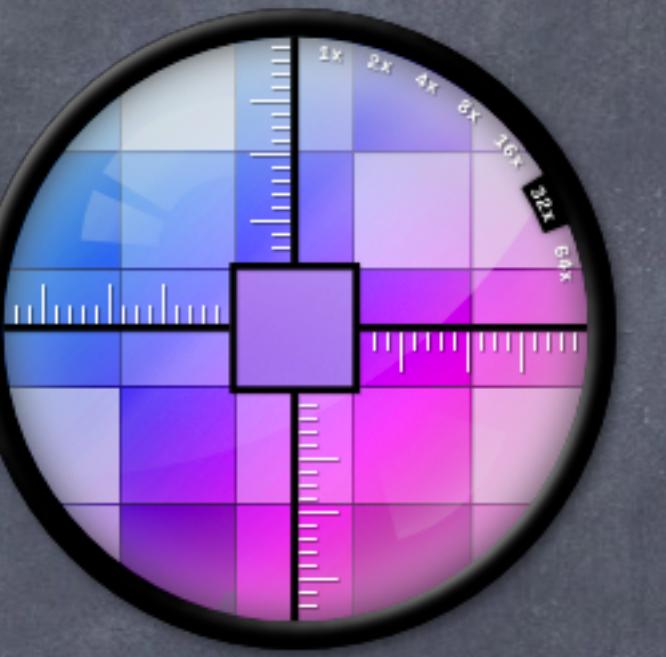
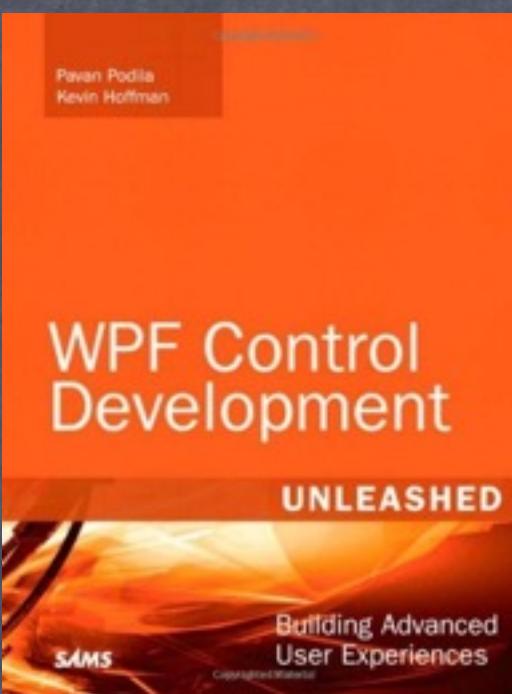


Redux

Pavan Podila



.Net/WPF

2001

Java

2005

iOS/macOS

2011

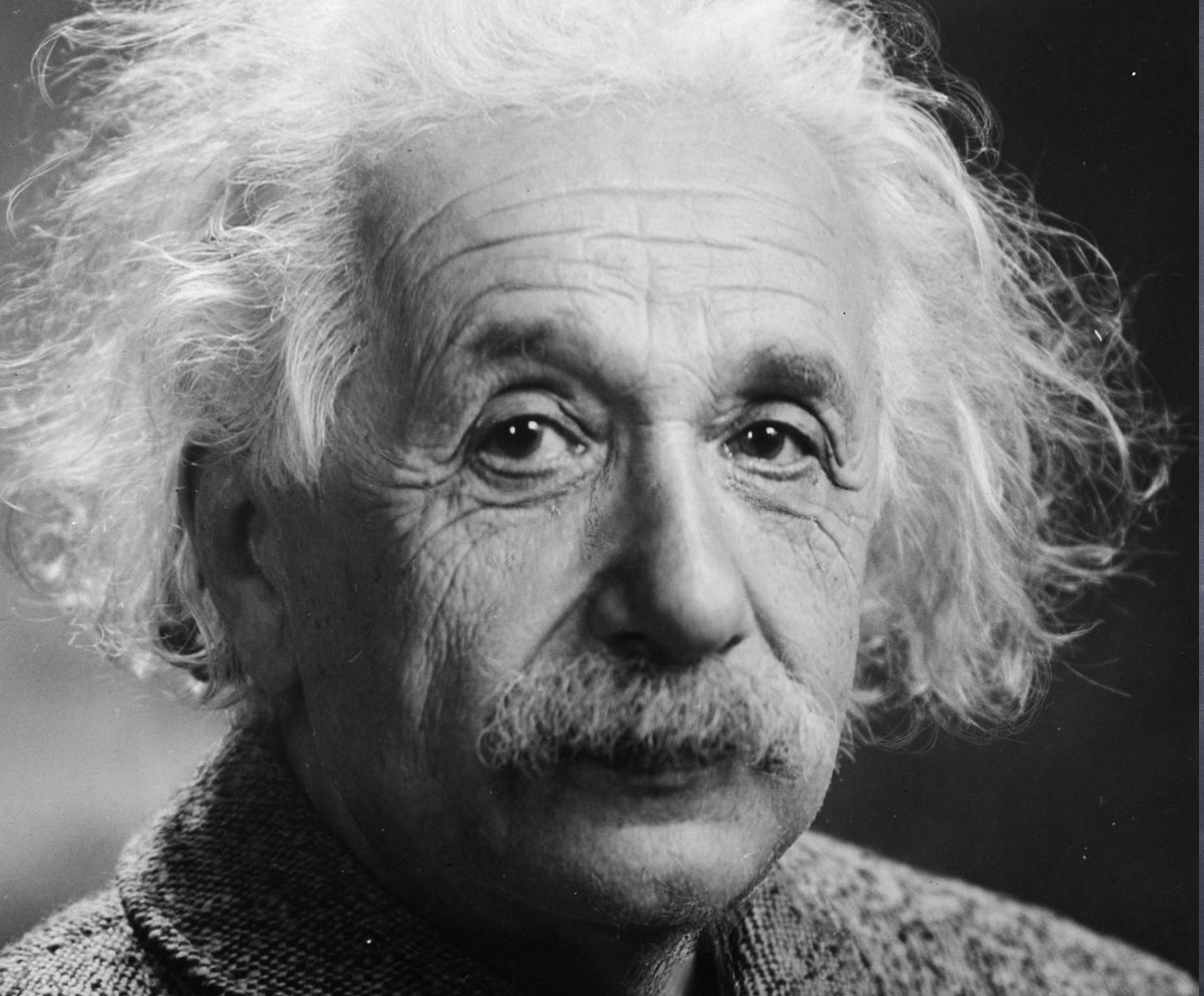
Web

2013

Tuts+

Web

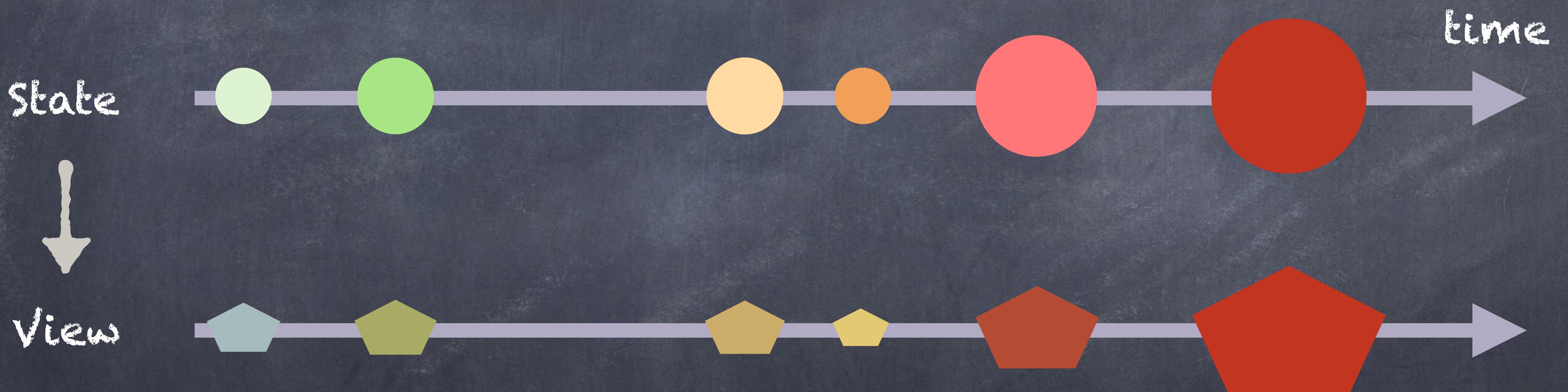
UI = fn(state)



