# ABSTRACT COMPONENT MODELING

FARZAD YOUSEFZADEH

@FARZAD_YZ

futurice

# REVEAL MY 🖐

ABSTRACT BEHAVIOR MODELING

BEHAVIOR FIRST APPROACH

PORTABLE BEHAVIOR

# BEHAVIOR

# ABSTRACT BEHAVIOR

INTEGRATIONS = [DESIGN, PLATFORM, DATA FLOW, FRAMEWORK]

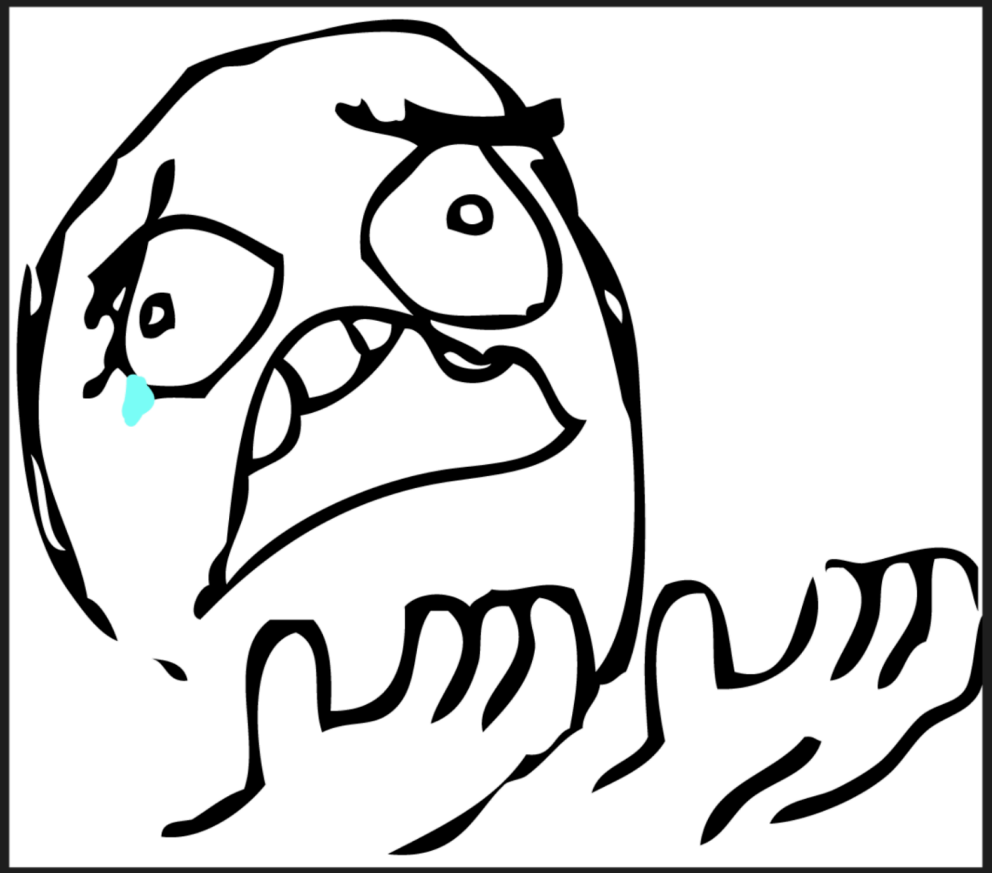
**David K.** 🎹
@DavidKPiano

💡 Model and develop your app's logic as if it will be used in many different UIs (e.g., web, CLI, native, etc.), even if it won't be.

This will force you to avoid coupling logic with presentation, which mainstream frameworks (React, Angular, Vue) unintentionally encourage.

4:08 PM · Feb 4, 2019 · Twitter Web Client

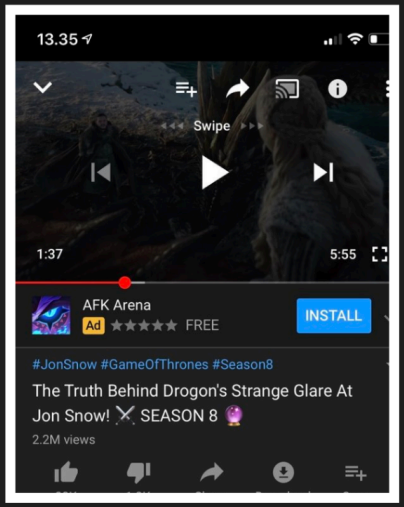
# BUT HOW?!

