



# Introduction To Elm



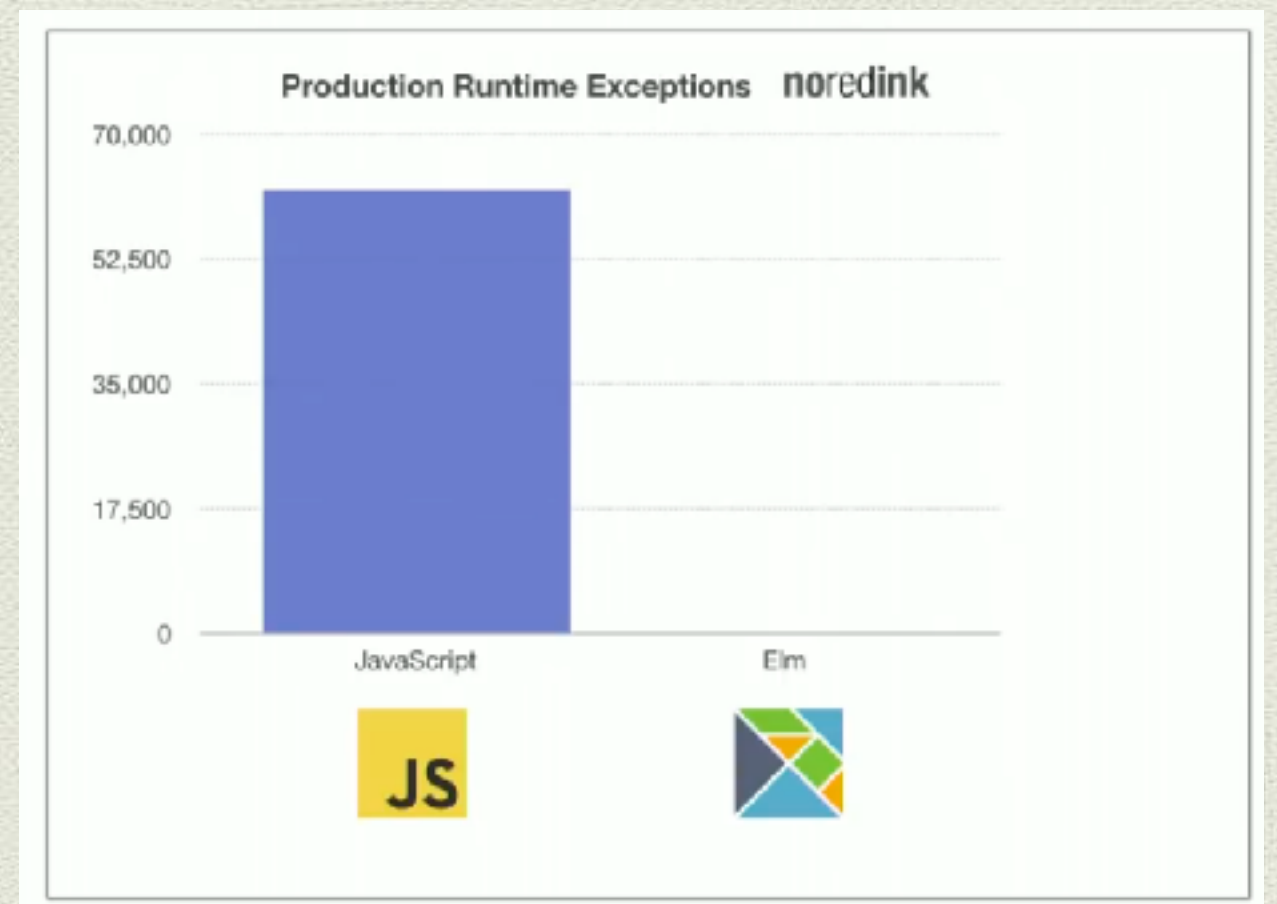
# Agenda

- ◆ What is Elm?
- ◆ How do you install Elm?
- ◆ Live coding: Refactor



# What is Elm?

- ◆ Pure functional
- ◆ Compiled to Javascript
- ◆ Front-end only
- ◆ Designed for safety & ease of learning. No runtime exceptions.