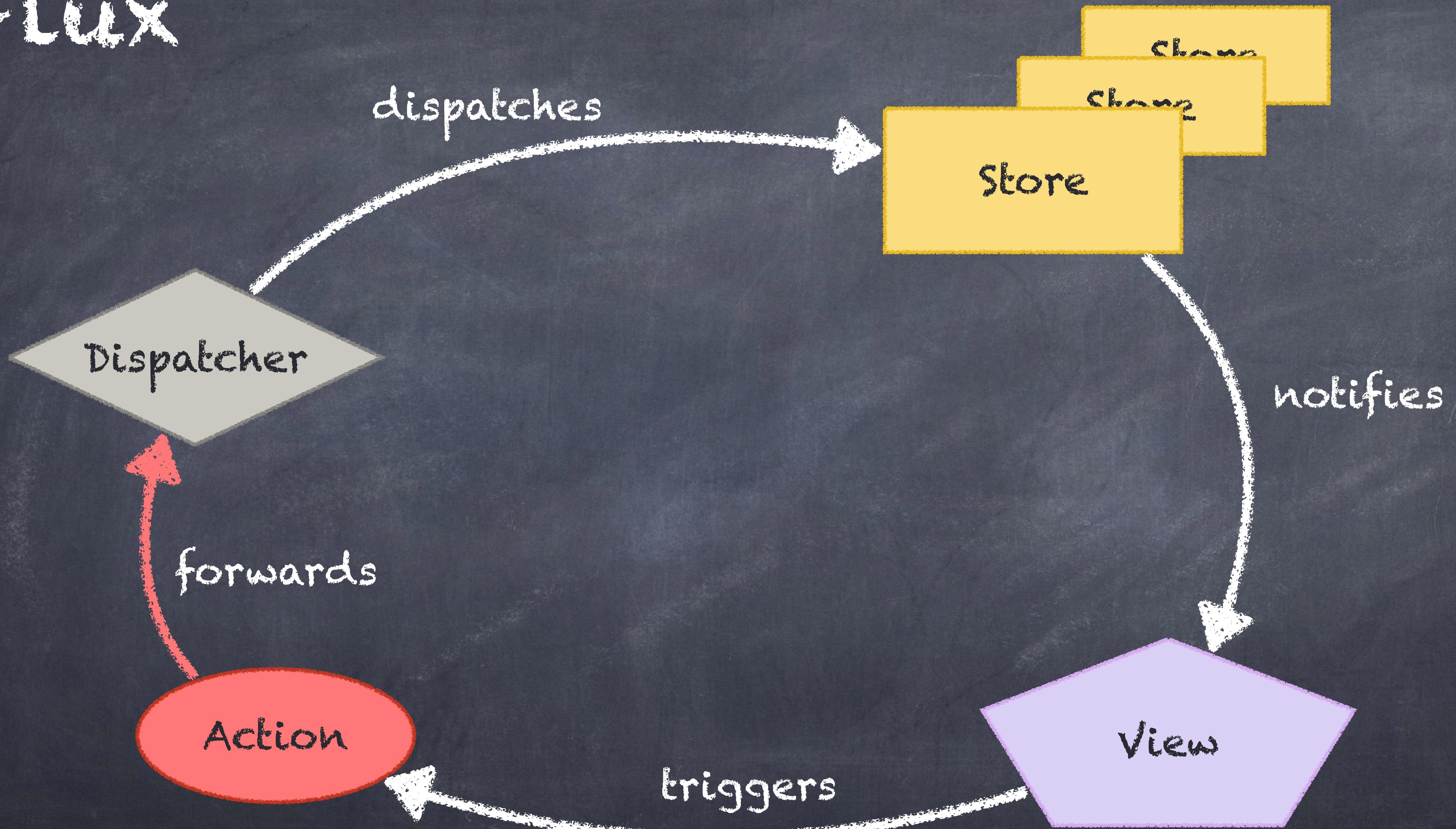
$$E=mc^2$$

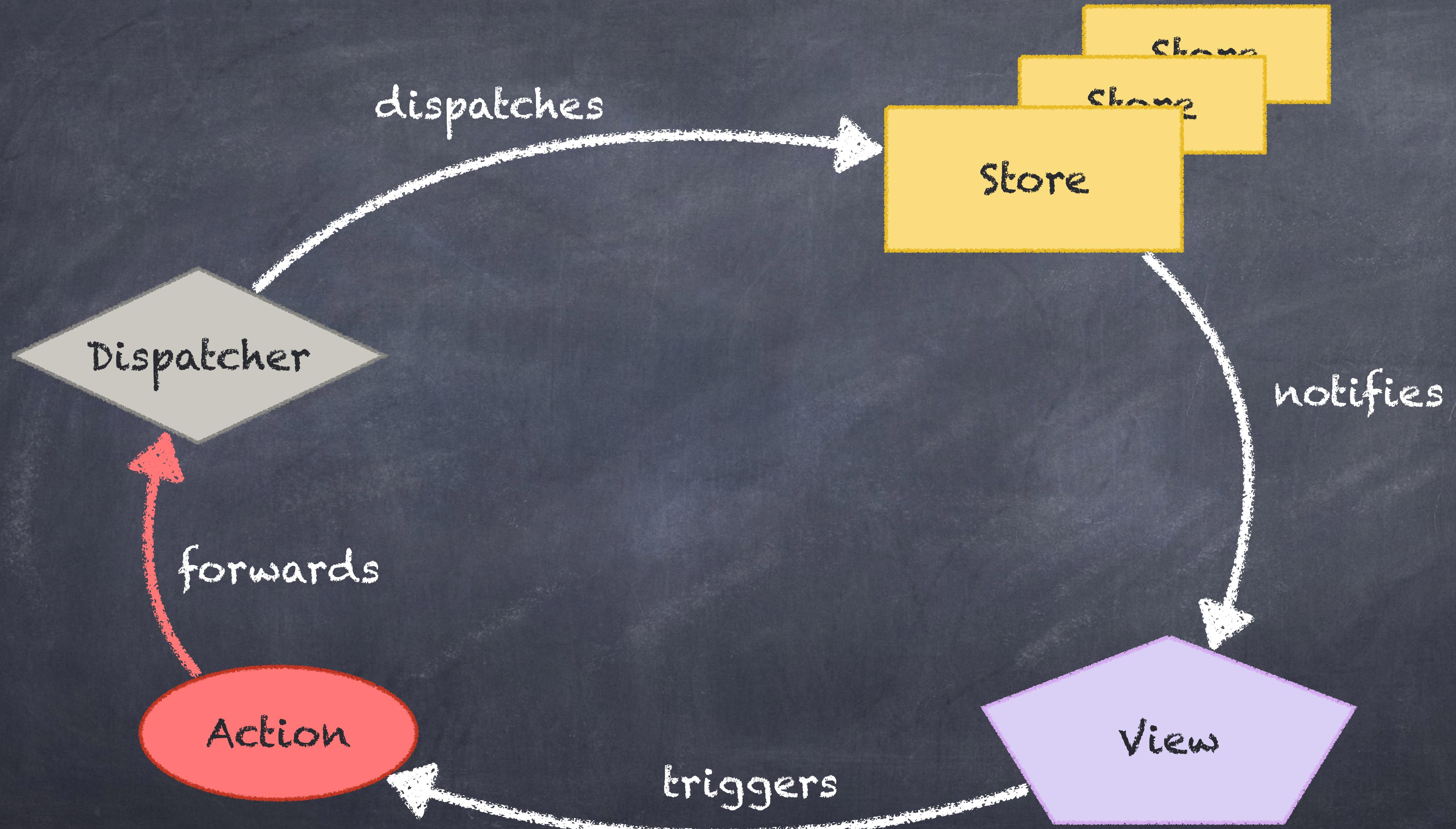
UI = fn(state)