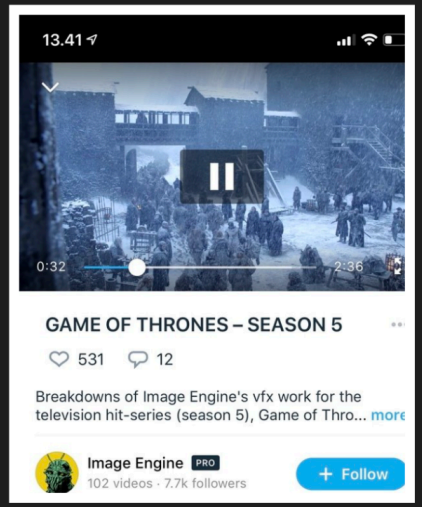


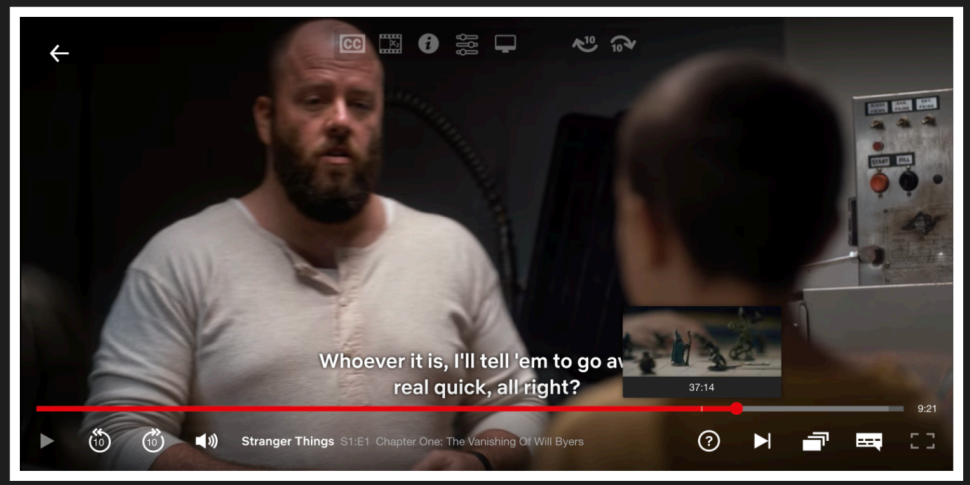
WEB

MOBILE

NETFLIX vimeo YouTube

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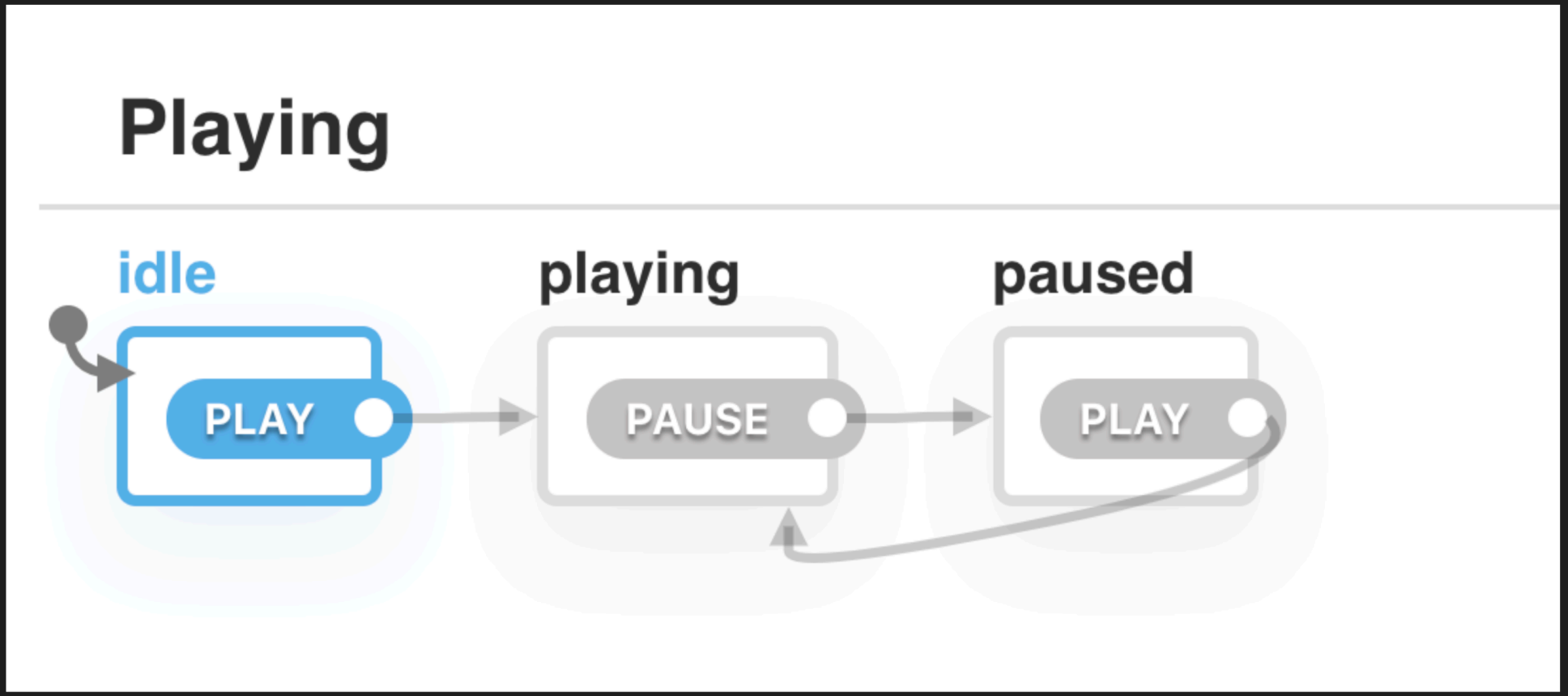
# AT THE HEART



