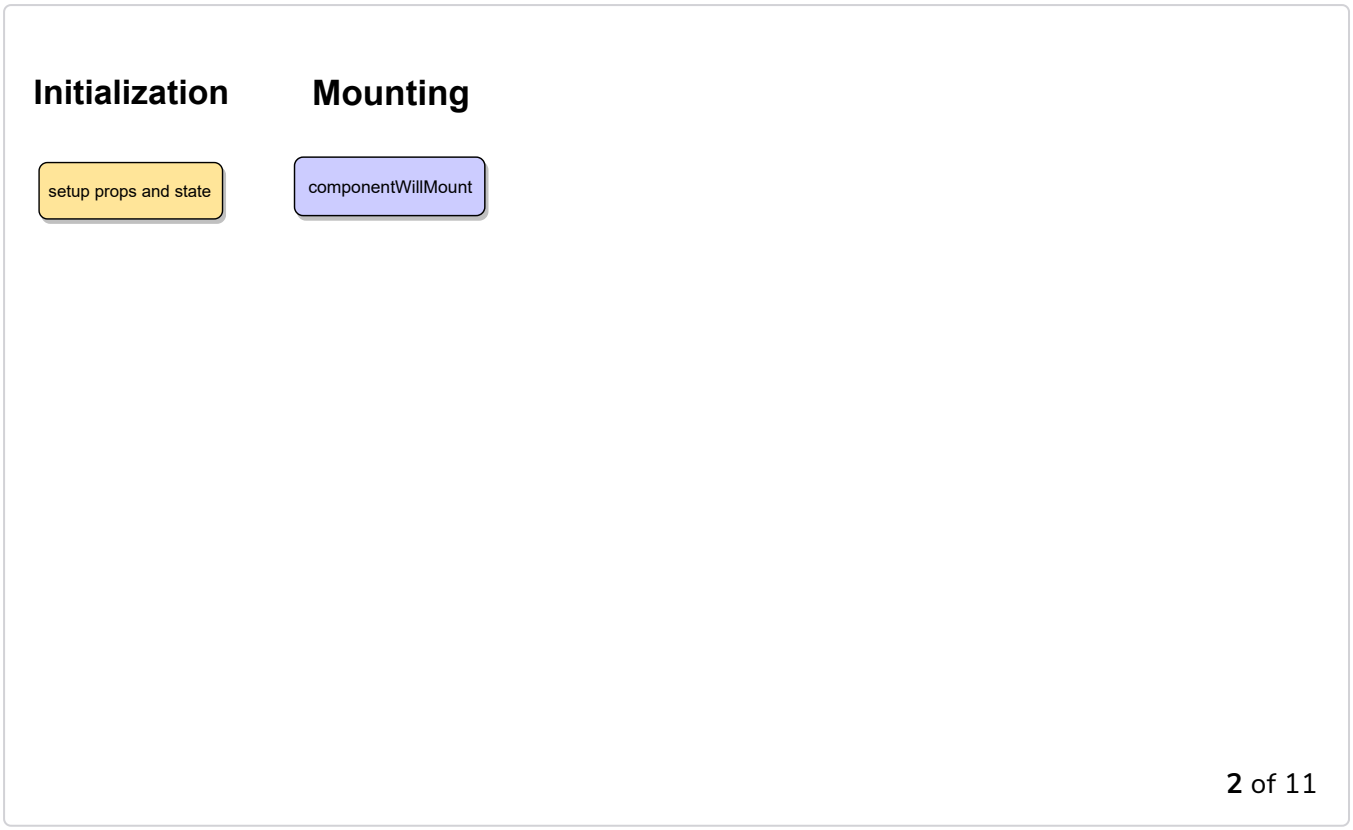
For each stage in the life of a component, we have specific functions that we can optionally implement in our components.

Function	When its called
`constructor`	called just once when the component is instantiated.
`componentDidMount`	called just once, after the component is added for the first time to the DOM, used for adding event handlers or making asynchronous data calls.
`componentWillUnmount`	called just once when the component is due to be removed from the DOM, used for cleanup.
`shouldComponentUpdate`	method used for component-level performance optimization

`componentWillReceiveProps` (deprecated)	replaced by `getDerivedStateFromProps`, called before the mount and also after each component re-render.