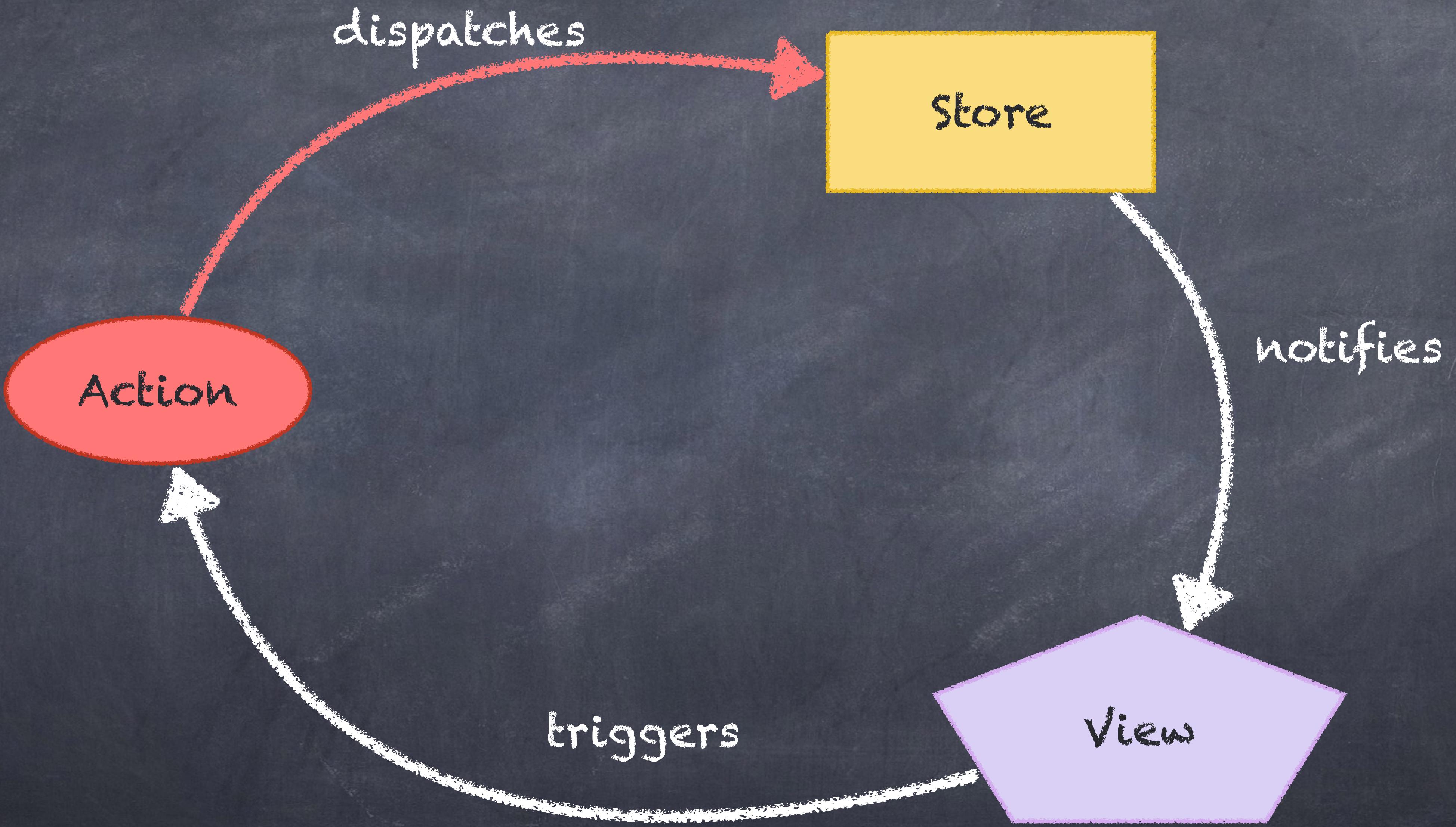
Snapshots



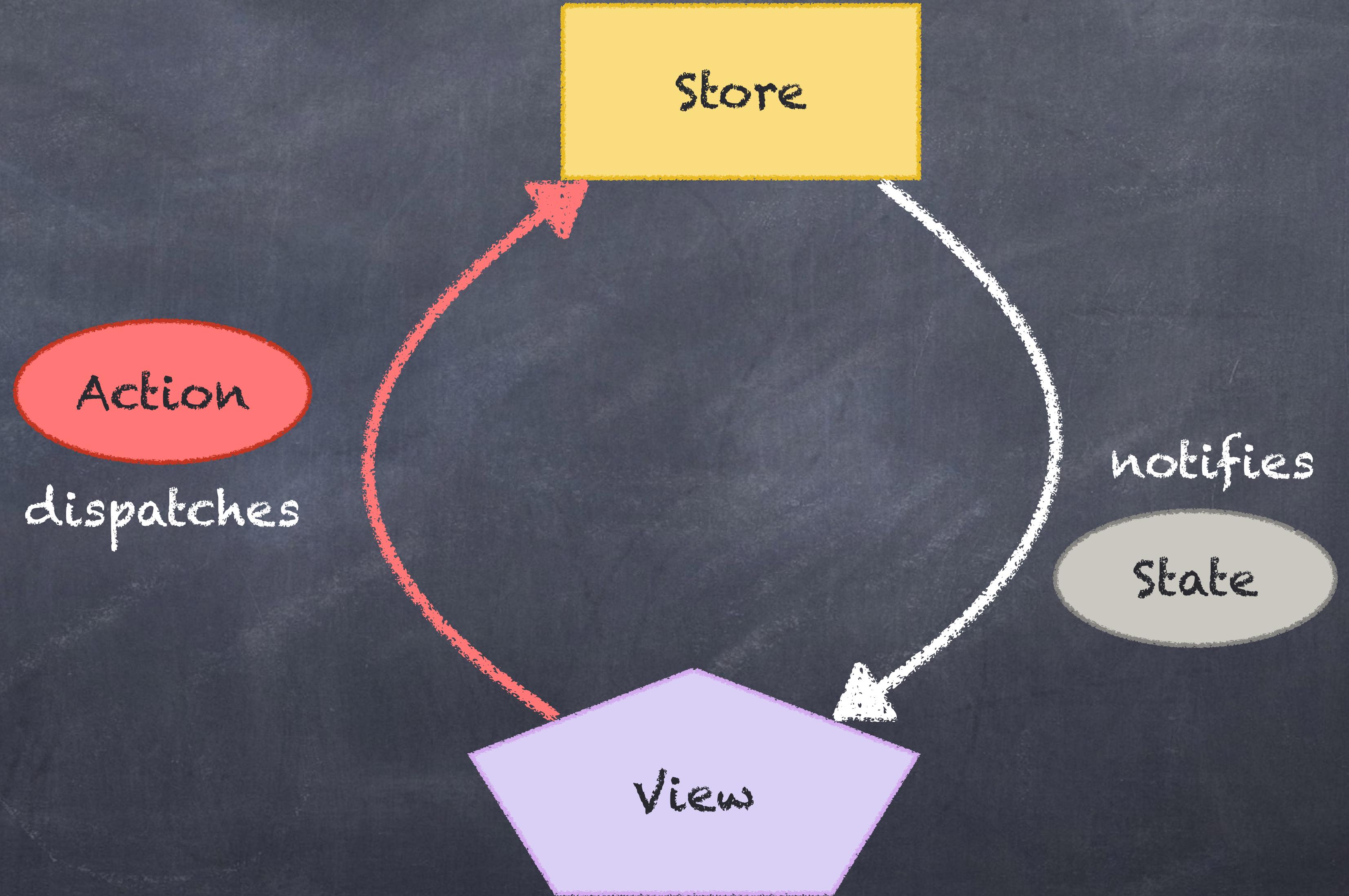
Flux







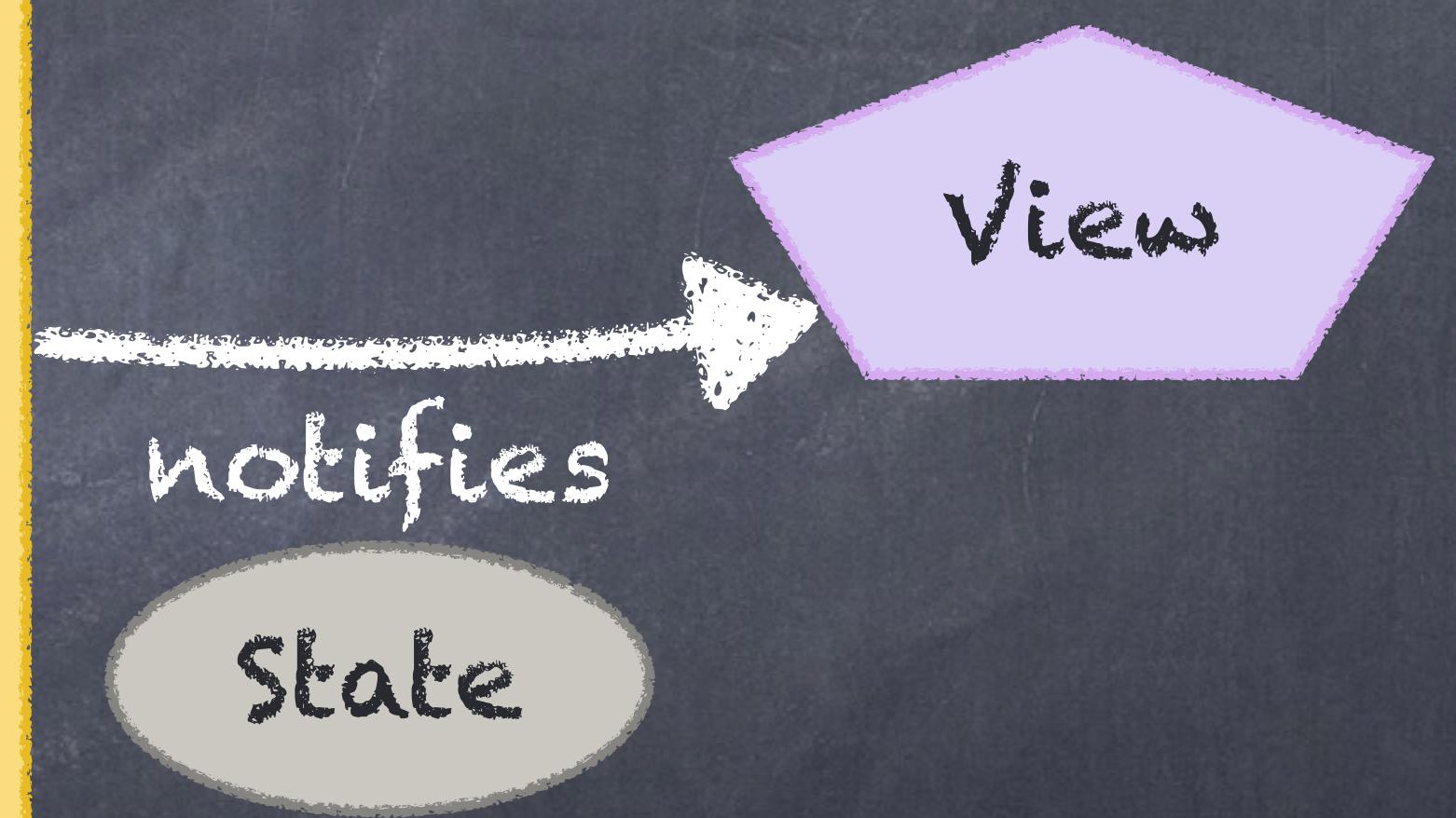
