Intro to Redux



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Here's The Plan



Do I need Redux?

3 Principles

Flux vs Redux

Redux Flow



Do I need Redux?



Vanilla JS j Query React React + Redux

Simple
No setup

Significant setup

When Do I Need Redux?



Complex data flows

Inter-component communication

Non-heirarchical data

Many actions

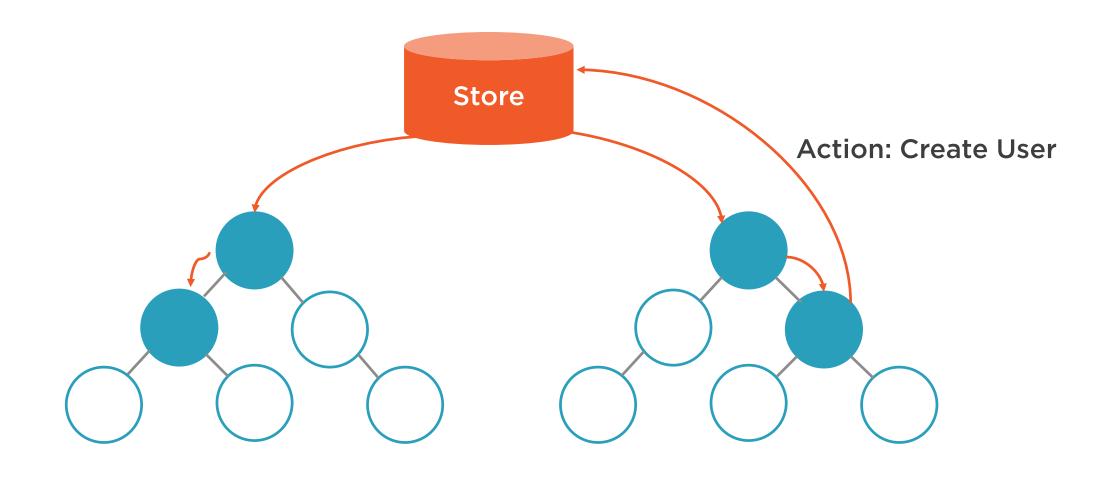
Same data used in multiple places



"...If you aren't sure if you need it, you don't need it."

Pete Hunt on Flux and Redux

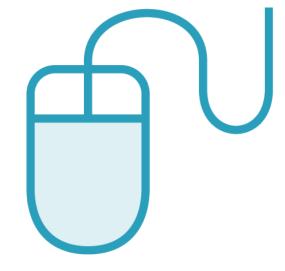




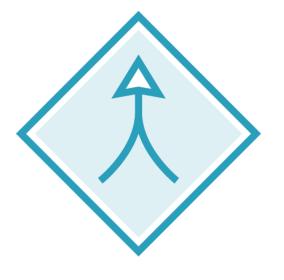
Redux: 3 Principles



One immutable store



Actions trigger changes



Reducers update state



Flux vs Redux



Data down. Actions up.



Flux and Redux: Similarities





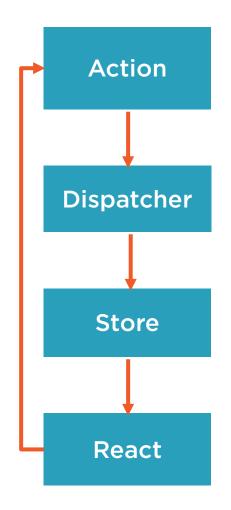
Redux: New Concepts



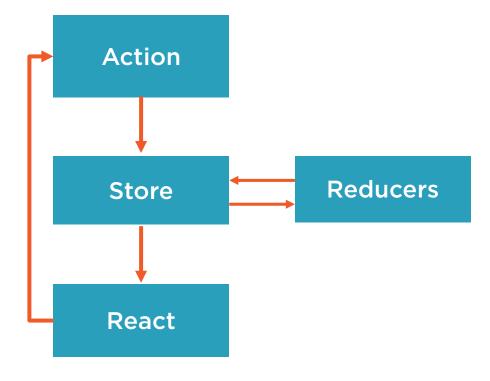


Flux vs Redux

Flux



Redux





Flux | Redux

Stores contain state and change logic

Store and change logic are separate



Redux

Stores contain state and change logic

Multiple stores

Store and change logic are separate

One store



Stores contain state and change logic

Multiple stores

Flat and disconnected stores

Redux

Store and change logic are separate

One store

Single store with hierarchical reducers



Redux

Stores contain state and change logic

Multiple stores

Flat and disconnected stores

Singleton dispatcher

Store and change logic are separate

One store

Single store with hierarchical reducers

No dispatcher



Stores contain state and change logic

Multiple stores

Flat and disconnected stores

Singleton dispatcher

React components subscribe to stores

Redux

Store and change logic are separate

One store

Single store with hierarchical reducers

No dispatcher

Container components utilize connect



Stores contain state and change logic

Multiple stores

Flat and disconnected stores

Singleton dispatcher

React components subscribe to stores

State is mutated

Redux

Store and change logic are separate

One store

Single store with hierarchical reducers

No dispatcher

Container components utilize connect

State is immutable



Redux Flow



Redux Flow

```
Action { type: RATE_COURSE, rating: 5 }

function appReducer(state = defaultState, action) {
    switch(action.type) {
        case RATE_COURSE:
        //return new state
    }
}

React Notified via React-Redux
```

Summary



If you need Redux, you'll know it.

3 Principles

- Immutable Store
- Actions trigger changes
- Reducers return updated state

Flux vs Redux

Unidirectional Redux Flow

Next up: Actions, stores, and reducers