# COMPONENT CONSISTS OF

- CORE BEHAVIOURS
- IMPLEMENTATION BEHAVIOURS
- STYLES
- [...INTEGRATIONS]

# THINK IN

IMPLEMENTATION: LANGUAGES, FRAMEWORKS

DESIGN: MATERIAL DESIGN, BOOTSRAP, IN-HOUSE DESIGN SYSTEM

PLATFORM: WEB, MOBILE, NATIVE VS HYBRID

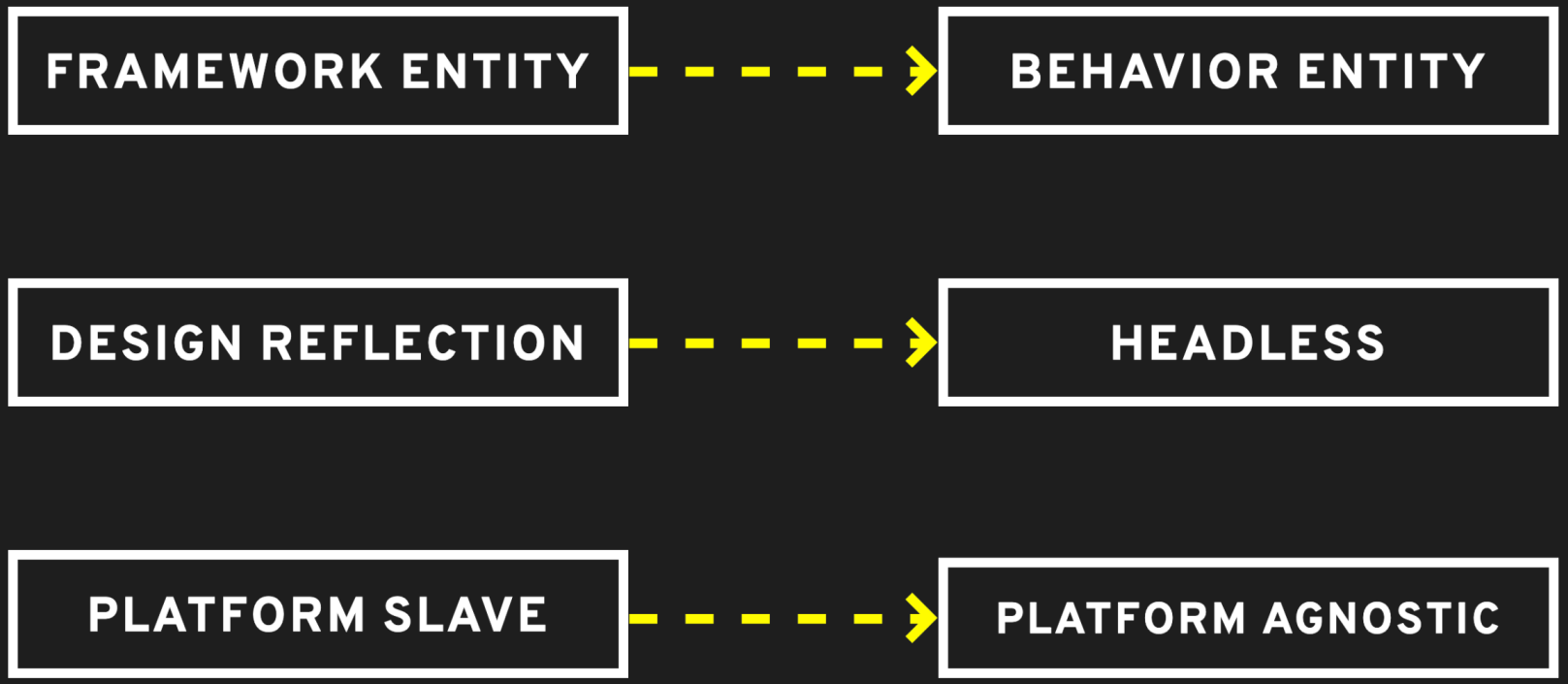
# I WISH FOR

JUST CARING ABOUT BEHAVIOUR