Redux



Redux

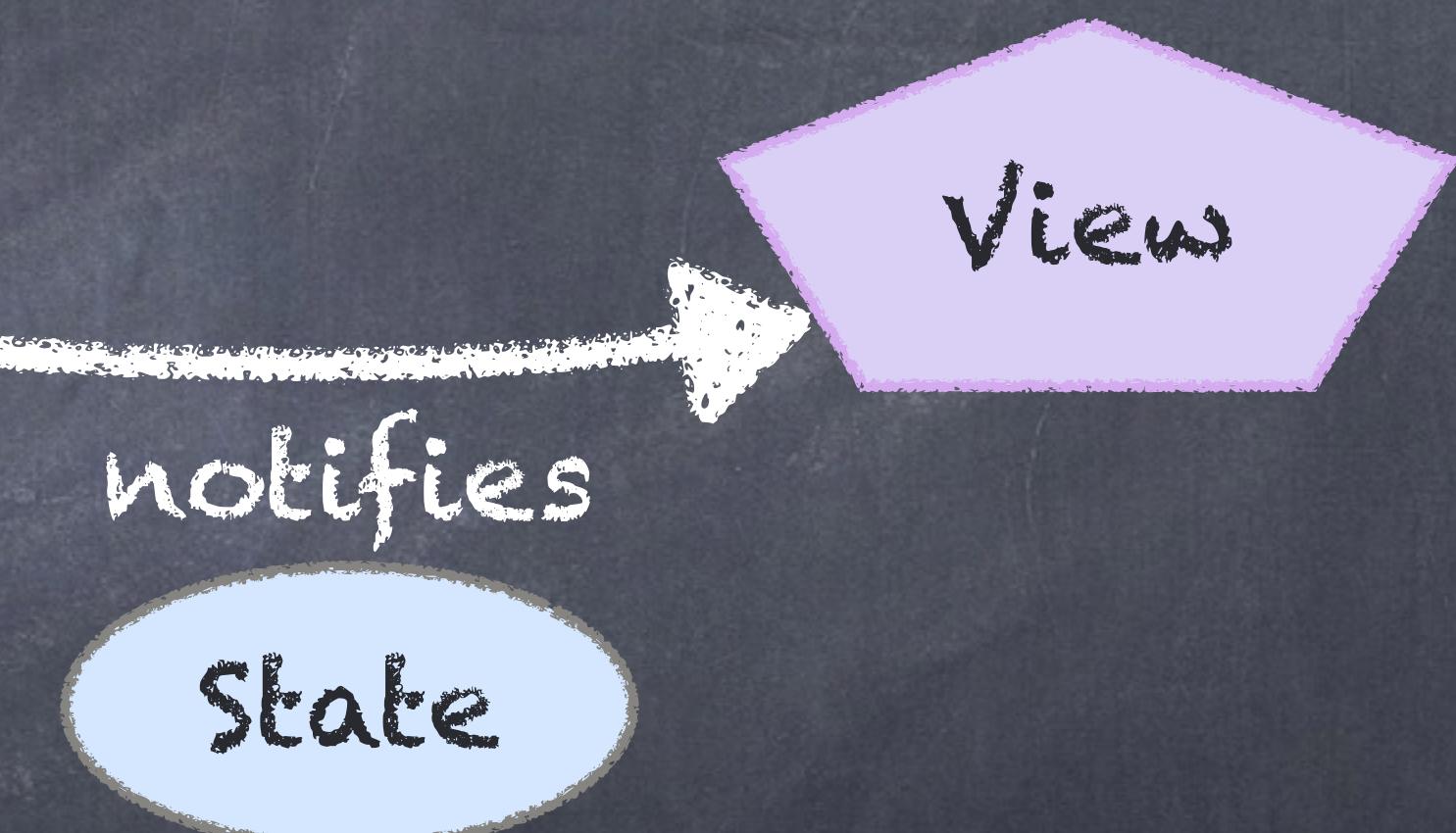
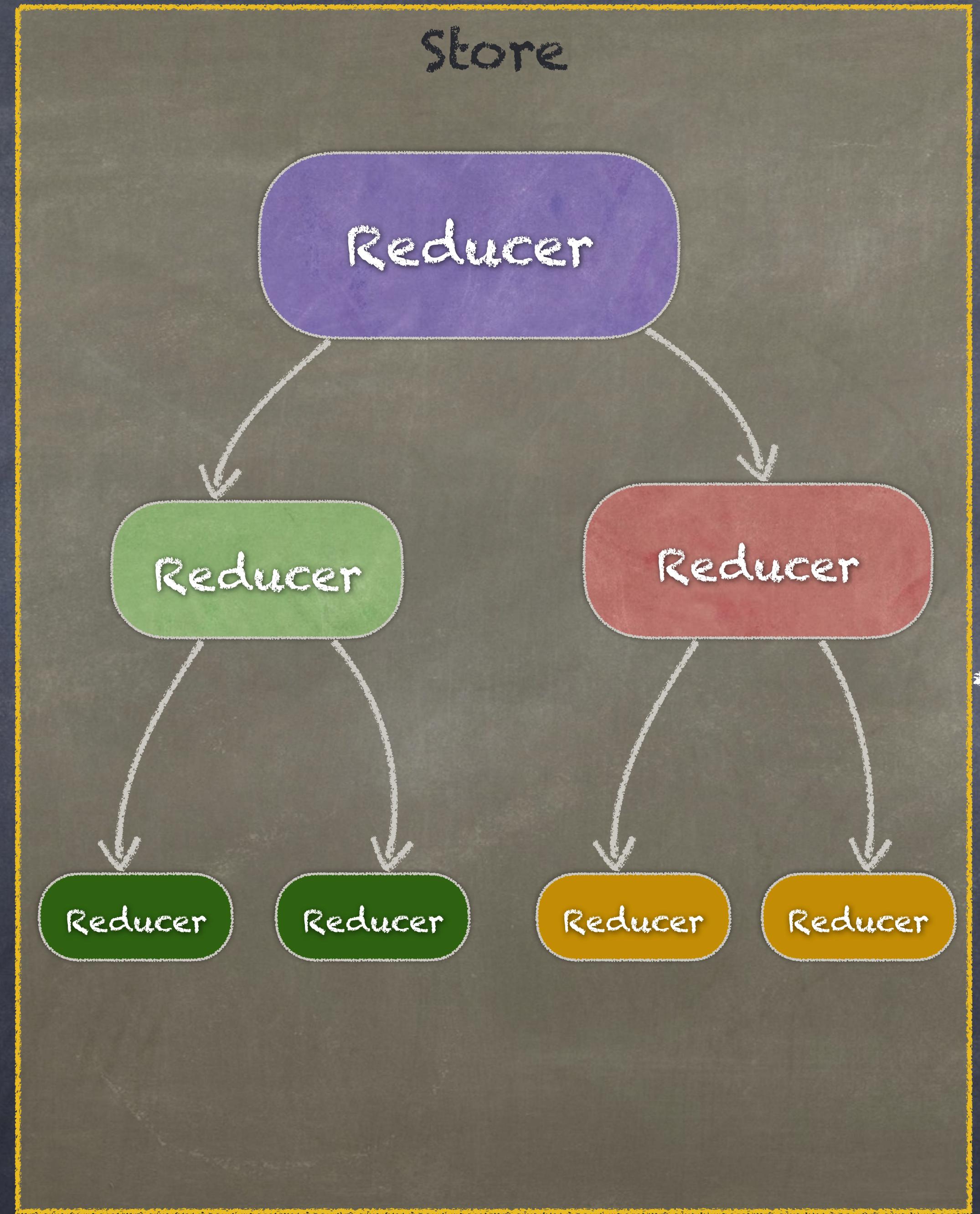
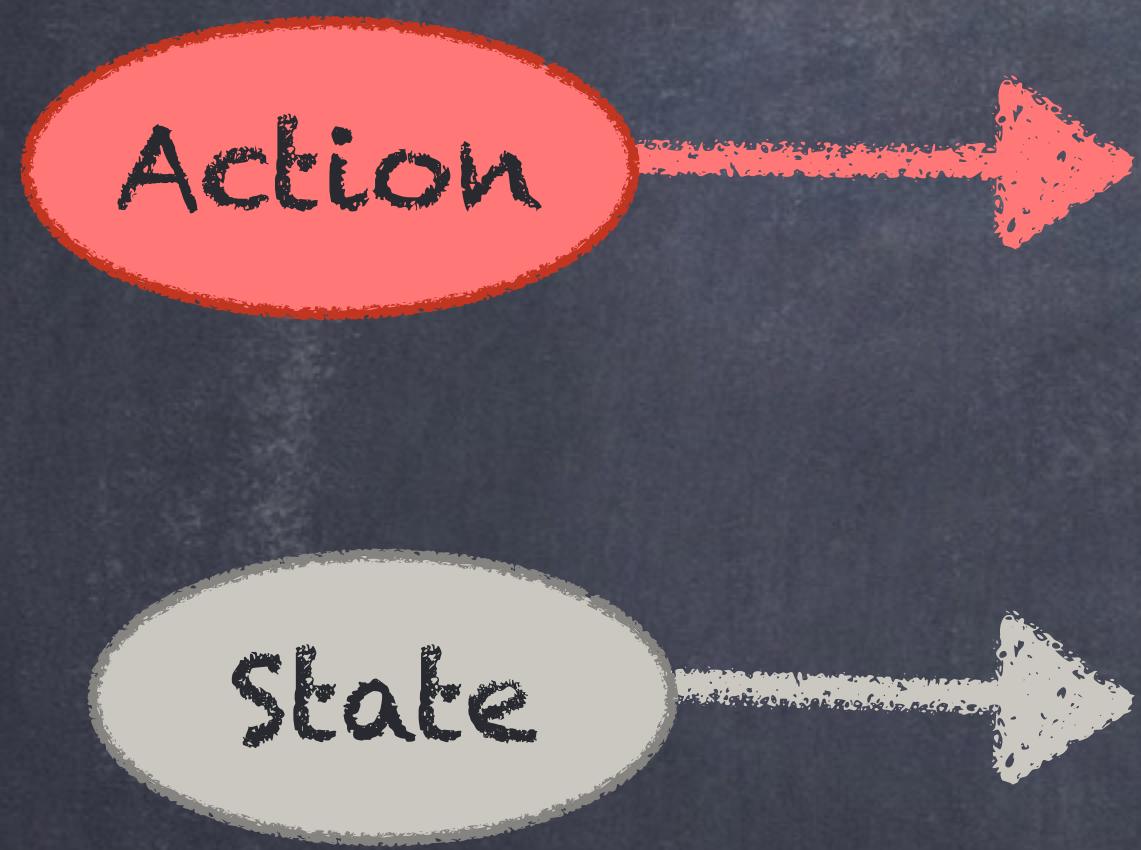


