

Best Practices for Variable Declaration in React Components

1. Use 'const' and 'let' Appropriately

- Use 'const' for variables that do not change.
- Use 'let' only when reassignment is needed.

2. Avoid Declaring Variables Inside the Render Body Unnecessarily

- Use 'useMemo' for expensive calculations.
- Use 'useCallback' for functions passed as props.

3. Use 'useRef' for Mutable Values That Do Not Trigger Re-renders

- Store values that persist across renders without causing re-renders.

4. Declare Functions with 'useCallback' When Passing to Children

- Prevents unnecessary re-renders of child components.

5. Avoid Global Variables or Side Effects in Component Scope

- Scope variables properly to avoid bugs or memory leaks.

6. Group Related Variables Together

- Improves readability and maintainability.

7. Use Destructuring for Props and State

- Makes code cleaner and avoids repetitive access.