MORE INTEGRABILITY

CROSS WHATEVER

# WHAT IF?


FRAMEWORK ENTITY
BEHAVIOR ENTITY
DESIGN REFLECTION
HEADLESS
PLATFORM SLAVE
PLATFORM AGNOSTIC

# STATE MACHINES

and

# STATECHARTS

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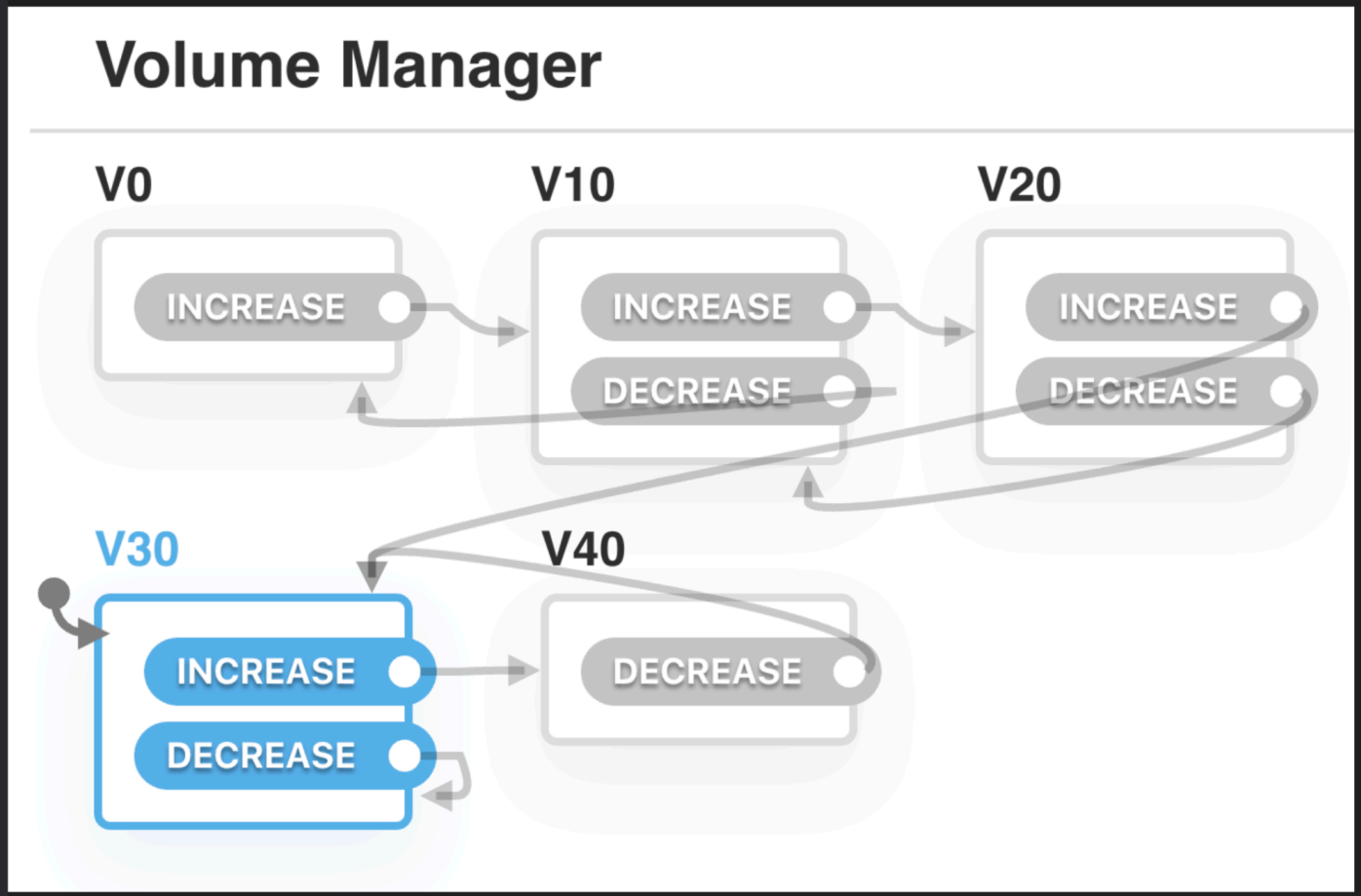
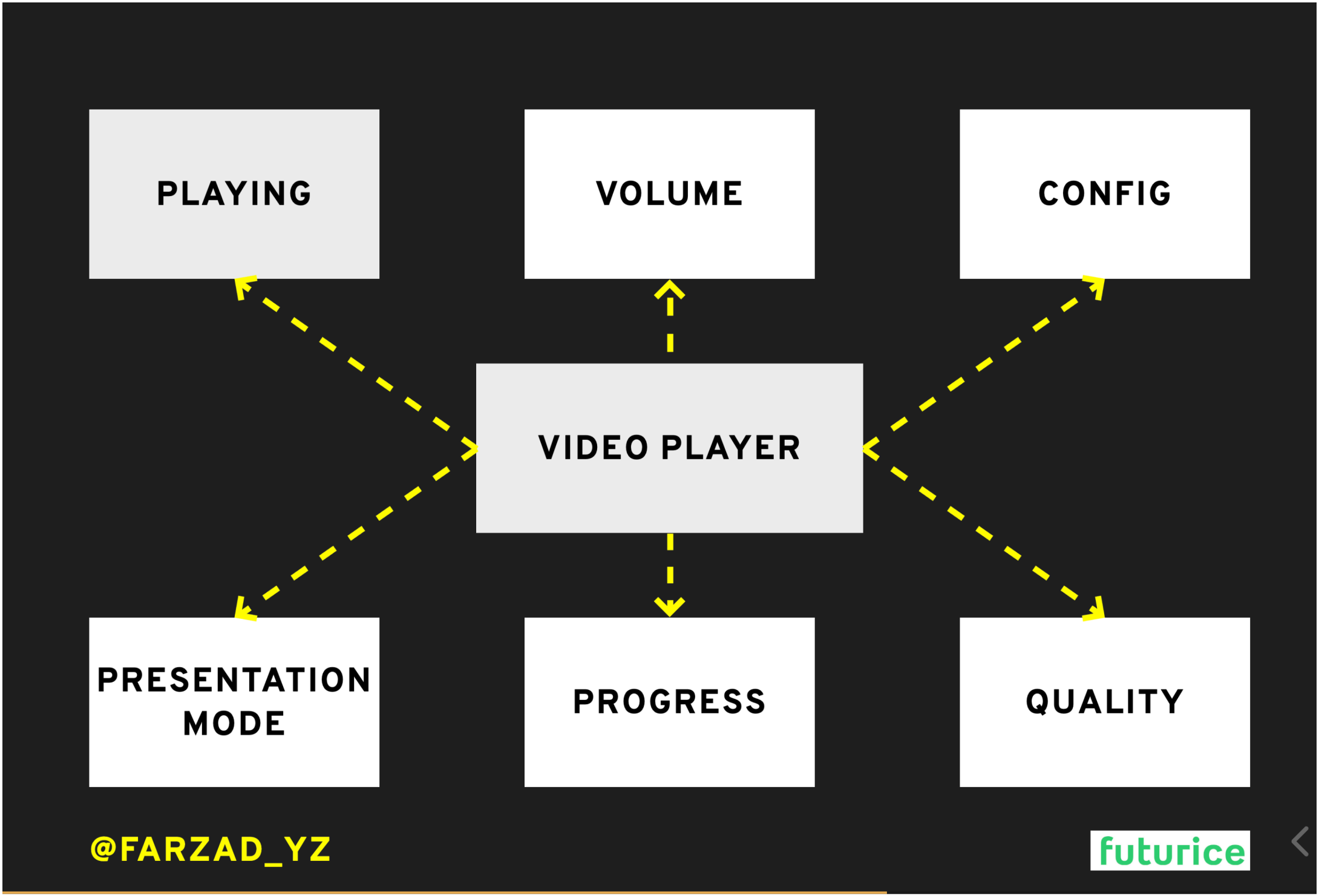
# THEY'RE COOL