Store

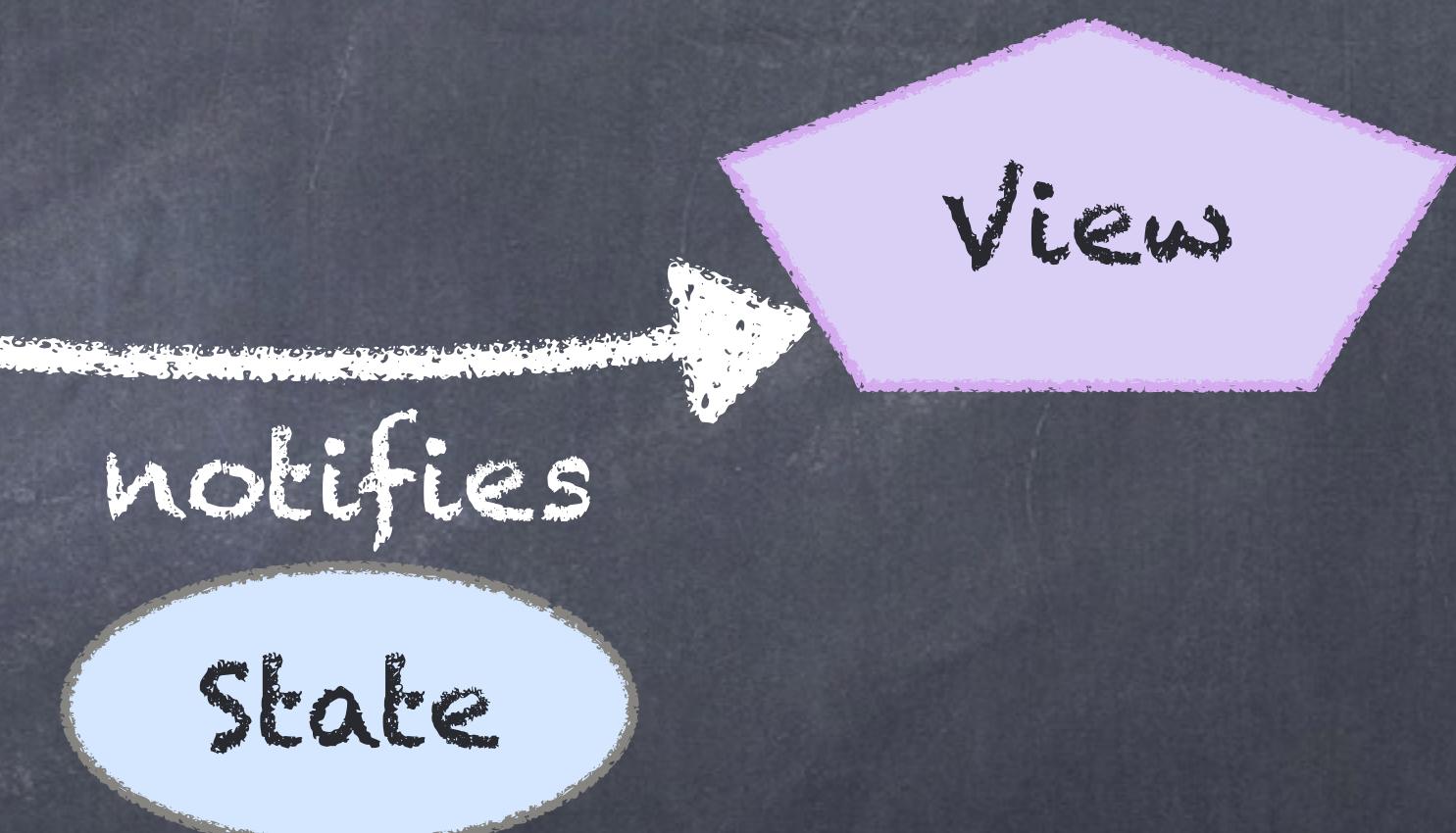
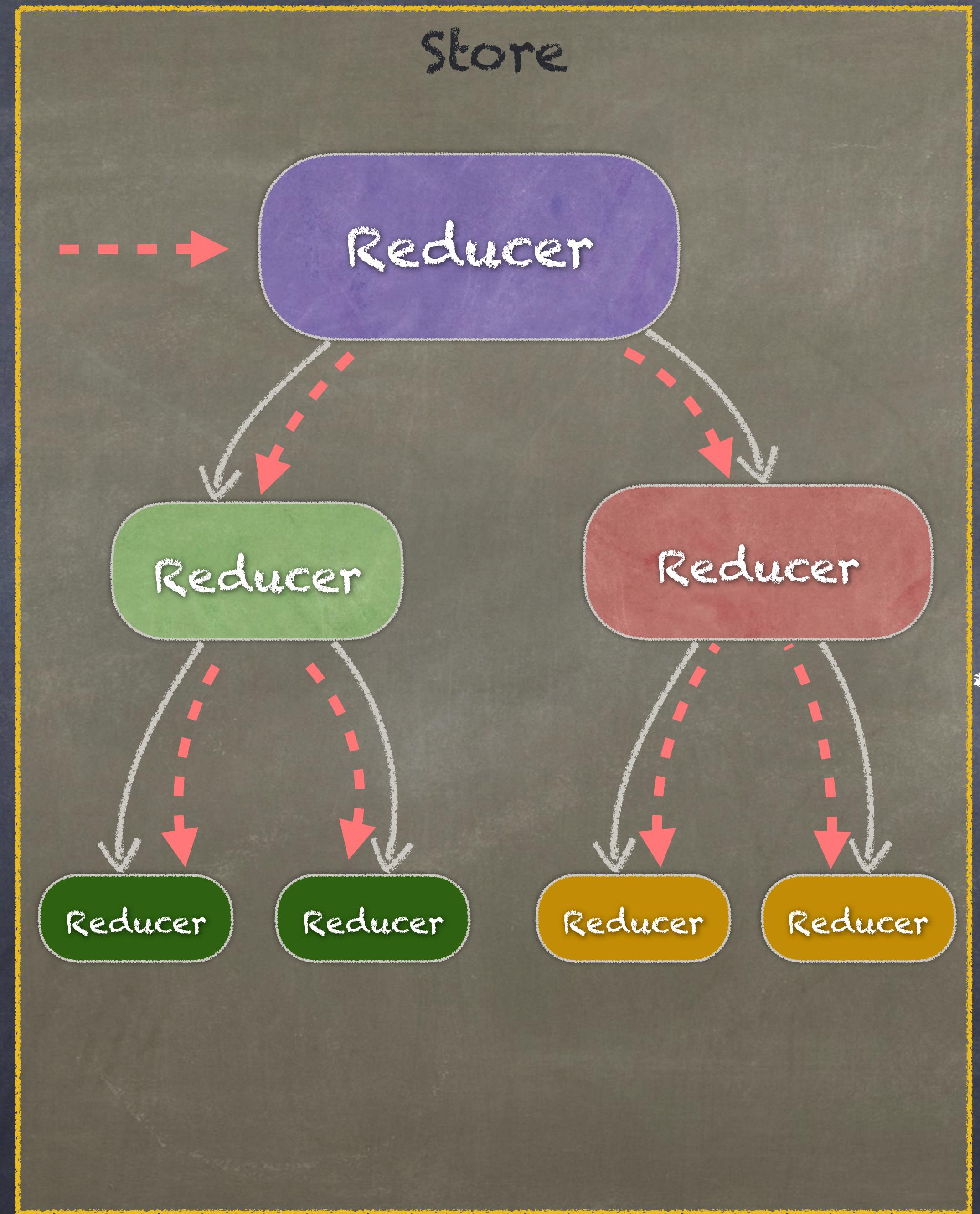
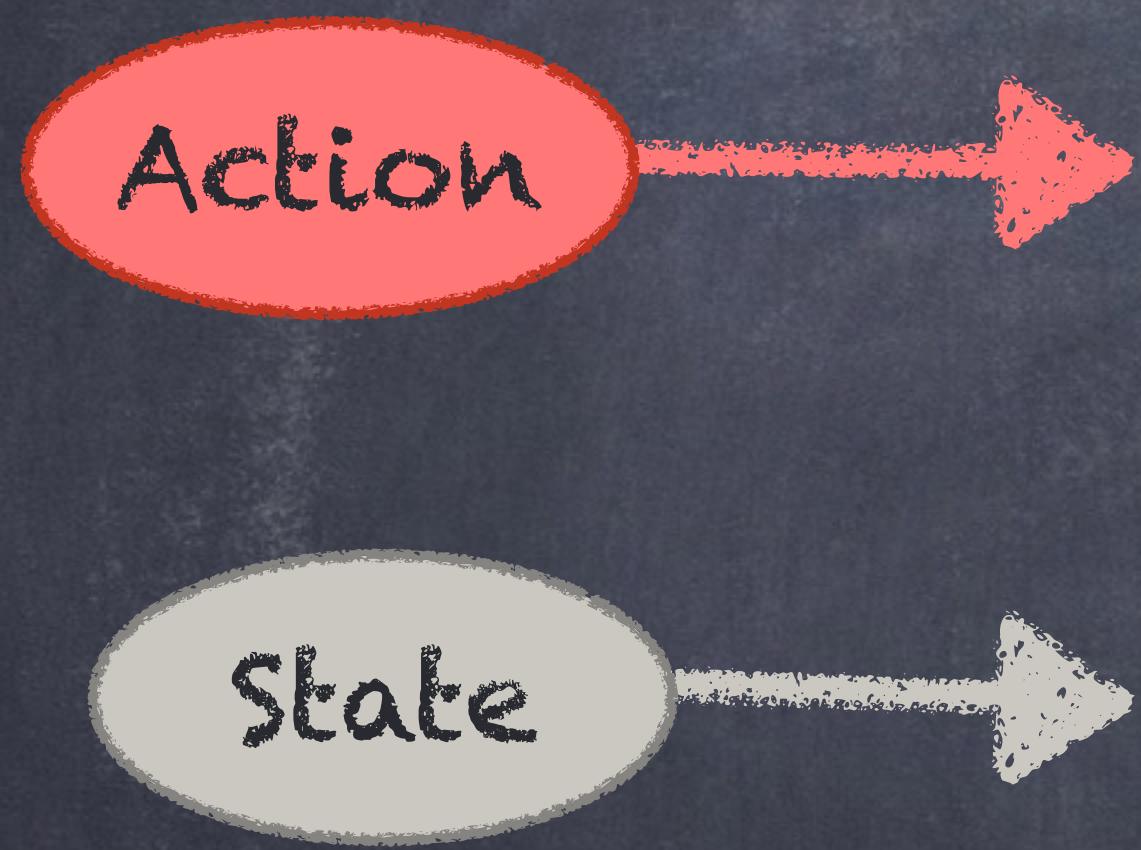


