

INTRO TO

REACT NATIVE

@JOSHGRETZ

[HTTPS://GITHUB.COM/JGRETZ/INTROTOREACTNATIVE](https://github.com/jgretz/introtoreactnative)



WHERE ARE WE GOING TO GO?

1 ■ Foundation

2 ■ Development Speed

3 ■ Mental Clarity

4 ■ Build An App

1

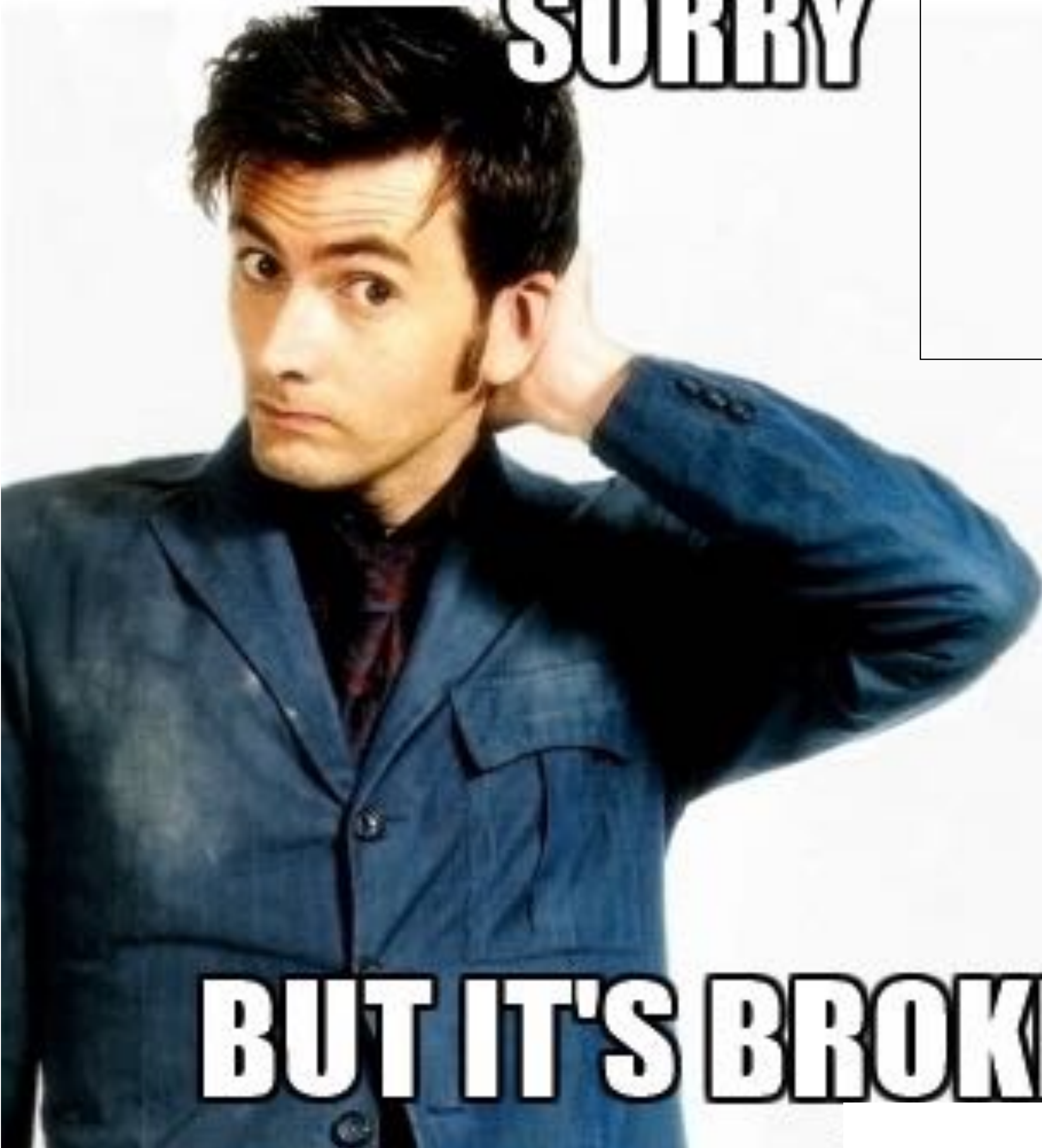
BACKSTORY

Begin at the beginning and go
on till you come to the end;
then stop.