- ABSTRACT (JSON -> SCXML)
- VISUALIZED
- EXPLICIT
- PORTABLE (JSON -> SCXML)

```
{
  initial: "V30",
  states: {
    V0: {
      on: {
        INCREASE: "V10"
      }
    },
    V10: {
      on: {
        INCREASE: "V20",
        DECREASE: "V0"
      }
    },
    V20: {
      on: {
        INCREASE: "V30",
        DECREASE: "V10"
      }
    },
    V30: {
      on: {
        INCREASE: "V40",
        DECREASE: "V30"
      }
    },
    V40: {
      on: {
        DECREASE: "V30"
      }
    }
  }
}
```




PLAYING
VOLUME
CONFIG
VIDEO PLAYER
PRESENTATION MODE
PROGRESS
QUALITY
@FARZAD_YZ
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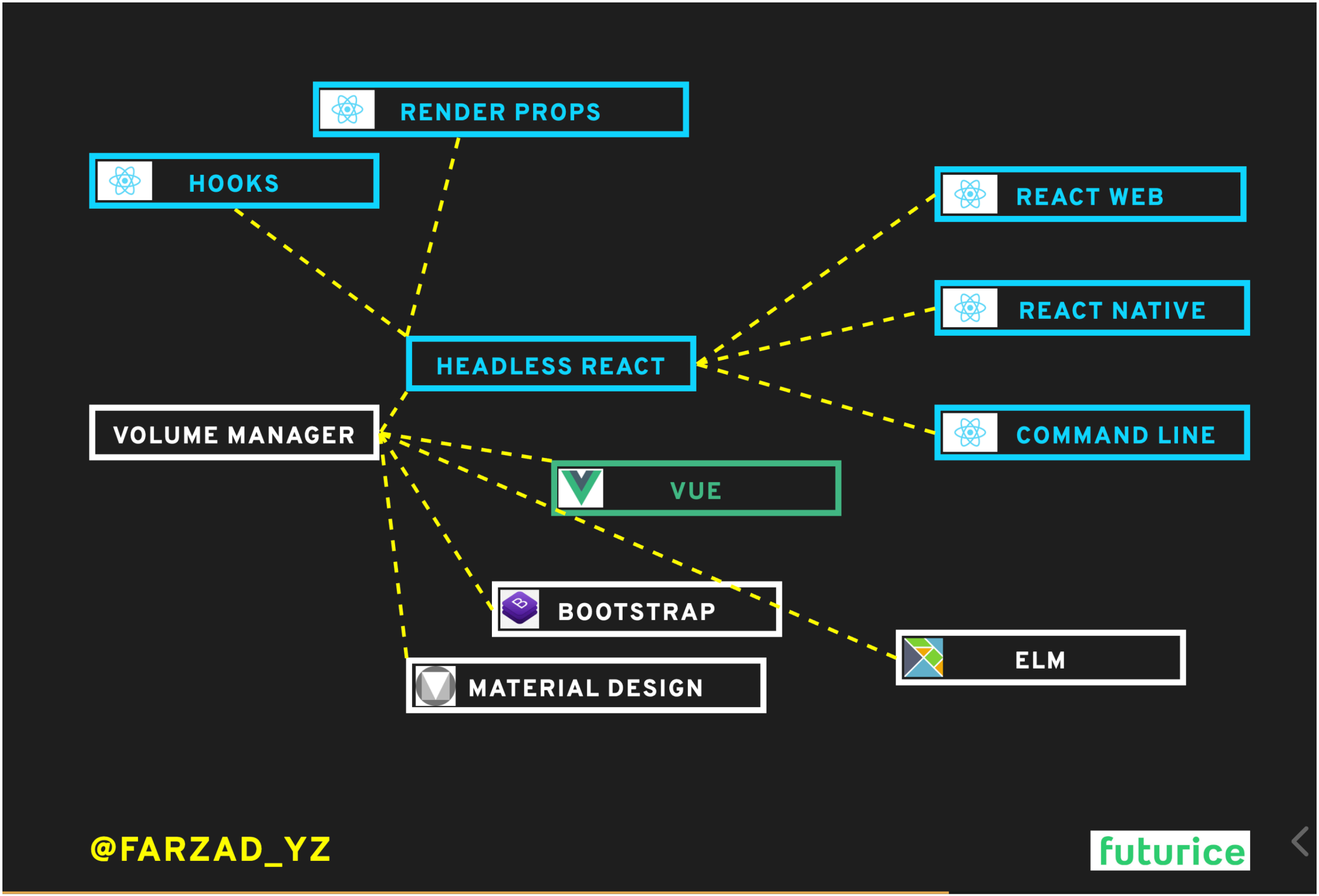
