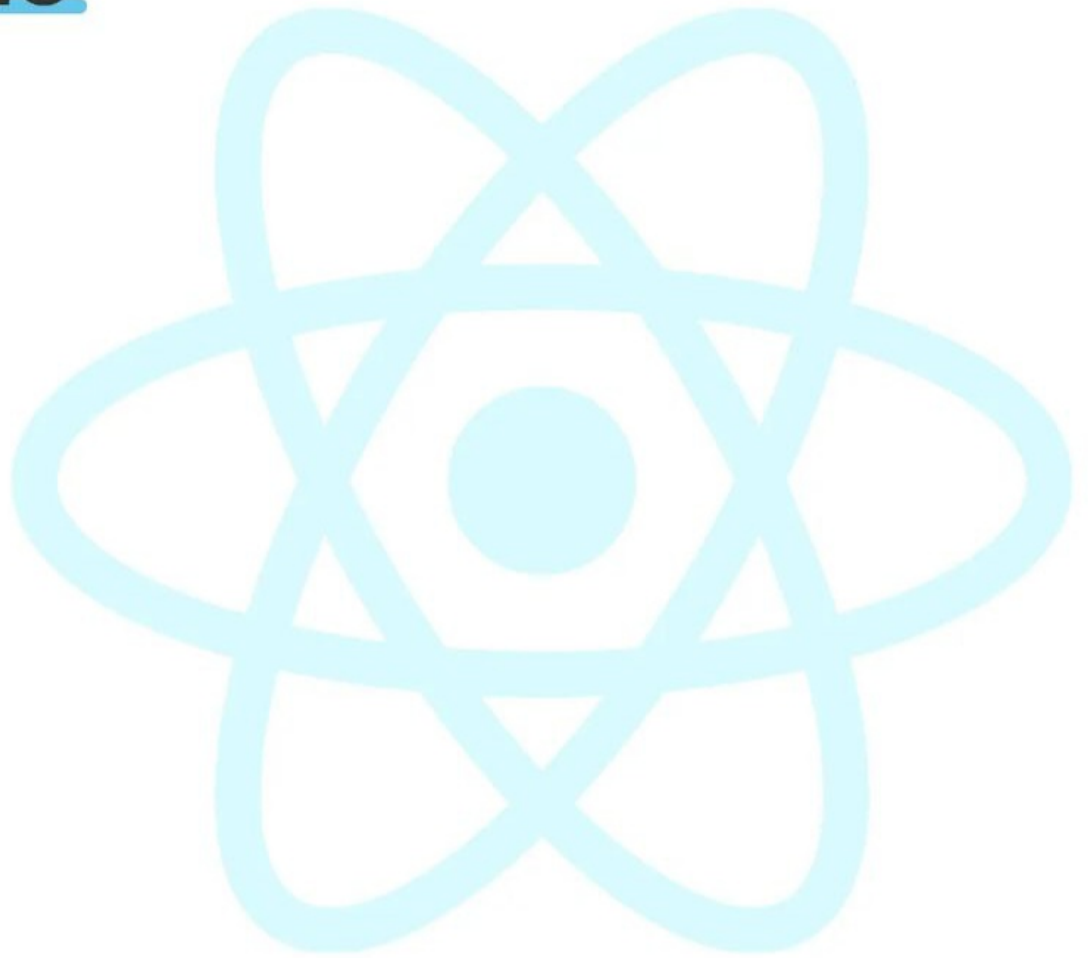


What's New in React 18



Automatic Batching

Batching is when React groups multiple state updates into a single re-render for better performance

```
// Before: only React events were batched.
setTimeout(() => {
  setCount(c => c + 1);
  setFlag(f => !f);
  // React will render twice, once for each state update (no batching)
}, 1000);

// After: updates inside of timeouts, promises,
// native event handlers or any other event are batched.
setTimeout(() => {
  setCount(c => c + 1);
  setFlag(f => !f);
  // React will only re-render once at the end (that's batching!)
}, 1000);
```

Transitions

A transition is a new concept in React to distinguish between urgent and non-urgent updates. Transitions will opt into concurrent rendering, which allows the update to be interrupted.

```
import {startTransition} from 'react';

// Urgent: Show what was typed
setInputValue(input);

// Mark any state updates inside as transitions
startTransition(() => {
  // Transition: Show the results
  setSearchQuery(input);
});
```

New Suspense Features

Suspense lets you declaratively specify the loading state for a part of the component tree if it's not yet ready to be displayed.

```
<Suspense fallback={<Spinner />}>  
  <Comments />  
</Suspense>
```

New Strict Mode Behaviors

This feature will give React apps better performance out-of-the-box but requires components to be resilient to effects being mounted and destroyed multiple times.

- * React mounts the component.
 - * Layout effects are created.
 - * Effects are created.
- * React simulates unmounting the component.
 - * Layout effects are destroyed.
 - * Effects are destroyed.
- * React simulates mounting the component with the previous state.
 - * Layout effects are created.
 - * Effects are created.