- Mad Hatter -



**I'M SORRY. I'M SO
SORRY**

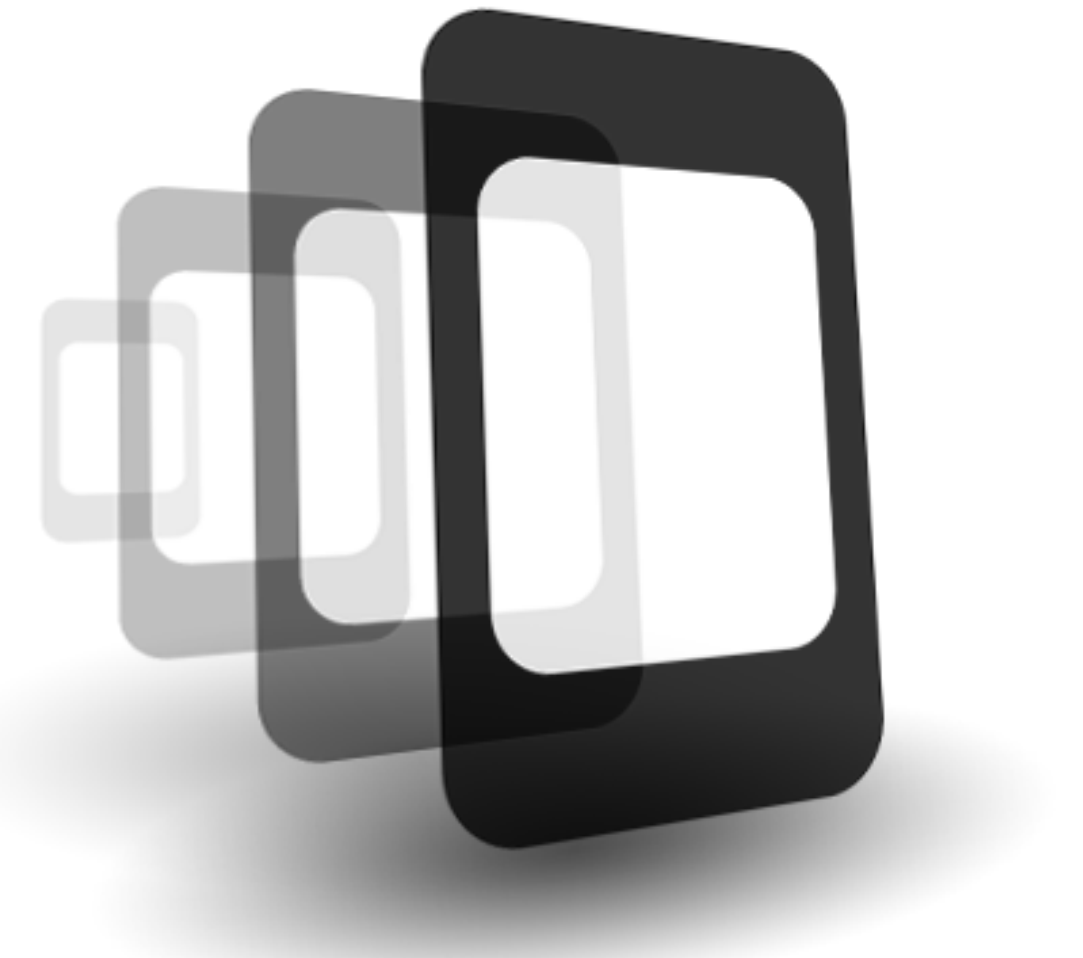
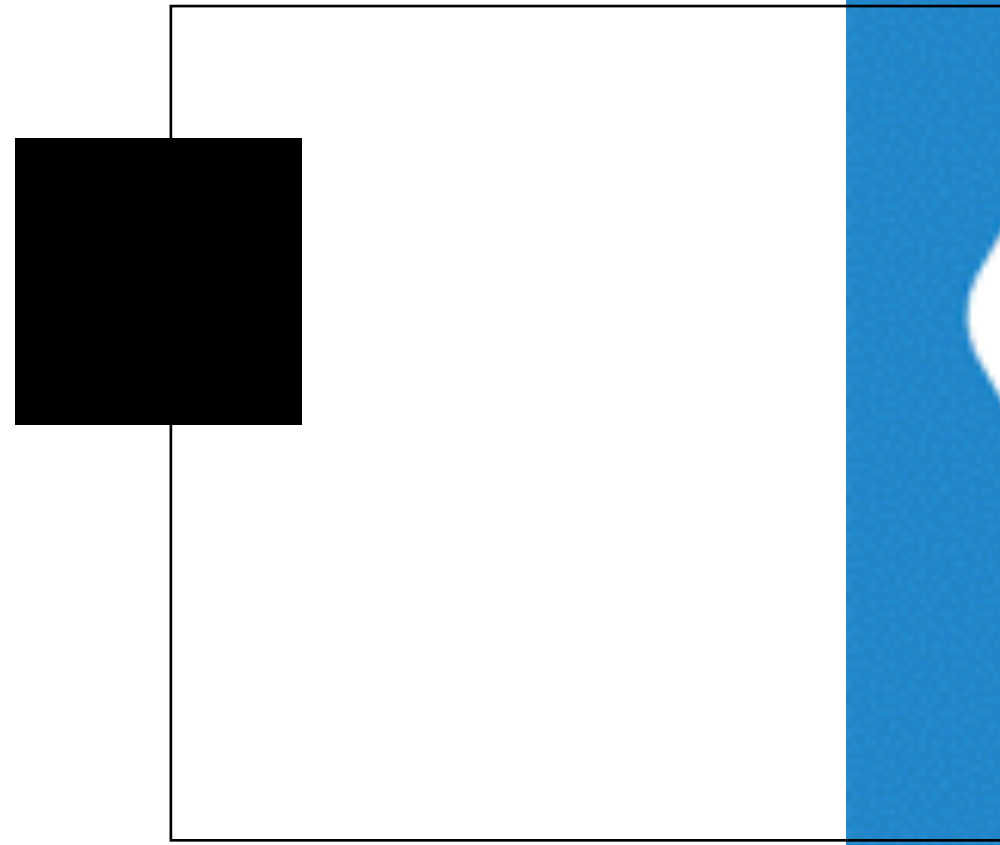


