Reactjs

Reactjs is a popular javascript library for building user interfaces, particularly single page applications where we want a fast, interactive experience for users.

Reactjs class component and functional component lifecycle method

Component can be define either as functional components/class components. Each type of component has it own lifecycle method. However, with the introduction of hooks in React 16.8 functional components can now mimic lifecycle behavior.

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| Phases | Class base component | Functional component |
| Mounting | constructor()  static getDerivedStateFromProps()  render()  compentDidMount() | Initialize(similar to constructor)  useState()  useEffect(()=>{/\*effect\*/},[]) |
| Updating | static getDerivedStateFromProps()  shouldComponentUpdate()  render()  getSnapshotBeforeUpdate()  componentDidUpdate() | useEffect(()=>{/\* effect \*/},[props])  useEffect(()=>{/\* effect \*/},[dependencies]) |
| Unmounting | componentWillUnmount() | useEffect(()=>{return()=>{/\* cleanup \*/}},[]) |

Functional component lifecycle

* Mounting

Initialization, It is similar to constructor

Initialize state using the useState hook.

Component Did Mount

useEffect with empty dependency array to run the effect only once after the initial render.

* Updating

Component did update

useEffect to turn effects on state / prop changes by specifying dependencies.

Derived state from props

Manage derived state within the component / useEffect to handle side effects based on props.

Get snapshot before update

This lifecycle method doesn’t have a direct equivalent. Typically, this is used to capture some state / dom information before update, and we can use refs and useEffect for more complex scenarios.

Should component update

Functional component don’t have a direct hook equivalent for this, but we can optimize rerendering using React.memo to prevent unnecessary updates.

* Unmounting

Component will unmount

Function component lifecycle method in unmounting phase will return a cleanup function from useEffect to handle component unmounting.