

Model / State

OO pattern: MVC, MVP, MVVM

Basic idea: Everything on the screen
has a ^{single} representation in the model.

Extension: some presentation data is
Controller / presenter / view model

State: model + additional extras

Functional Principles

1. No variables
2. Every function is pure
3. Fcts 1st-class

Function-style principles

1. Few variables
2. Most functions are pure
3. Same

Variables

window.document: DOM

store: state

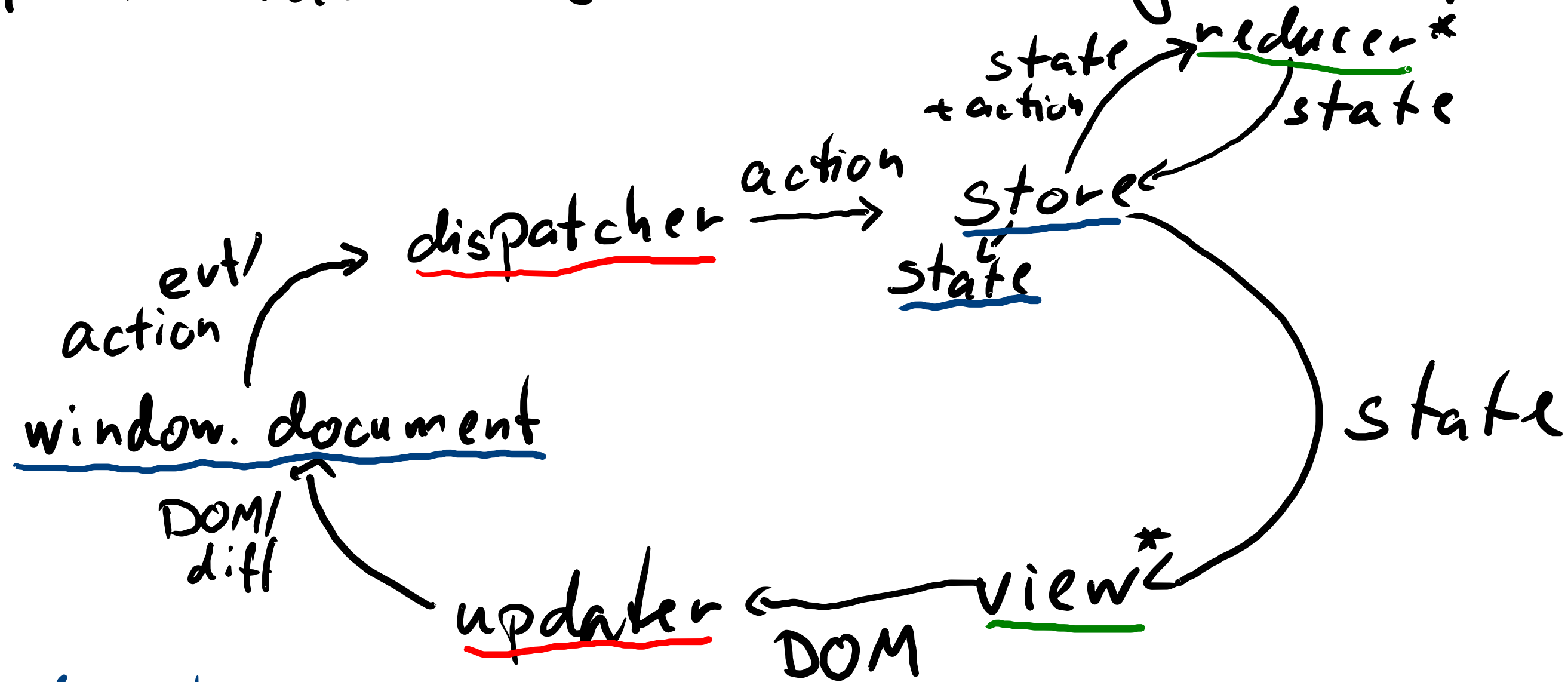
Fct-style prog base: $x = f(x)$ (f pure)

Pure functions

view: $\text{State} \rightarrow \text{DOM}$

reducer: $\text{Action} \times \text{State} \rightarrow \text{State}$

Flux Pattern (Facebook) - 1-way data flow



Variable

Impure fct

Pure fct

* Presentation logic

Coding in Practice

View/update

1. DIY ☹️
2. React (diff)

Store/reducer

1. DIY
2. Redux

Code examples

<https://github.com/olehougaard/swa-a20/flux/>
... / swa-a20 / flux.jsx /
... / tic-tac-toe / 2-player.jsx