

Writing Idiomatic, Cleaner and More Readable Redux

Understand state. Write less code.
Write readable code.

What is state?

State is the outcome of all the actions the user has taken. It helps us improve our UI by providing us with information on where the user is and what they have done so far in the application.

What does state look like?

State comes in many forms.

Data we get from the API is regarded as state. A variable tracking if the user is typing is state. Values inputted into form fields are state.

State is everywhere and we need a way to manage it.

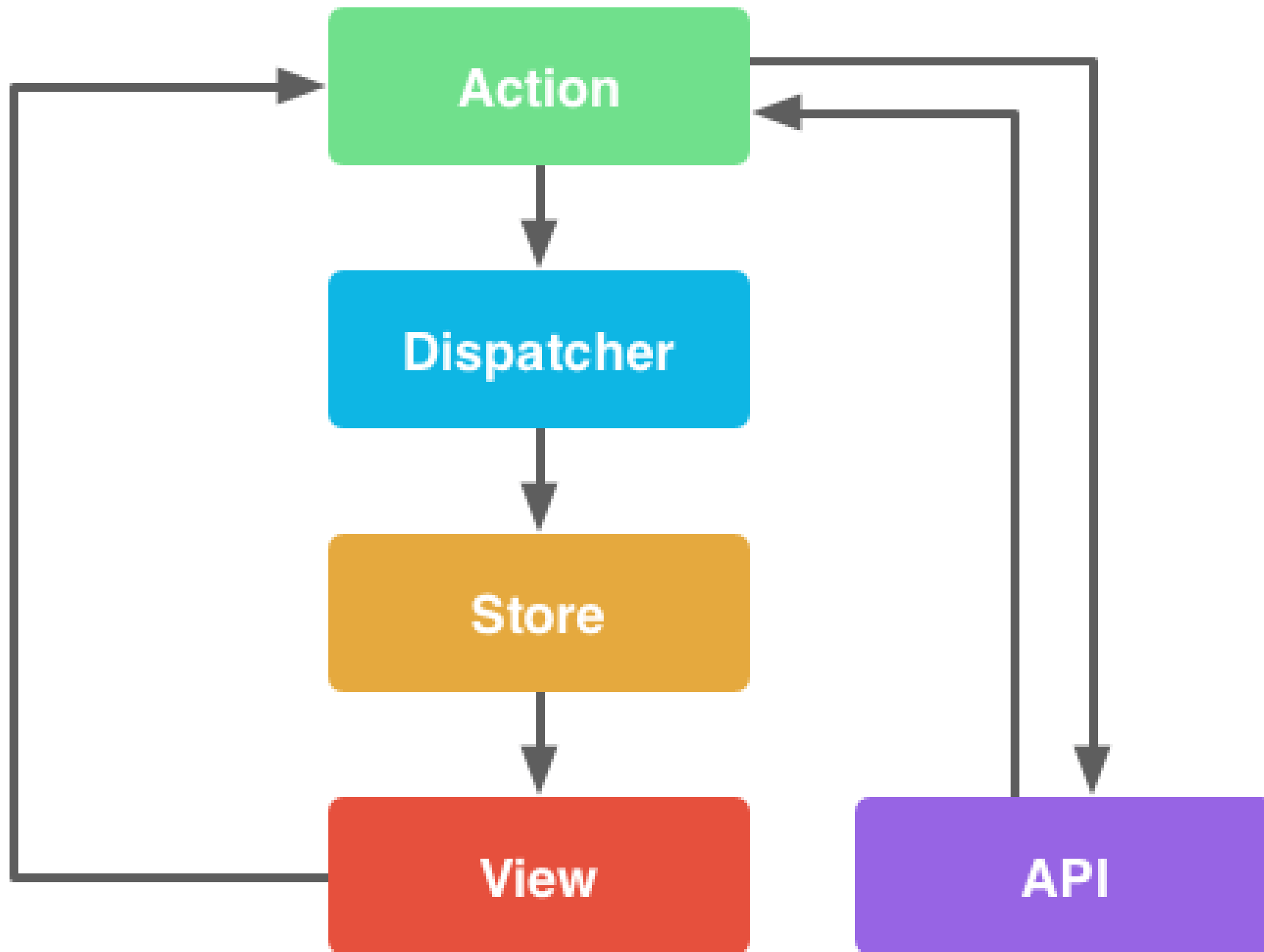
Enter Redux.

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Redux is a predictable state container created by Facebook which built off of their Flux pattern.

Redux is predictable because it has it's own pattern that defines how you can interact with and manipulate the state.

The only way to update the state using Redux is immutably.



Let's forget about...

- React Context
- MobX
- Recoil
- Any other form of state management


Shop Drop

Acceptance Criteria:

- Users are able to add items to a shopping list
- Users can mark an item as in their basket
- Users can remove an item that in their basket from the list
- Users can clear all of the items from the list

```
1 item: {  
2     value: "Hamburger Rolls",  
3     inBasket: false  
4 }
```

Actions are payloads of data that send information from our application to our store.



```
1 // actions.js
2
3 export const actionCreators = {
4   addToList: (data) => ({ type: "ADD_TO_LIST", payload: data })
5 };;
```

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Reducers determine how our state changes in response to actions.



```
1 // reducer.js
2
3 const initialState = {
4   items: []
5 };
6
7 export default (state = initialState, action) => {
8   switch (action.type) {
9     case "ADD_TO_LIST":
10      return {
11        ...state,
12        items: [...state.items, action.payload]
13      };
14     default:
15      return state;
16   }
17 };
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Our components are where we can access the store and dispatch actions.



```
1 // ShoppingList.js
2
3 import { useSelector } from "react-redux";
4 import { actionCreators } from "../../store/actions";
5
6 export default function ShoppingList() {
7   const items = useSelector(state => state.items);
8
9   return (
10     ...
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1 // AddItem.js
2
3 import { useDispatch } from "react-redux";
4 import { actionCreators } from "../../store/actions";
5
6 export default function Input() {
7   const dispatch = useDispatch();
8
9   const handleSubmit = () => {
10     dispatch(actionCreators.addToList(input));
11   };
12
13   return (
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