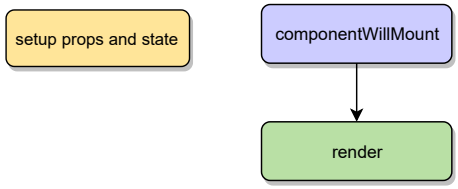
The animation below will show you when each hook is being called by React:





Initialization

Mounting



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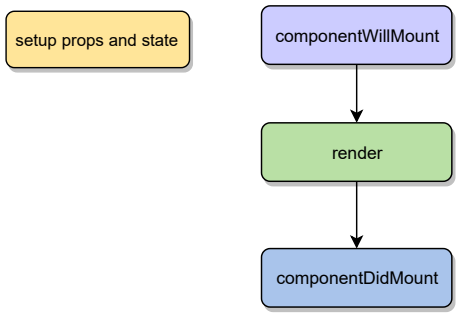
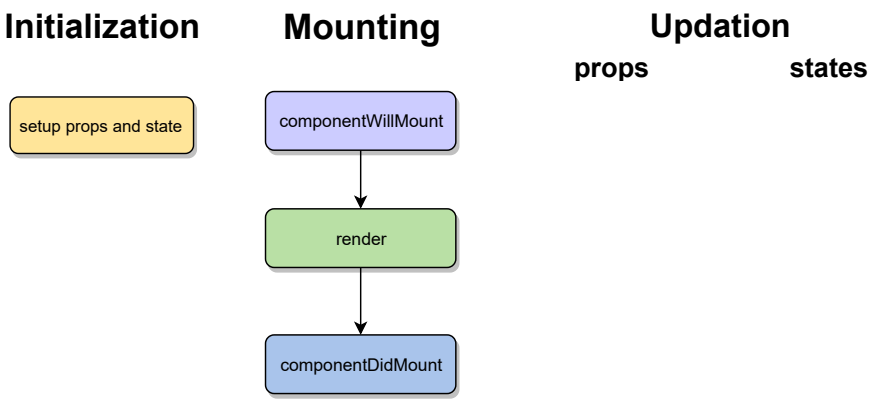
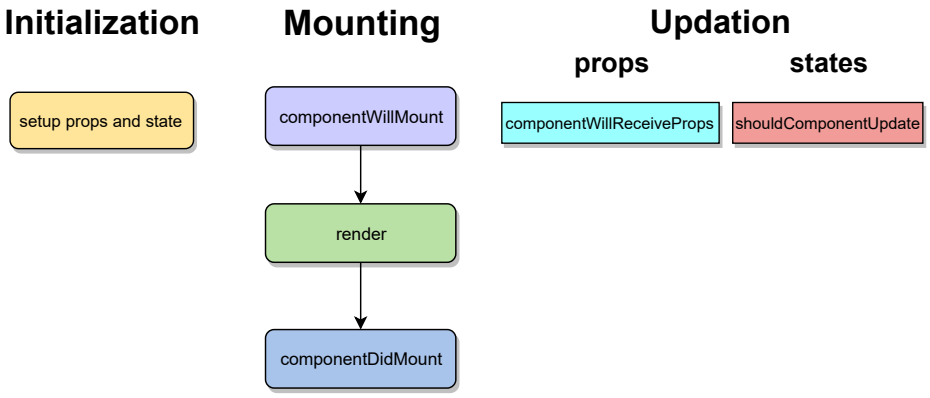