# How do you install Elm?

- ◆ Install elm

```
npm install -g elm
```

- ◆ Start a project

```
elm init
```

- ◆ Also install the code formatter

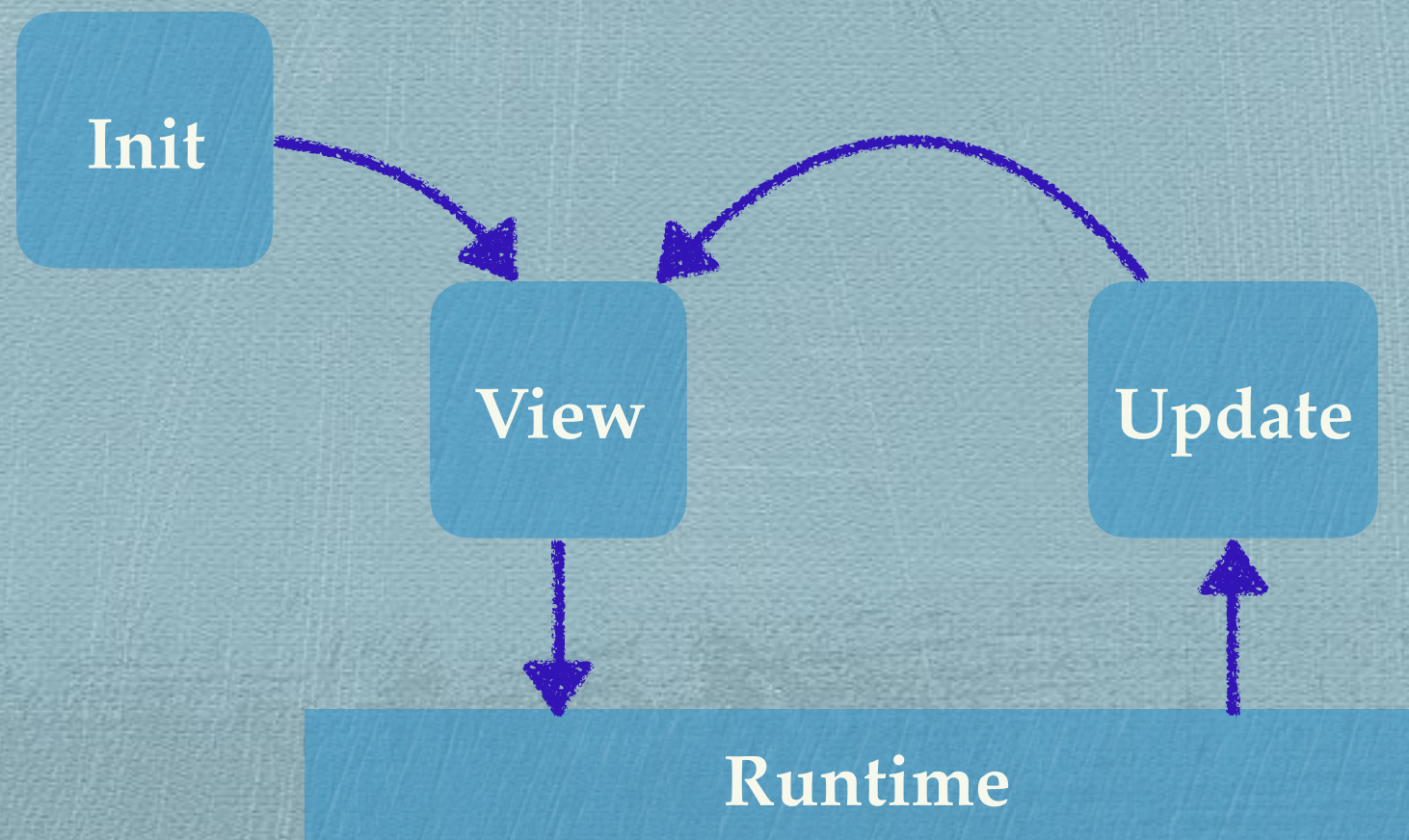
```
npm install -g elm-format
```



# Live coding: Refactor

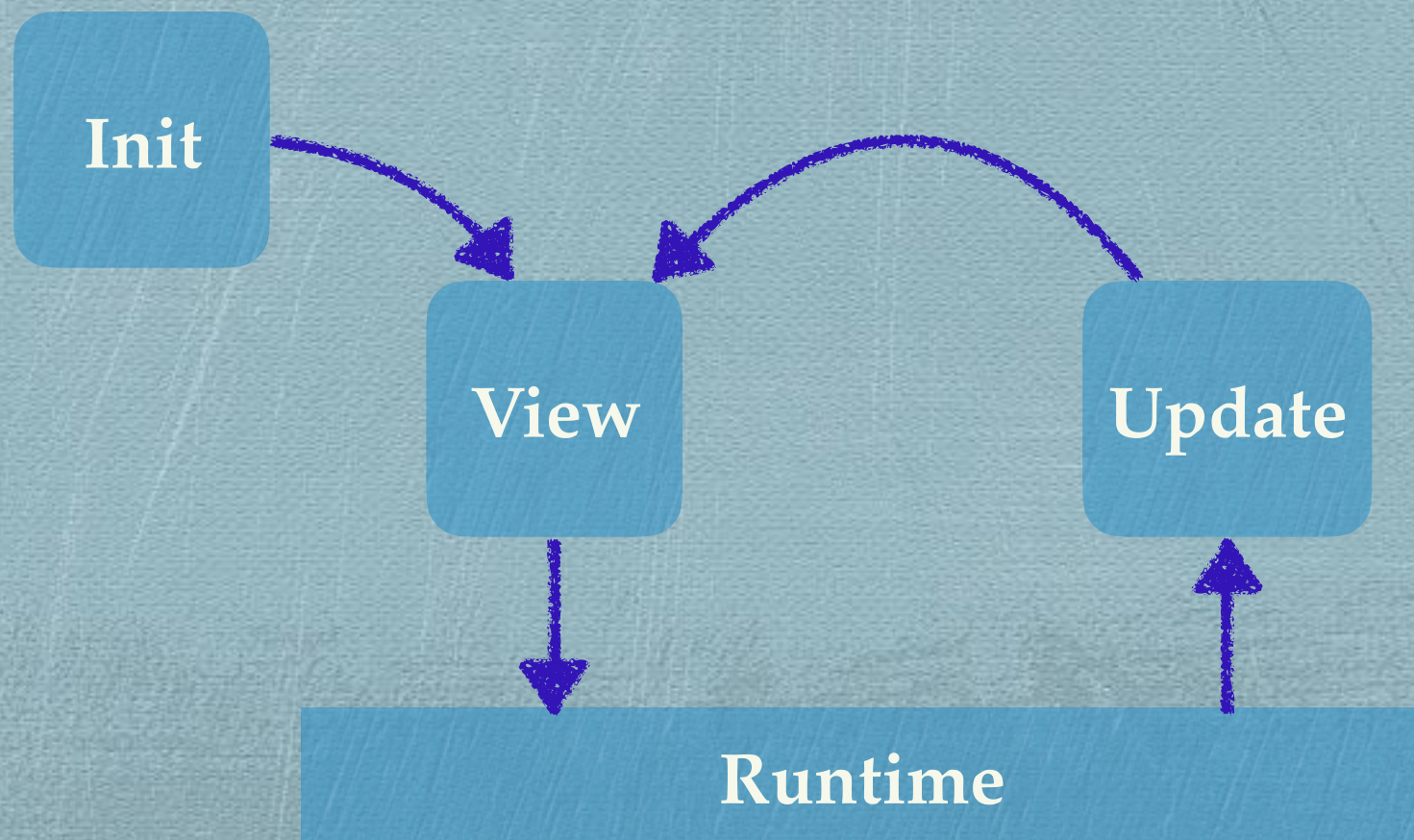
- ◆ We have a simple counter app.
- ◆ We want to refactor the app to load a gif.
  - How many people would do this in React/Redux JS?
    - With no tests
    - With no console.logs
    - Without running the code
- ◆ The Elm programming loop is based around the compiler, not the debugger.