BUT IT'S BROKEN

CROSS PLATFORM

Mobile Development has been broken for a while.

You want to support everyone, but its a nightmare for developers, designers, and business



PhoneGap

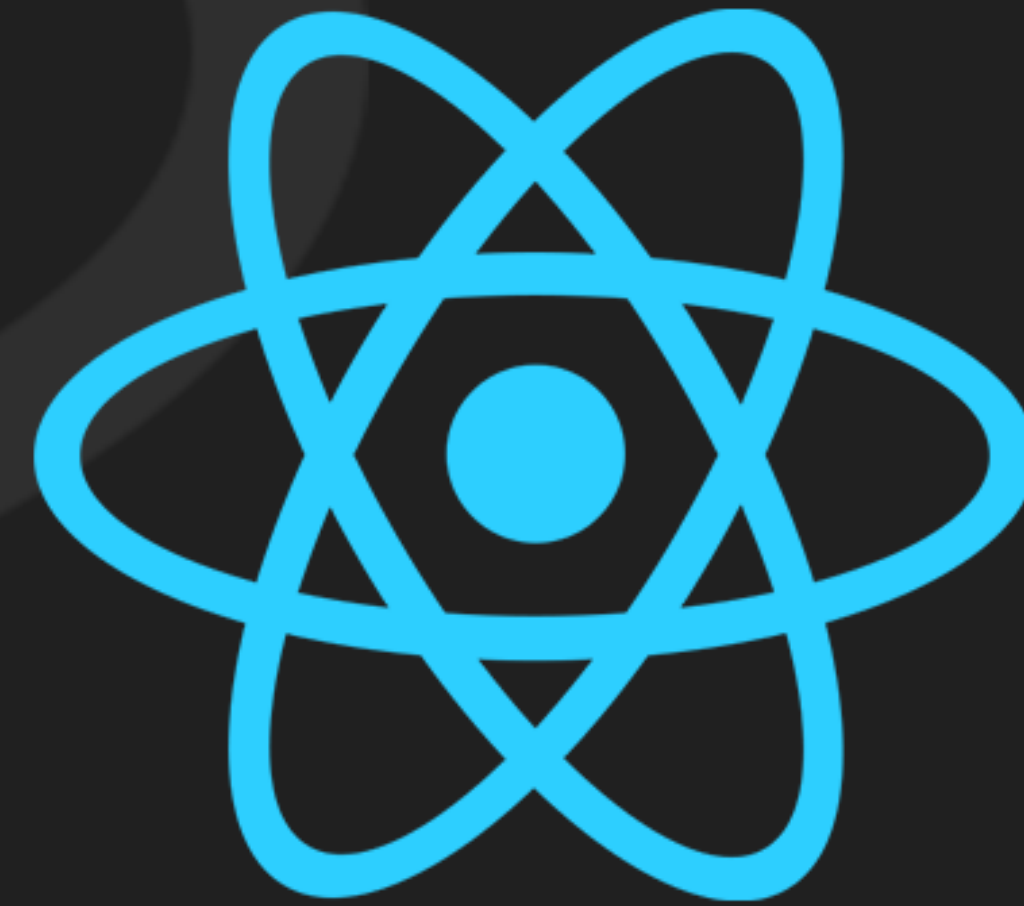


OTHER

OPTIONS



React Native



React Native enables you to build world-class application experiences on native platforms using a consistent developer experience based on JavaScript and React. The focus of React Native is on developer efficiency across all the platforms you care about – learn once, write anywhere. Facebook uses React Native in multiple production apps and will continue investing in React Native.