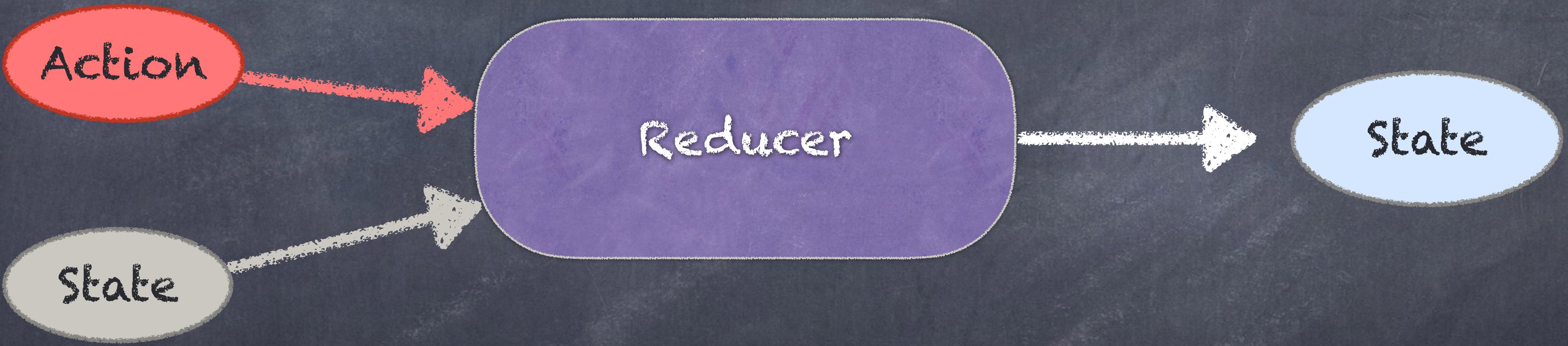
View

Redux

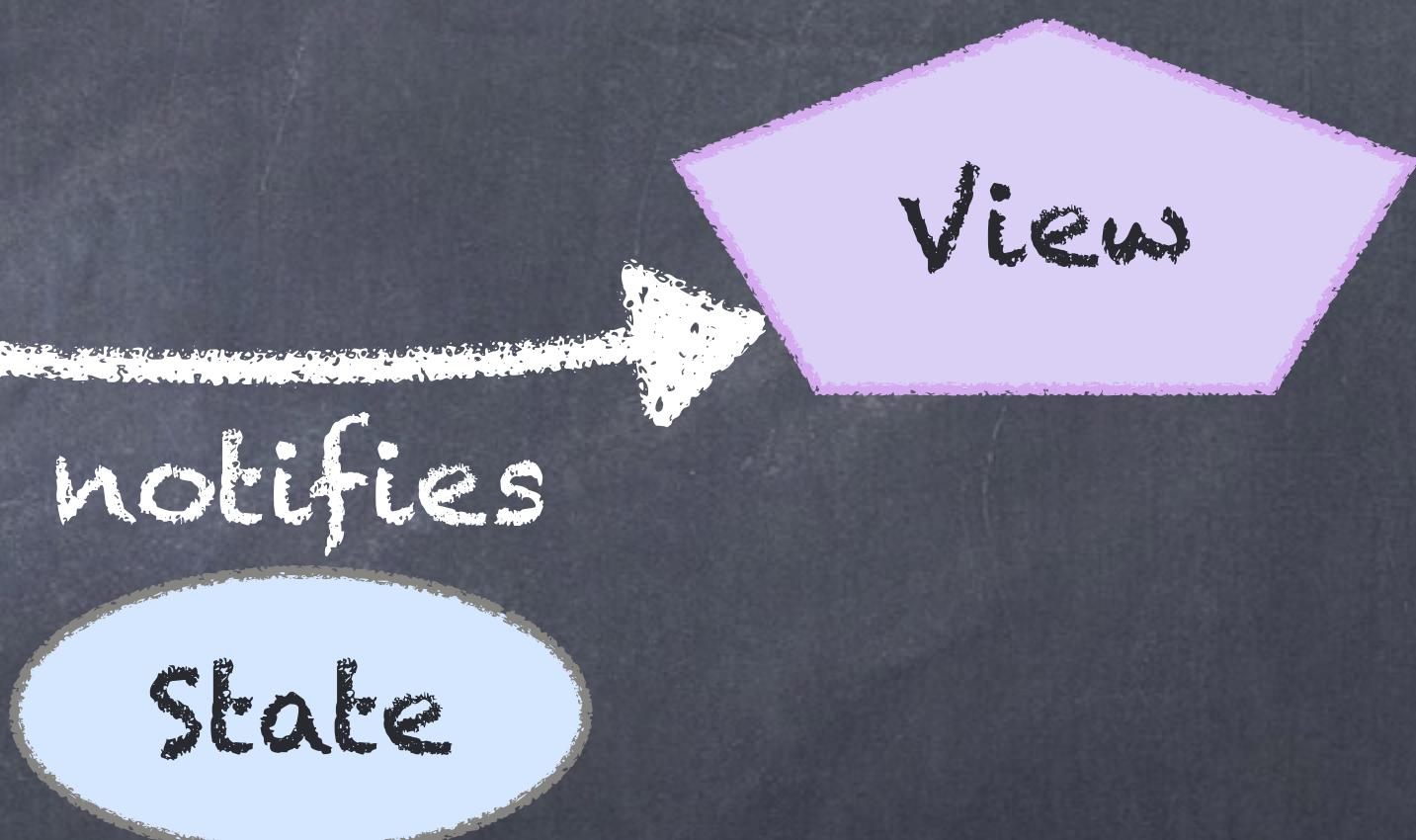
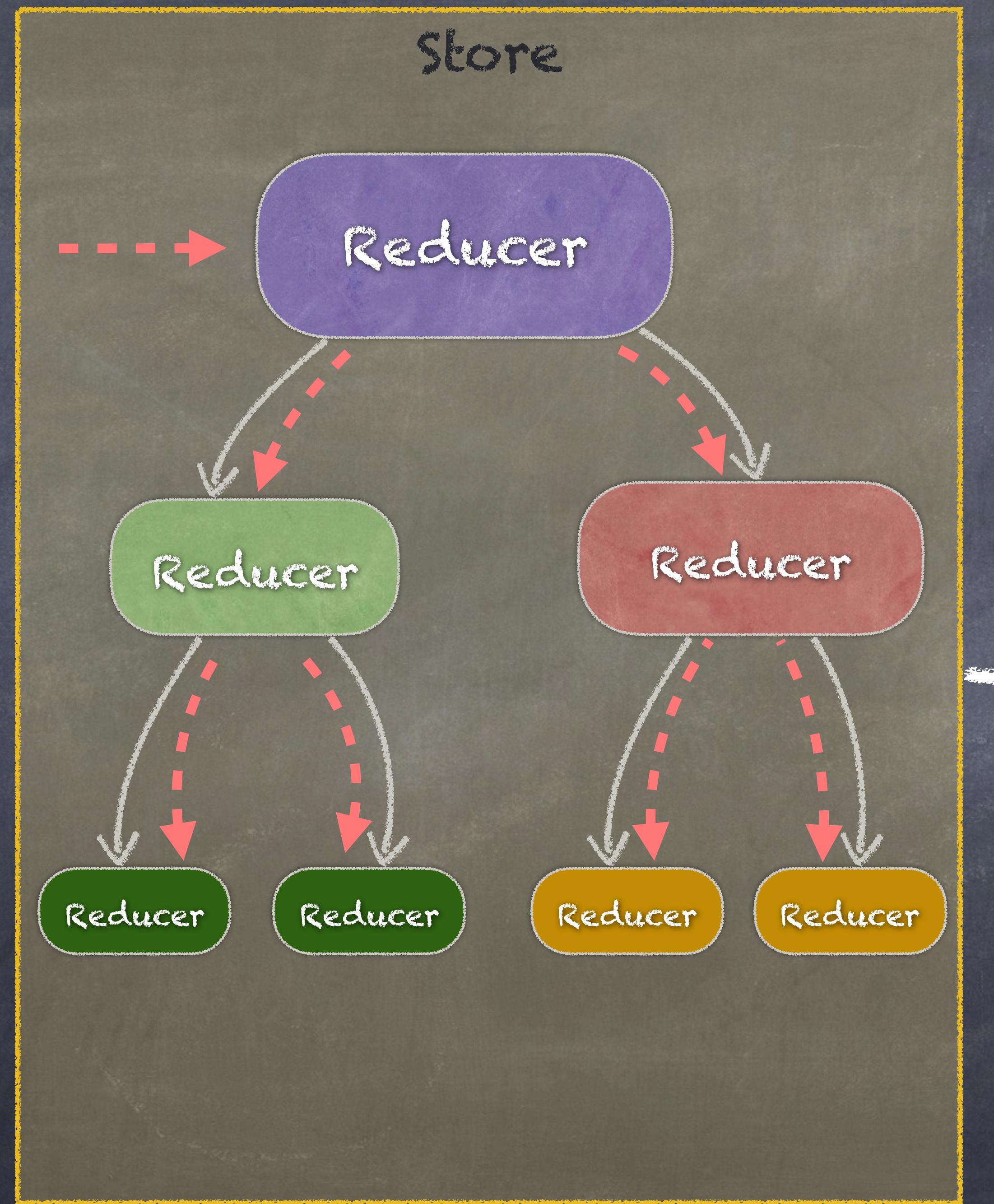
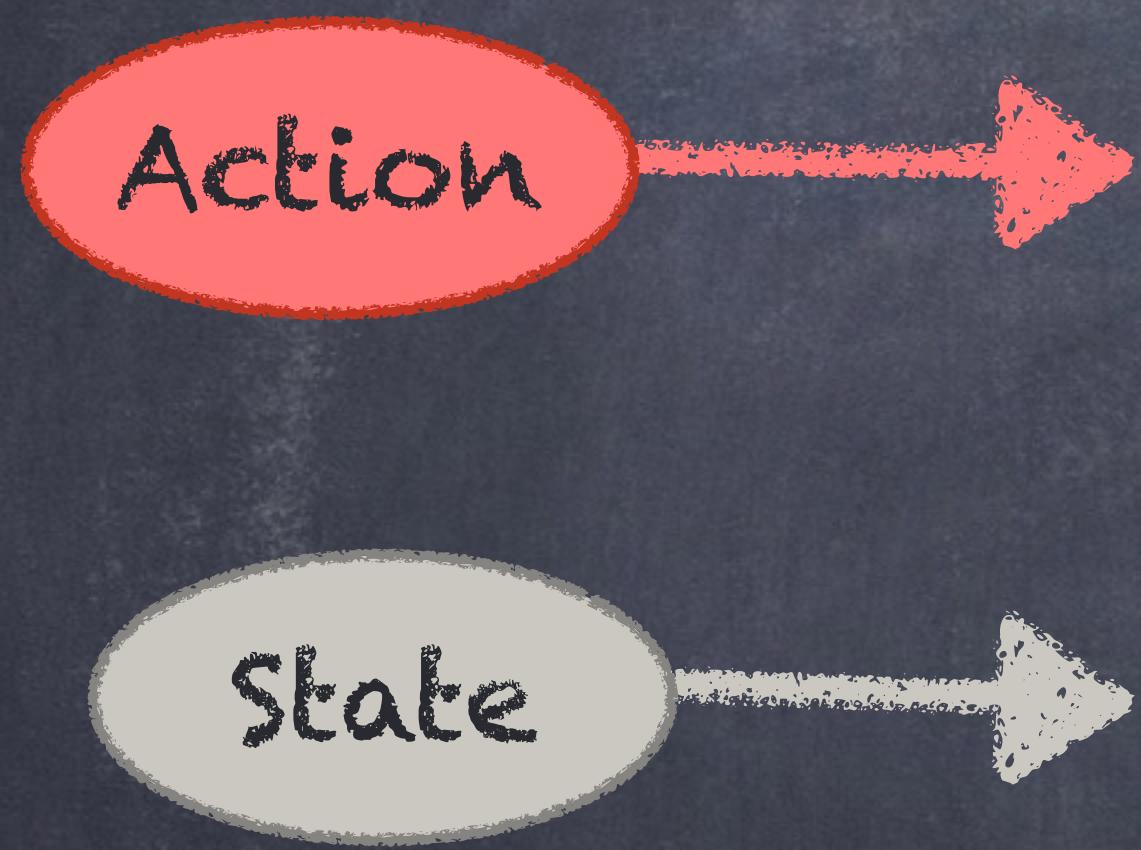