RENDER PROPS
HOOKS
REACT WEB
REACT NATIVE
HEADLESS REACT
COMMAND LINE
VOLUME MANAGER
VUE
BOOTSTRAP
ELM
MATERIAL DESIGN
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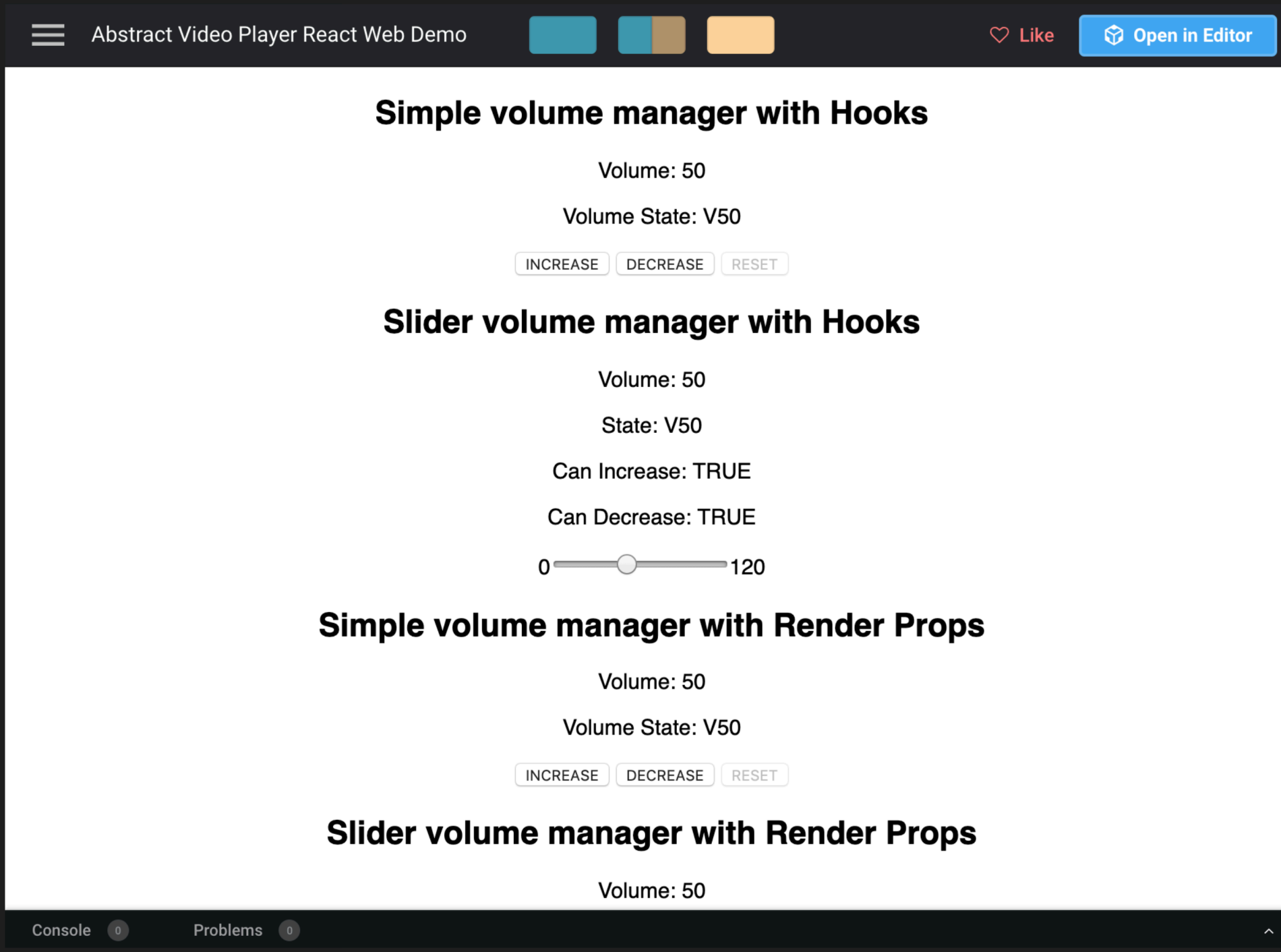
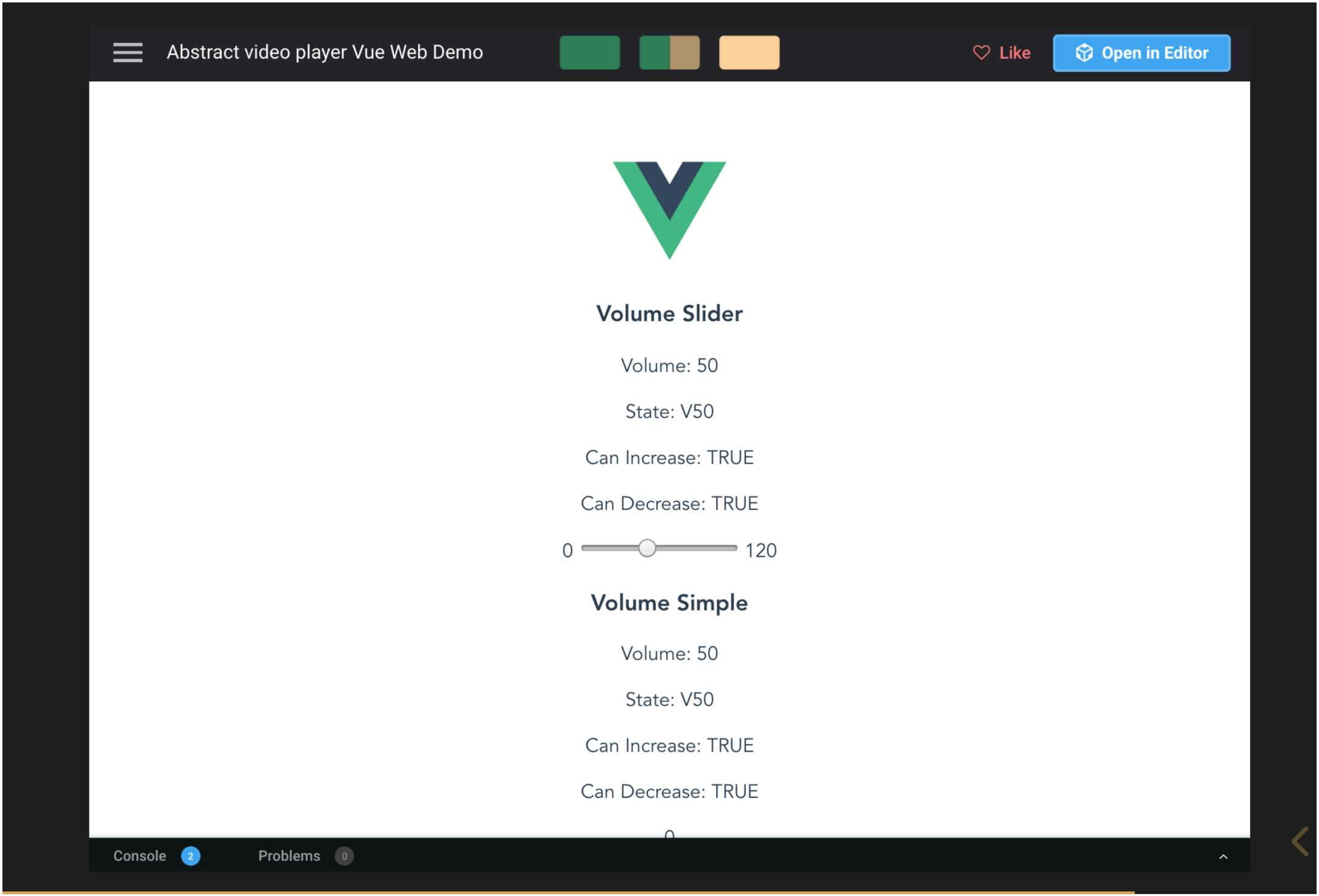
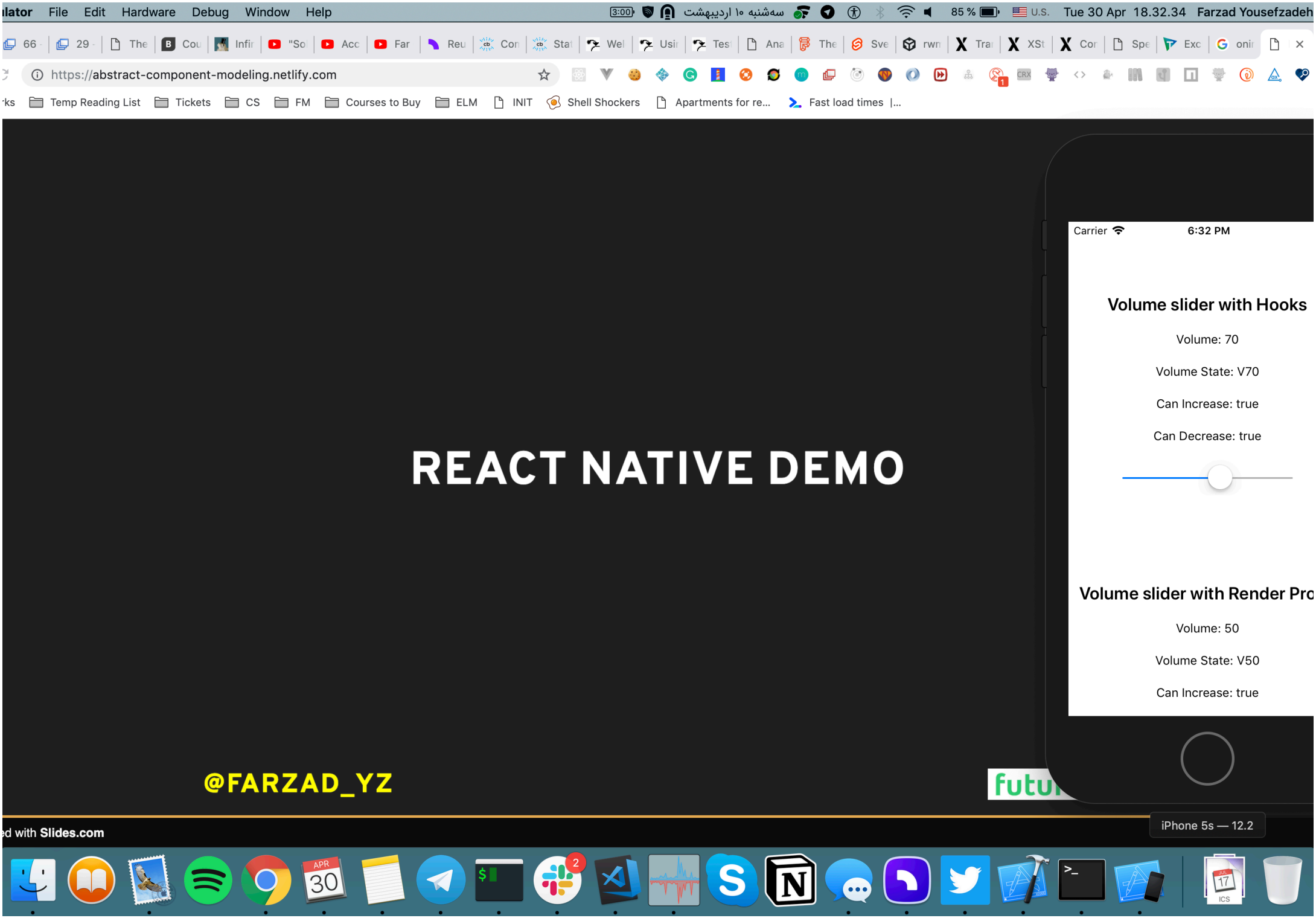
# DEMO