One-directional data flow  
using Browser.sandbox

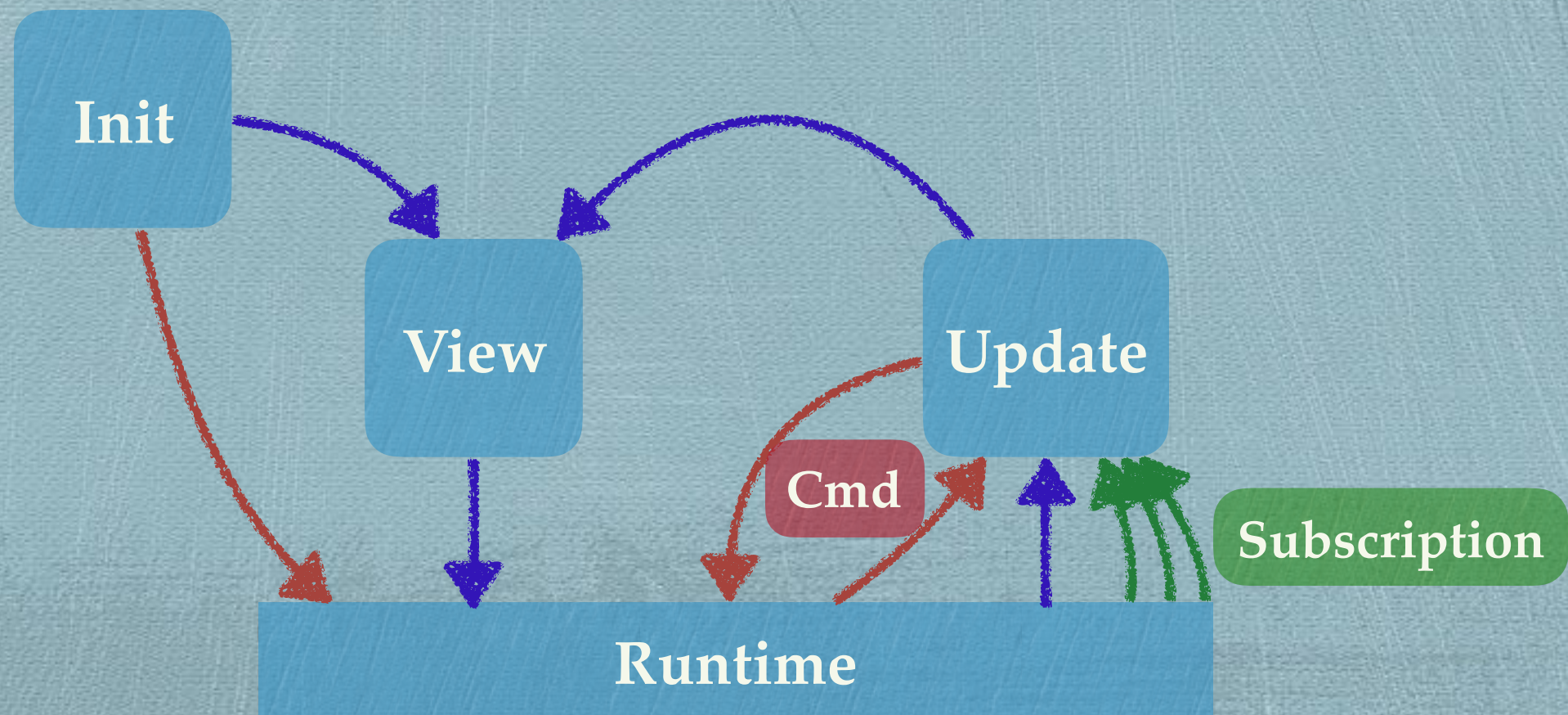




Redux	Elm
Store	Model
Render	View
Reducer	Update
Actions	Messages