ITS NOT JUST ME



MATT ASAY

React May Have Just Ended The
Native vs Web Debate



ROBBIE MCCORKELL

React Native - The Killer Feature
That Nobody Talks About



CARY WODEHOUSE

7 Reasons Why React Native Is
The Future Of Hybrid App
Development



JAMES LONGSTER

React Native Is The Right Way To
Build Apps






- EDITORS






PROJECT
SETUP

LOVE THE CLI



PROJECT
SETUP



BUT
DON'T FORGET
THE IDE



HOW DOES THE
CODE GET THERE?

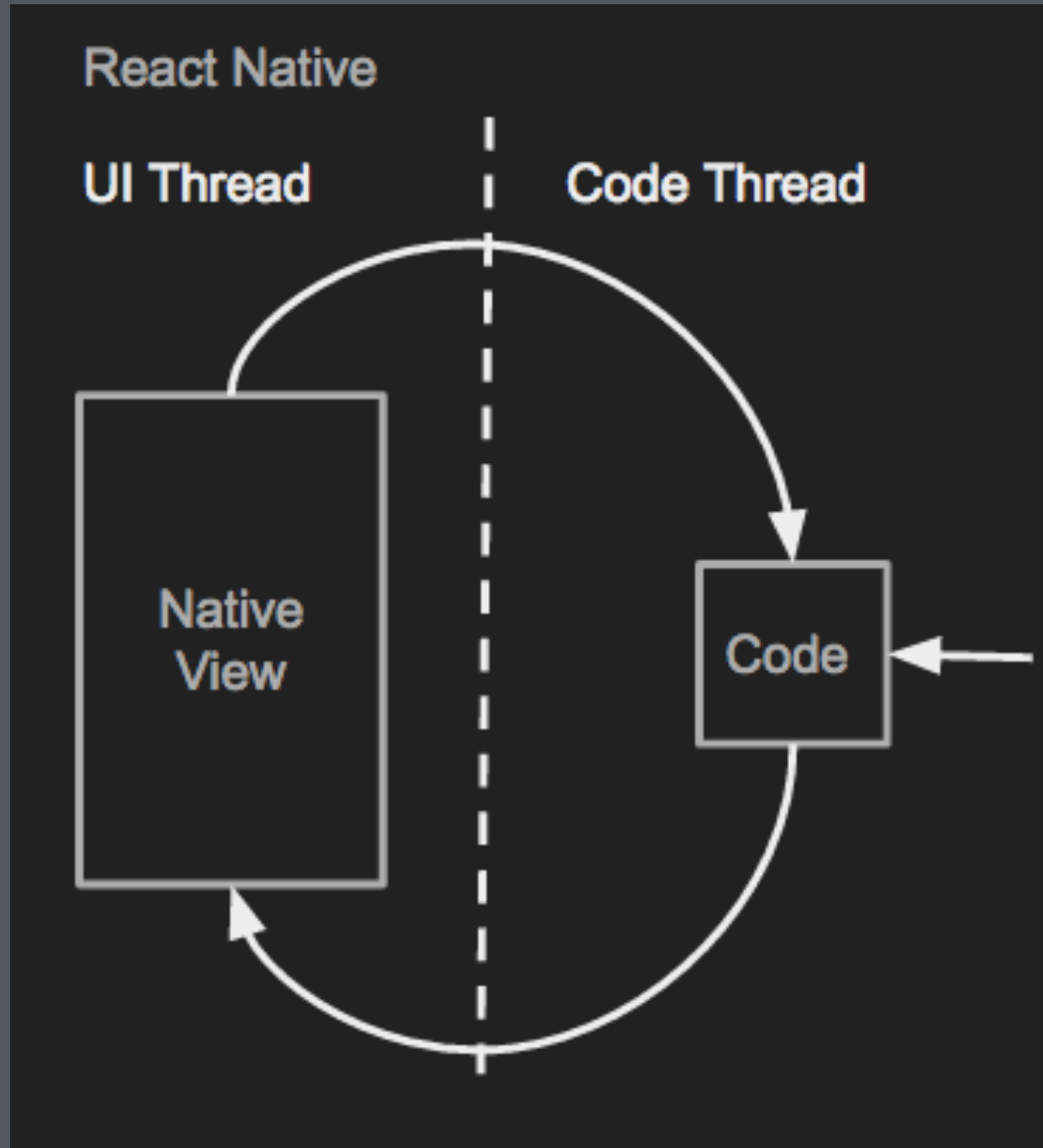
React Native

UI Thread

Code Thread

Native
View

Code



2

DEVELOPMENT SPEED

Faster, Faster, until the thrill of
speed overcomes the fear of
death

- Hunter S. Thompson -



ES6

ES6

is a significant update to the language, and the first update to the language since ES5 was standardized in 2009.

Add both useful features and syntactic sugar.