Redux

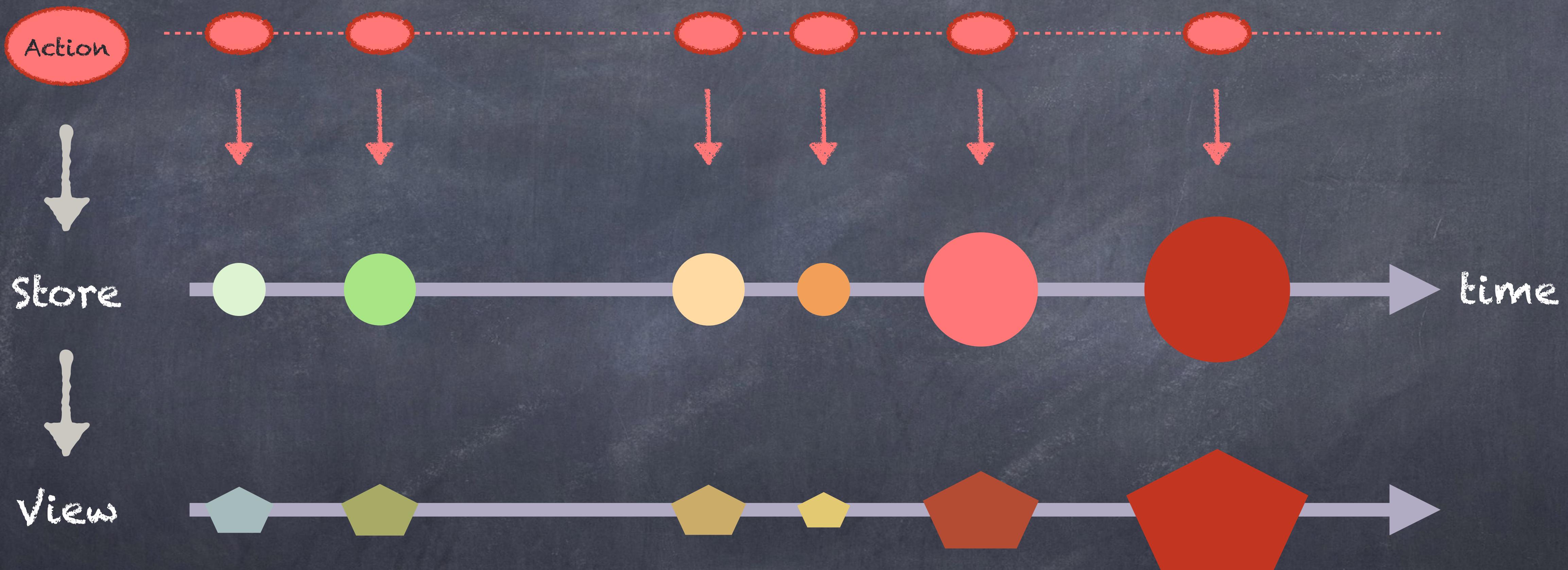




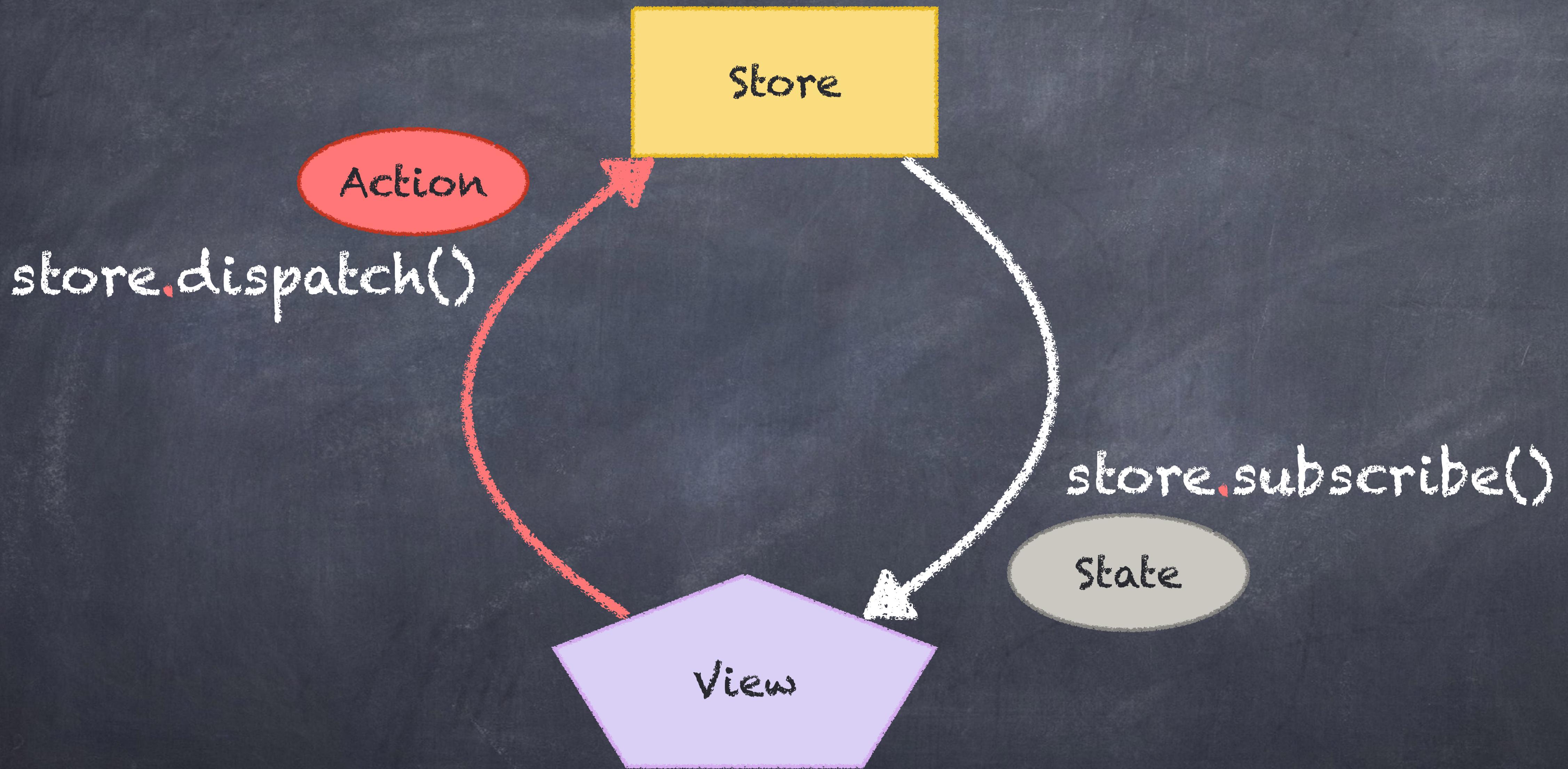
Redux

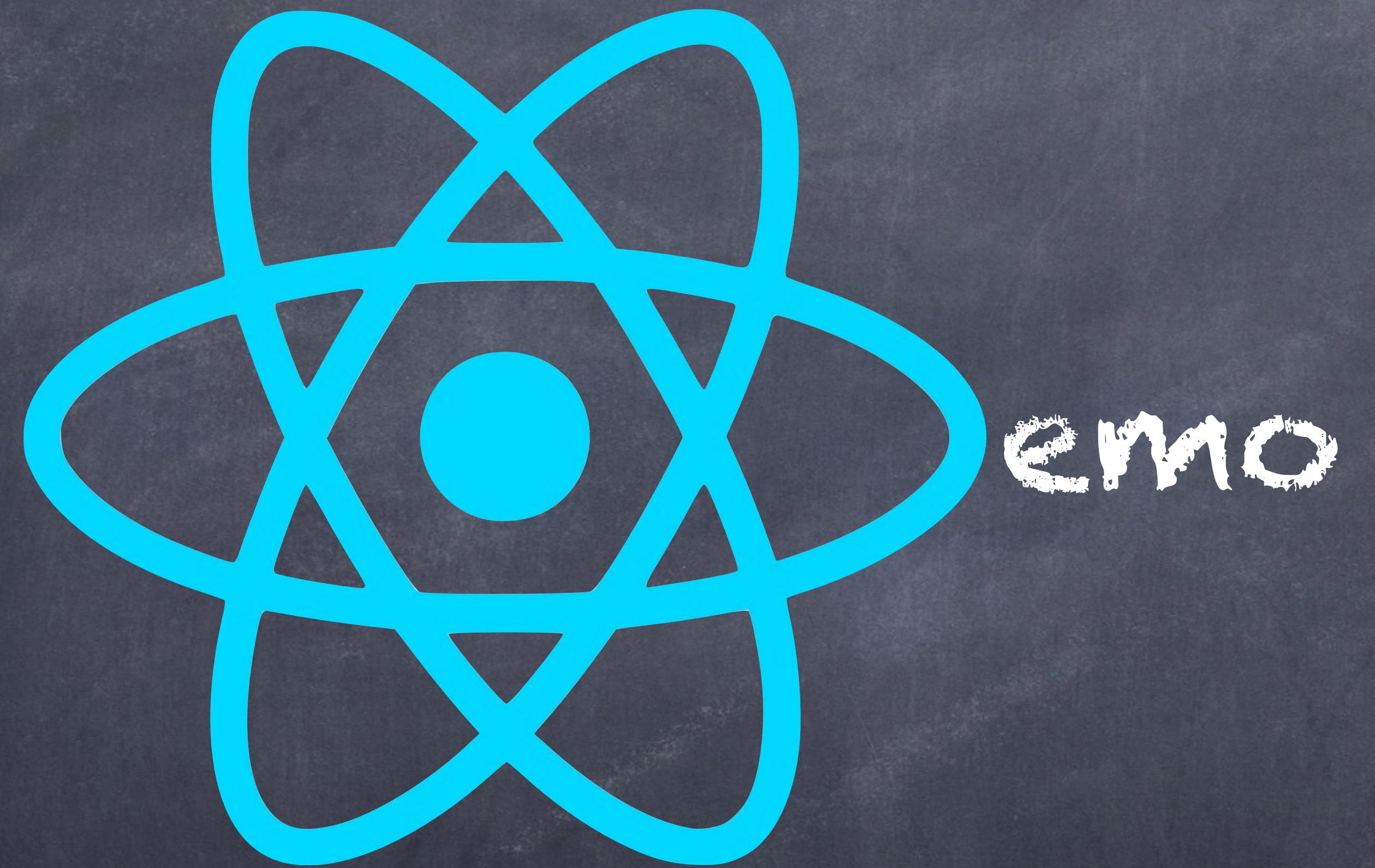


Application States



API





There's more

Structuring State

Refactoring Components

- Container + Presentation

Async Actions

- Sagas, Epics, Thunks

Reducer composition

- slicing
- nesting
- higher-order

Memoizing mapStateToProps()

bindActionCreators()

entity Cache

Firefox Debugger

The screenshot shows the Firefox Debugger interface with the following details:

- Sources:** The left panel displays the file structure and code for several files:
 - localhost:7999/increment/index.js
 - localhost:7999/increment/bundle.js
 - webpack://increment/index.js
 - webpack://increment/example.js
 - webpack://increment/increment.js
 - webpack/bootstrap 4f282b30eeca6ec69a5d/index.js
 - math.js (selected)
- Breakpoints:** The right sidebar shows breakpoints set in `math.js: 3` and `increment.js: 3`.
- Call Stack:** The call stack shows the current execution path: `exports.increment` → `increment.js: 3`.
- Scopes:** The scopes panel shows the current context:
 - Block:** `<this>`: `http://localhost:7999/increment/`, `arguments`: Arguments
 - 0: 0
 - length: 1
 - callee: `exports.increment()`
 - `_proto_`: Object
 - val: 0
 - (anonymous):** `add: exports.add()`, `prototype: Object`, `length: 0`, `name: ""`, `_proto_: function()`
 - Window:** `http://localhost:7999/increment/`, `Function: Function()`, `Object: Object()`, `eval: eval()`, `EventTarget: function()`, `Window: function()`, `close: close()`, `stop: stop()`, `focus: focus()`, `blur: blur()`, `open: open()`, `alert: alert()`, `confirm: confirm()`, `prompt: prompt()`

```
1 var add = require('./math').add;
2 exports.increment = function(val) {
3     return add(val, 1);
4 };
5
6
7 //*****WEBPACK FOOTER*****
8 ** ./increment/increment.js
9 ** module id = 1
10 ** module chunks = 0
