

Comparison of Function Components vs Class Components in React

Aspect	Function Components	Class Components
Syntax Simplicity	Concise and easier to read/write	Verbose with more boilerplate
State Management	Uses useState and other hooks	Uses this.state and this.setState()
Side Effects	Handled with useEffect	Handled with lifecycle methods
Code Reusability	Custom hooks allow logic reuse	Logic reuse is harder
Performance	Slightly better in some cases	Slightly heavier due to class instantiation
Testing	Easier to test as pure functions	Requires more setup
Learning Curve	Easier for beginners	More complex due to this and lifecycle methods
Community & Ecosystem	Preferred in modern React	Still supported but not recommended
Support for New Features	Fully compatible with latest React features	Some new features are harder to use
Hot Reloading	Works better with React Fast Refresh	Less reliable due to method bindings