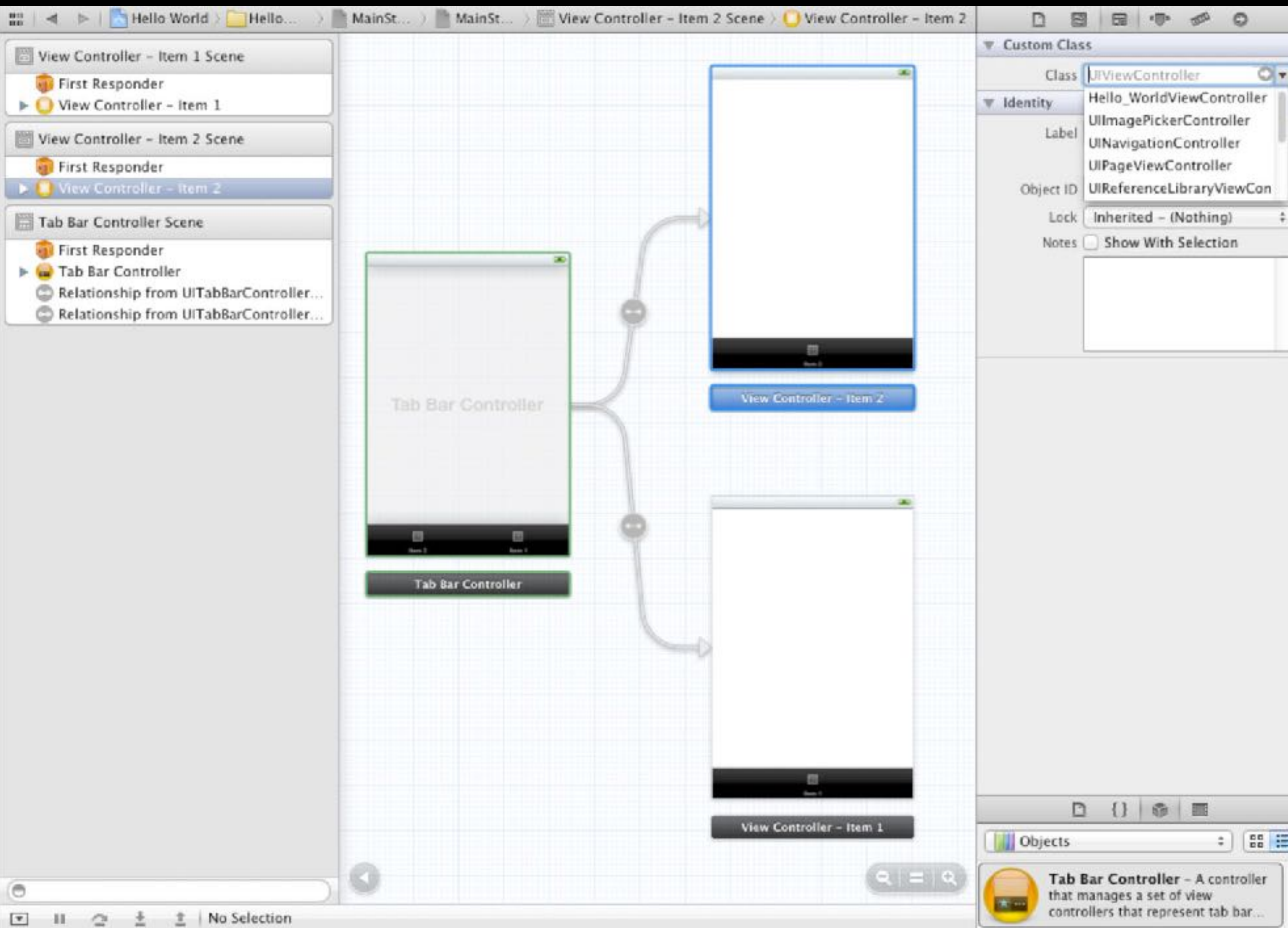
- `const / let`
- `() => {}`
- ``${obj.name} - 1``
- `{...obj}`
- `const { prop } = obj`
- `class Foo extends`
- `import / export`

JSX

```
<View style={styles.container}>
  <Text style={styles.welcome}>
    Welcome to React Native!
  </Text>
  <Text style={styles.instructions}>
    {this.renderGetStartedText()}
  </Text>
  <Text style={styles.instructions}>
    Press Cmd+R to reload,{'\n'}
    Cmd+D or shake for dev menu
  </Text>
</View>
```