Abstract Video Player React Web Demo
Like
Open in Editor
Simple volume manager with Hooks
Volume: 50
Volume State: V50
INCREASE
DECREASE
RESET
Slider volume manager with Hooks
Volume: 50
State: V50
Can Increase: TRUE
Can Decrease: TRUE
0
120
Simple volume manager with Render Props
Volume: 50
Volume State: V50
INCREASE
DECREASE
RESET
Slider volume manager with Render Props
Volume: 50
Console
0
Problems
0


Abstract video player Vue Web Demo
Like
Open in Editor
Volume Slider
Volume: 50
State: V50
Can Increase: TRUE
Can Decrease: TRUE
0
120
Volume Simple
Volume: 50
State: V50
Can Increase: TRUE
Can Decrease: TRUE
0
Console
2
Problems
0


REACT NATIVE DEMO
@FARZAD_YZ
Carrier
6:32 PM
Volume slider with Hooks
Volume: 70
Volume State: V70
Can Increase: true
Can Decrease: true
Volume slider with Render Pro
Volume: 50
Volume State: V50
Can Increase: true
iPhone 5s — 12.2

Elm Html Output Edit on Ellie

Playing State: V80

INCREASE DECREASE RESET

0 120

RELOAD VIEW DEBUGGER

# TAKE AWAYS

NO, THIS IS NOT A REPLACEMENT FOR REDUX

YOU CAN ADOPT IT INCREMENTALLY FROM NEXT MONDAY

github.com/farskid/abstract-volume-manager

abstract-component-modeling.netlify.com