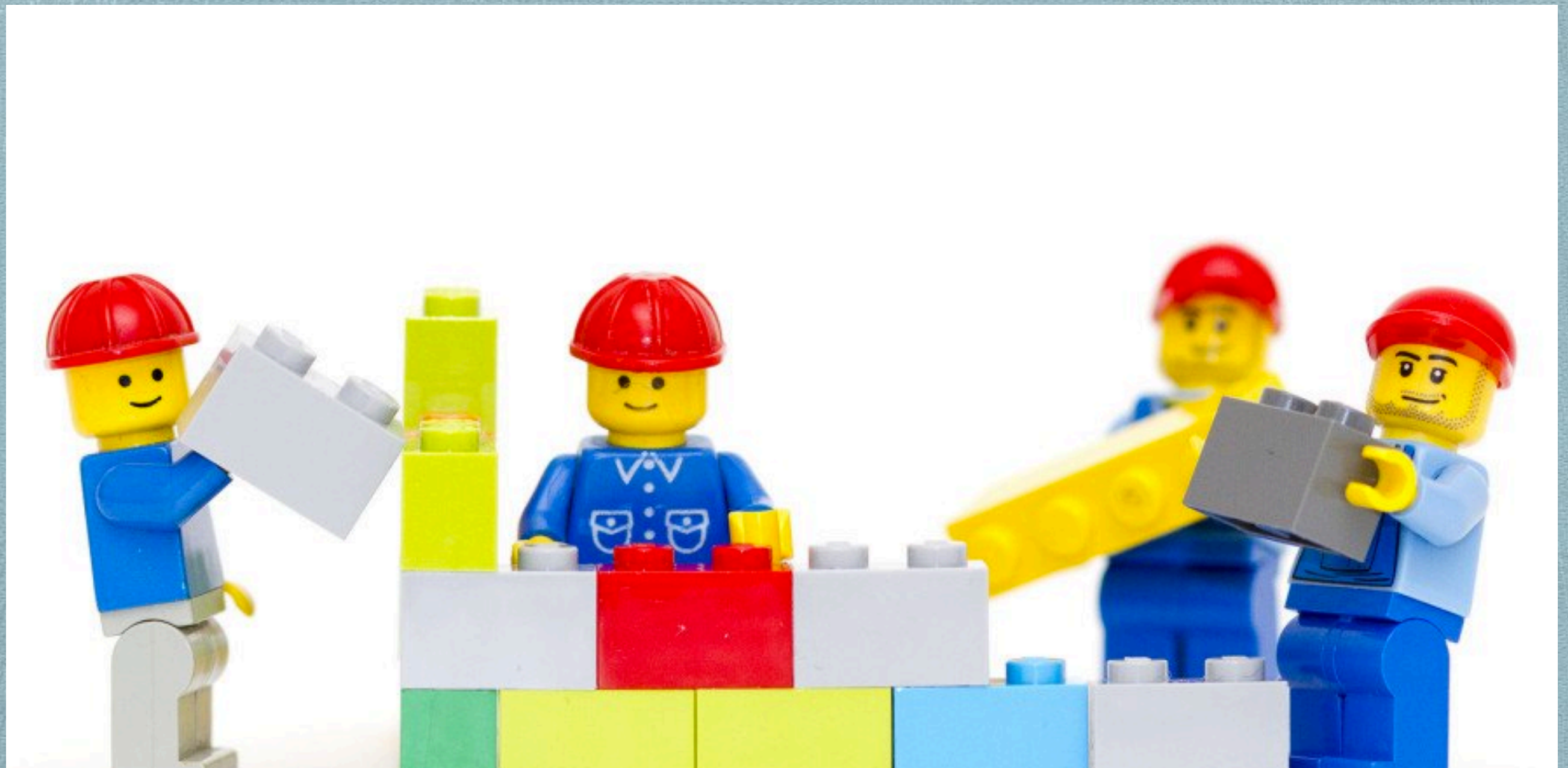
Redux -> Elm terminology





Cmd & Subscription  
Using Browser.element





# Thank you

*For more information: <https://guide.elm-lang.org>*