INTERFACE BUILDERS

- Hard To Debug
- Works Horribly with Source Control
- Can duplicate code



HOT MODULE ■ REPLACEMENT

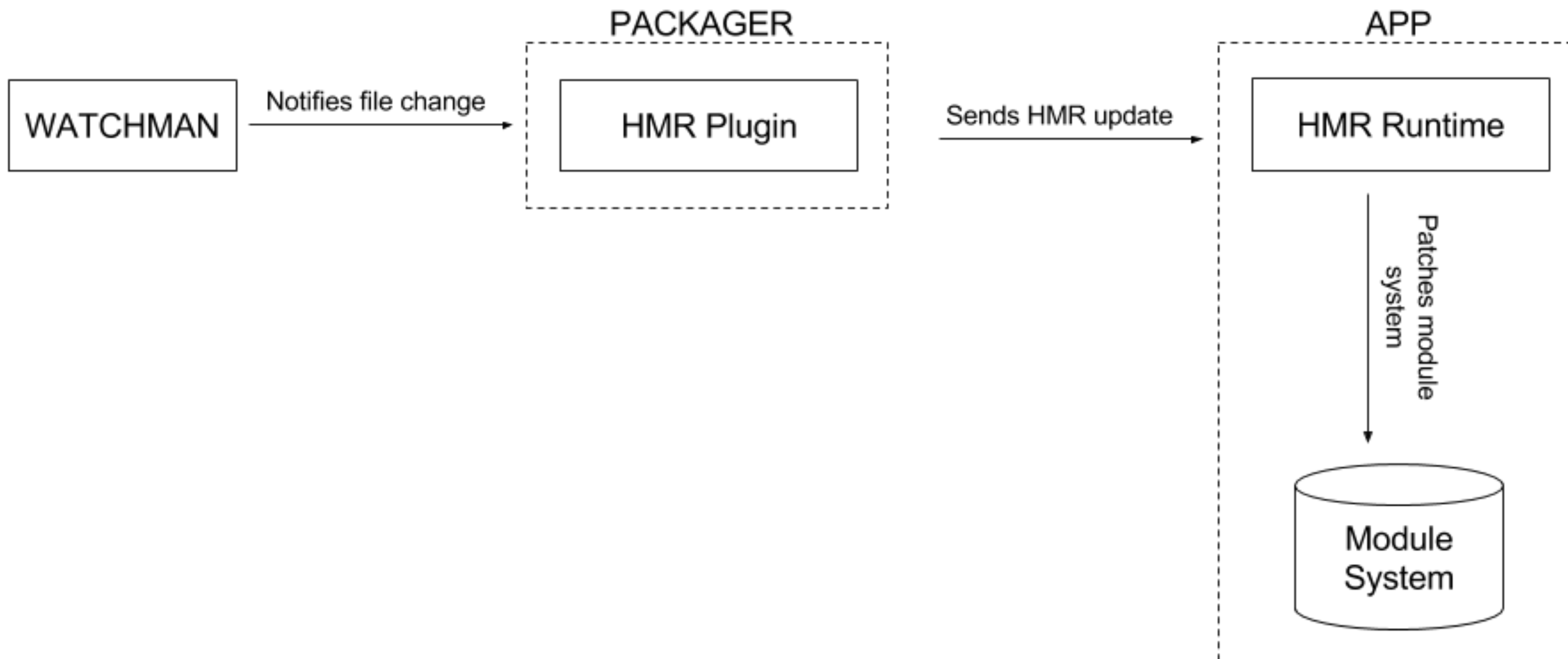
(HMR) is a feature to inject updated modules
into the active runtime.

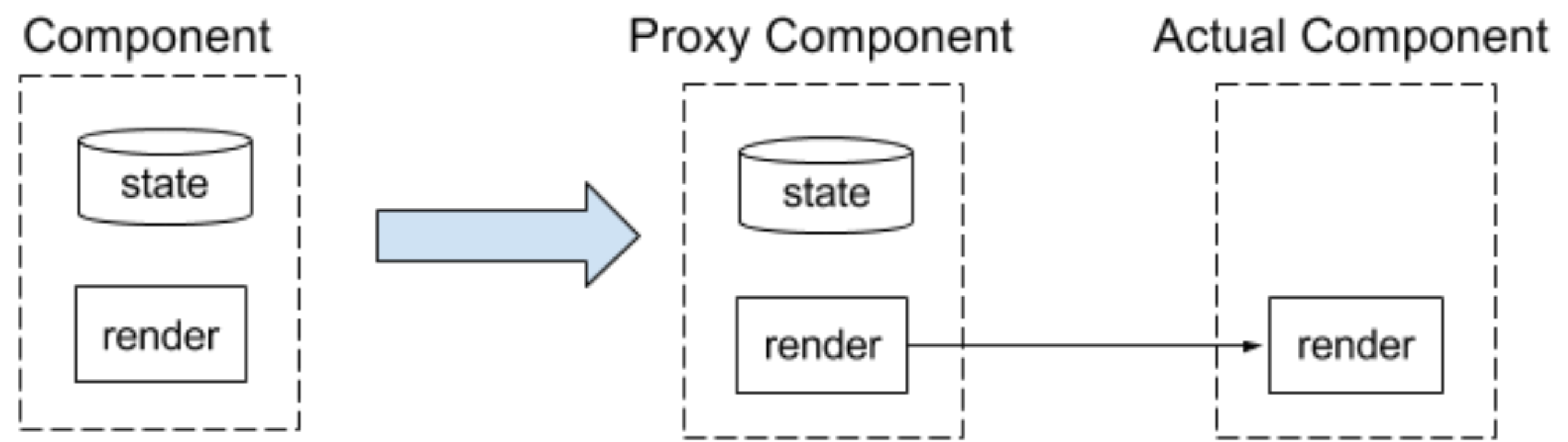
IT'S LIKE LIVERELOAD FOR EVERY MODULE.