Initialization
Mounting
Updation
props
states
setup props and state
componentWillMount
render
componentDidMount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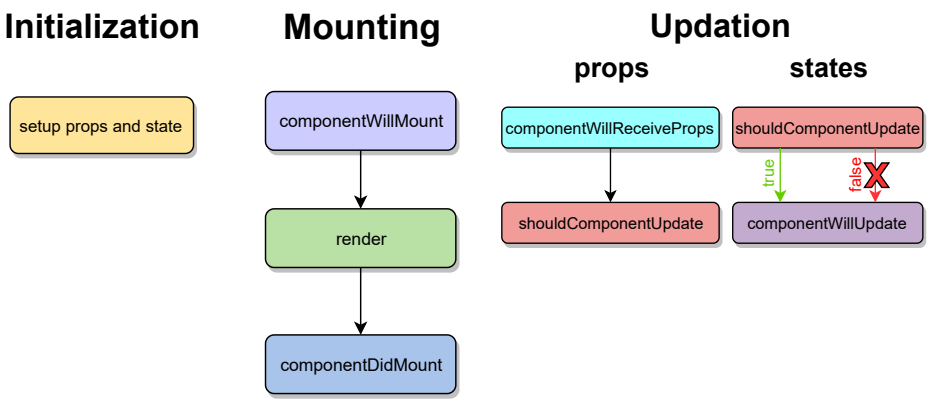
componentWillReceiveProps
shouldComponentUpdate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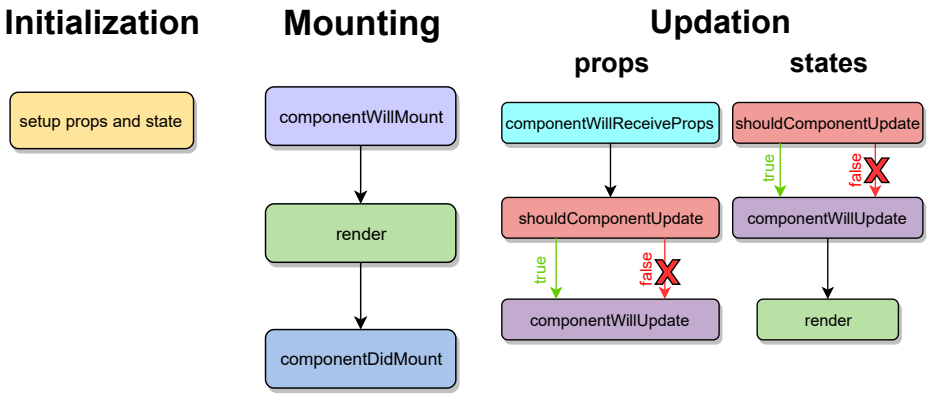
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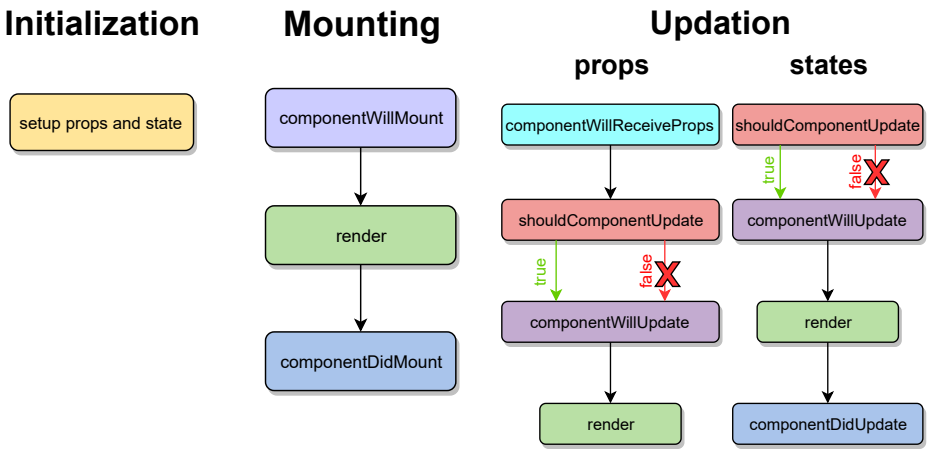
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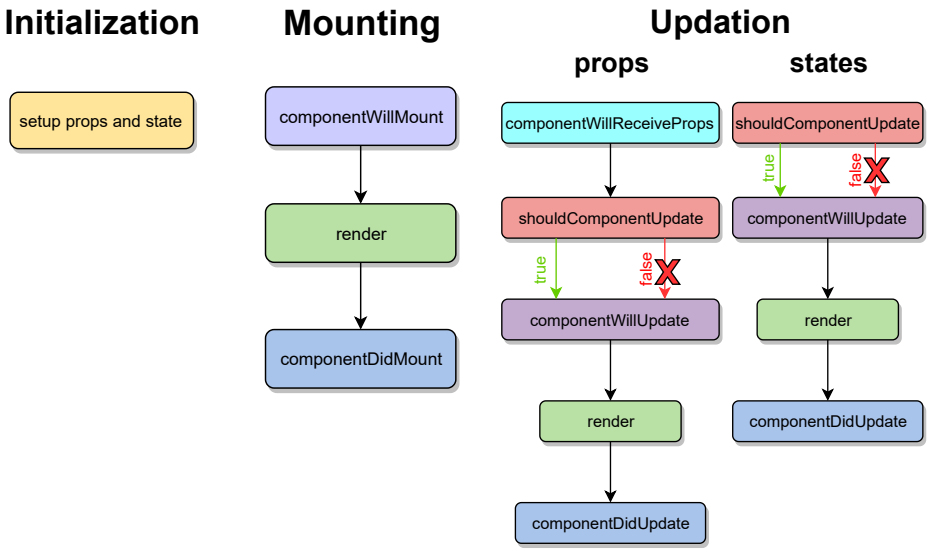
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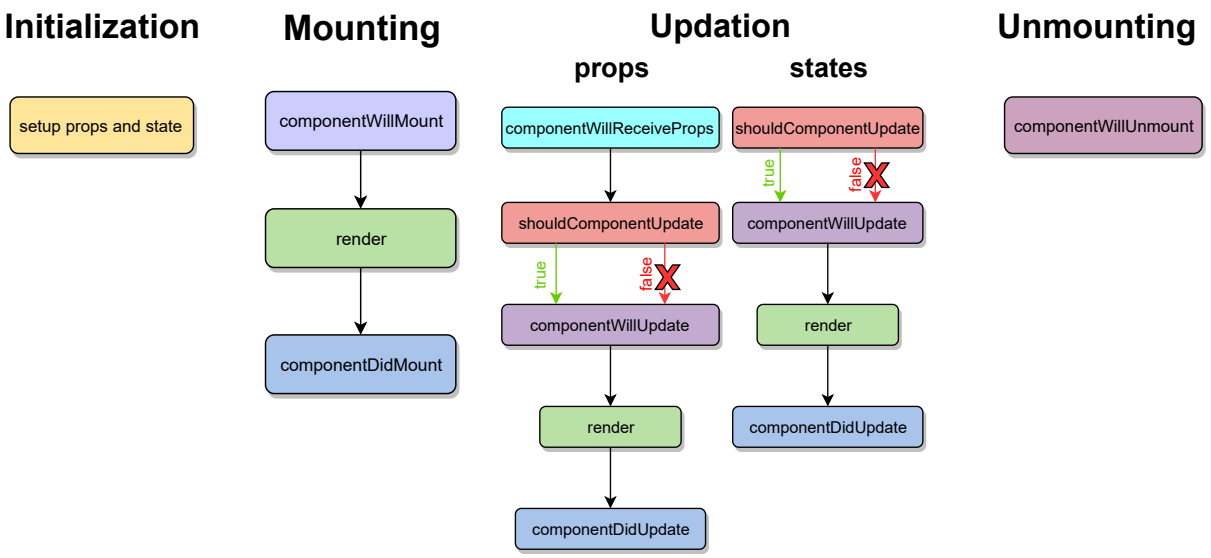

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You can run the code below and check the **console** to see the messages from the lifecycle methods.

```
import React from "react";

class Greeting extends React.Component {
    constructor() {
        super();
        console.log("created");
    }

    componentDidMount() {
        console.log("mounted");
    }

    componentWillUnmount() {
        console.log("unmounted");
    }

    static getDerivedStateFromProps(newProps) {
        console.log("props received", newProps);
    }

    render() {
        return (
            <div>
                <span>Hello {this.props.name}!</span>
            </div>
        );
```

```
    }
}


export default Greeting;
```

Quick quiz on the component lifecycle

1 Which of the following is not a phase of React's component lifecycle?

COMPLETED 0%

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Now that we understand the lifecycle of react components let's move onto how communication works in React.