

# Unidirectional State



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# Overview



**What is unidirectional state?**

**Redux vs. Zustand**

**Demo: Zustand**





# **What Is Unidirectional State?**



# Unidirectional

**State updates flow in one direction. The state can't be directly changed.  
It's “protected”.**



# Unidirectional State Libraries



**Redux**



# Zustand Example

## Zustand

```
// userStore.js
export const useStore = create((set) => ({
  user: {
    id: 1,
    name: "Cory House",
  },
  logout: () => set({ user: null }),
}) );
const { user, logout } = useStore();
```



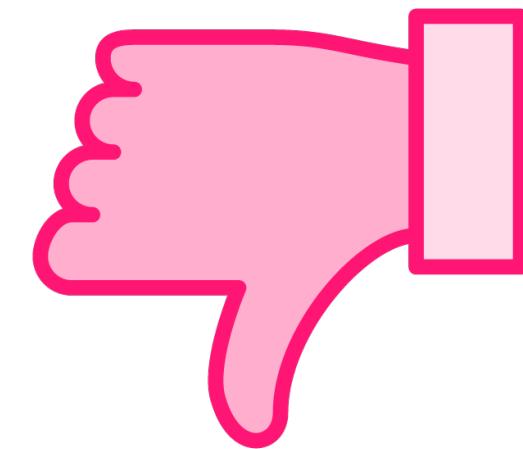
# Zustand Tradeoff

Doesn't track which fields you are using

You subscribe "manually" via selectors



**Benefit:**  
**Scalability and clarity**



**Downside:**  
**More code to write**



# Redux vs. Zustand



# Redux vs. Zustand

Redux	Vs.	Zustand
<b>One immutable store (typically)</b>		<b>One or multiple stores</b>
<b>Requires wrapping app in Provider</b>		<b>No Provider required</b>
<b>Redux toolkit is recommended</b>		<b>Streamlined API</b>
<b>Can “add on” RTK Query</b>		<b>No “RTK Query” equivalent</b>
<b>Dispatch actions</b>		<b>Use callbacks or actions</b>
<b>Optimize renders via selectors</b>		<b>Optimize renders via selectors</b>
<b>Globally available store</b>		<b>Can expose to subtree via context</b>





# Building Applications with React 17 and Redux

by Cory House

Learn how to use React, Redux, React Router, and modern JavaScript to build an app with React. Use Webpack, Babel, Jest, React Testing Library, Enzyme, and more to build a custom React development environment and build process from the ground up.

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 React Component Approaches		10m 17s	
 Initial App Structure	 	16m 10s	
 Intro to Redux		18m 36s	
 Actions, Stores, and Reducers		23m 0s	
 Connecting React to Redux		16m 51s	
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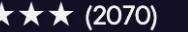
Course author



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Cory is an independent consultant with over 15 years of experience in software development. He is the principal consultant at reactjsconsulting.com and a Microsoft MVP.

Course info

Level	Intermediate
Rating	 (2070)
My rating	
Duration	6h 39m
Updated	18 Jul 2021

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**Demo**



**Zustand**



# Summary



**Unidirectional state is “protected”**

## **Redux vs Zustand**

- Redux: Huge ecosystem. Great devtools.
- Zustand: Simple, flexible API

## **Demo: Zustand**

- Created separate user and cart stores
- The stores encapsulate update logic



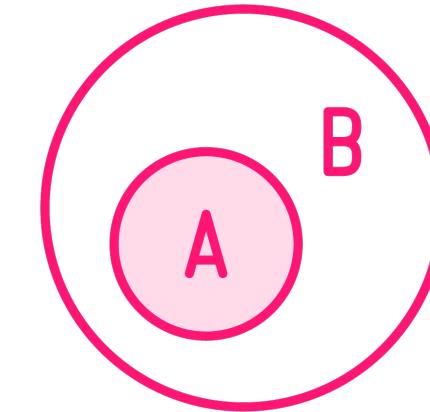
# Zustand



**General vs. Specific**



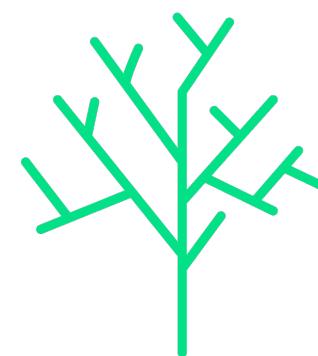
**Mutable vs. Immutable**



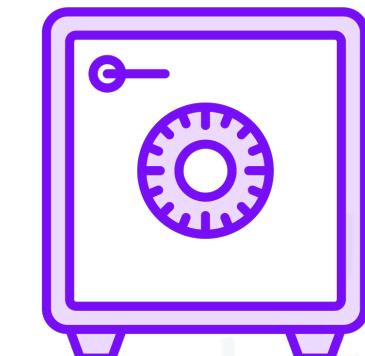
**External vs. Internal**



**Auto vs. Manual**



**One Store vs. Multiple**



**Protected vs. Unprotected**



**Up Next:**

# **Atomic State**

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