HMR &
HAPPINESS







3

MENTAL CLARITY

For me the greatest beauty
always lies in the greatest
clarity

- Gotthold Lessing -



```
candidateNum=4
if candidateNum == "4":
    handleCandidate4()
    return true
else:
    handleCandidate3()
    return true
```

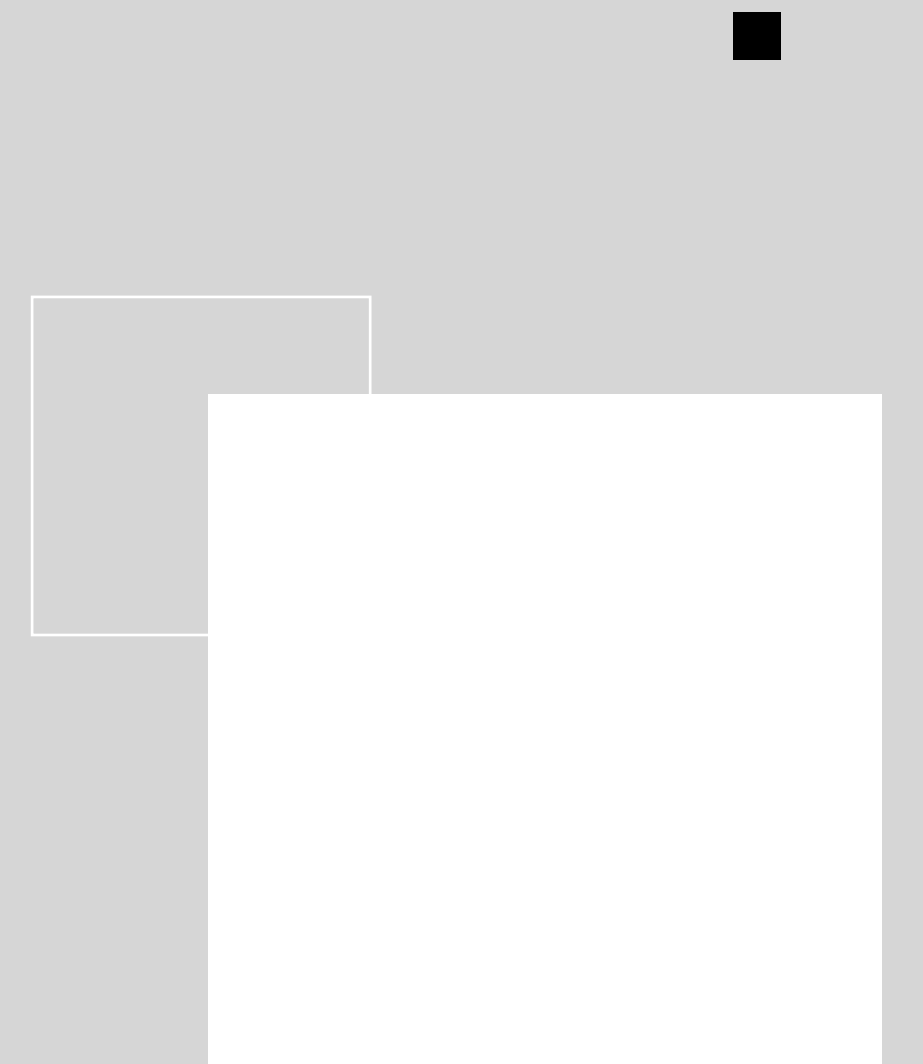
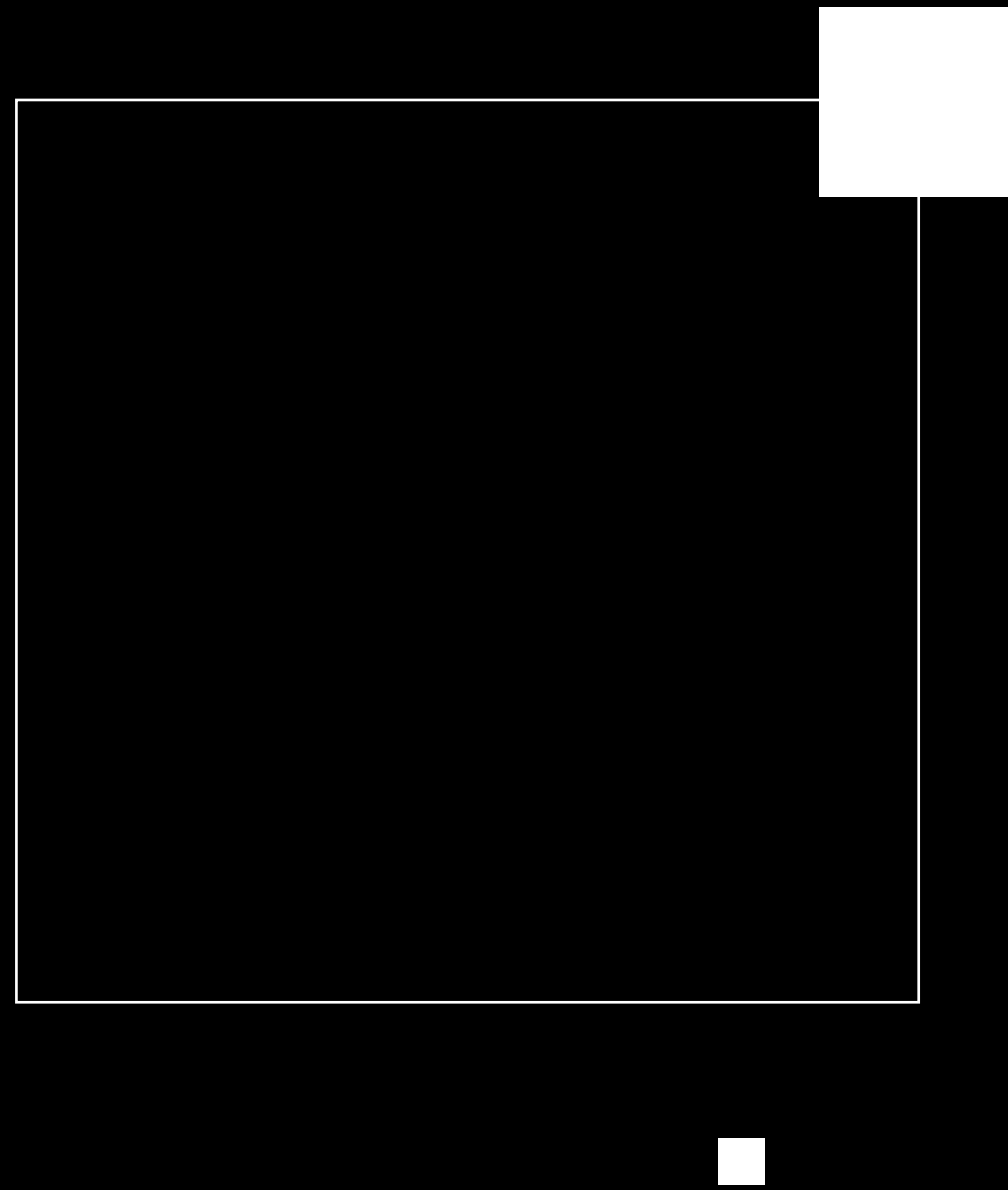
WRITE CLEAR CODE, NOT CLEVER CODE