11 */
12 */
```

Hyper Term

The image shows a terminal window on the left and a browser developer tools panel on the right. The terminal window displays the Vim help output for version 7.3. The developer tools panel shows the HTML structure of the Vim help page, with the title "VIM - Vi IMproved" highlighted.

Terminal Output (vim help):

```
VIM - Vi IMproved
version 7.3
by Bram Moolenaar et al.
Vim is open source and freely distributable

      Become a registered Vim user!
type :help register<Enter>    for information
type :q<Enter>                  to exit
type :help<Enter> or <F1>       for on-line help
type :help version7<Enter>      for version info
```

Developer Tools Panel:

- Elements Tab:** Shows the DOM structure of the page. The title "VIM - Vi IMproved" is selected, and its color style (color: rgb(0, 102, 255)) is shown in the details pane.
- Console Tab:** Shows the command "VIM - Vi IMproved" == \$0.
- Sources Tab:** Shows the source code of the Vim help page.
- Network Tab:** Shows network requests.
- Timeline Tab:** Shows the timeline of events.
- Profiles Tab:** Shows performance profiles.
- Alerts Tab:** Shows 11 alerts.
- Styles Tab:** Shows styles applied to the selected element.
- Event Listeners Tab:** Shows event listeners for the selected element.
- DOM Breakpoints Tab:** Shows DOM breakpoints.
- Properties Tab:** Shows properties of the selected element.
- Filter Bar:** Shows filters for #mount, div, div, div, div, div, div, div, iframe, html, body, x-screen, div, x-row, and (text).
- Event Listener Filter:** Shows filters for Ancestors, All, Framework listeners, and DOMMouseScroll, blur, click, contextmenu, copy, dblclick, focus, keydown, keypress, keyup, mousedown, mousemove, mouseout, mouseover, mouseup, and mousewheel.



Out in the wild

Khan Academy

Uber PayPal

Flipkart

Postman

New Relic

Start here...

<http://redux.js.org/>