Always code as if the guy who
ends up maintaining your code
will be a violent psychopath
who knows where you live

- Martin Golding -

START SIMPLE & ADD COMPLEXITY AS NEEDED

- Start with pure, stateless functions
- Start with small components and combine
- Unidirectional Data Flow



COMPOSE



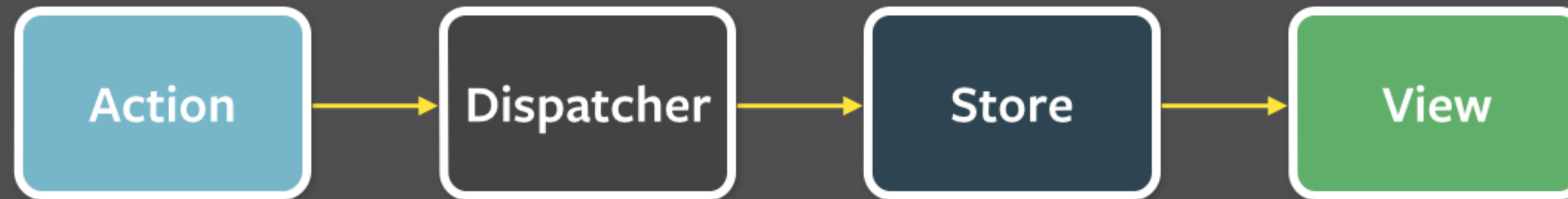
ALL THE THINGS!

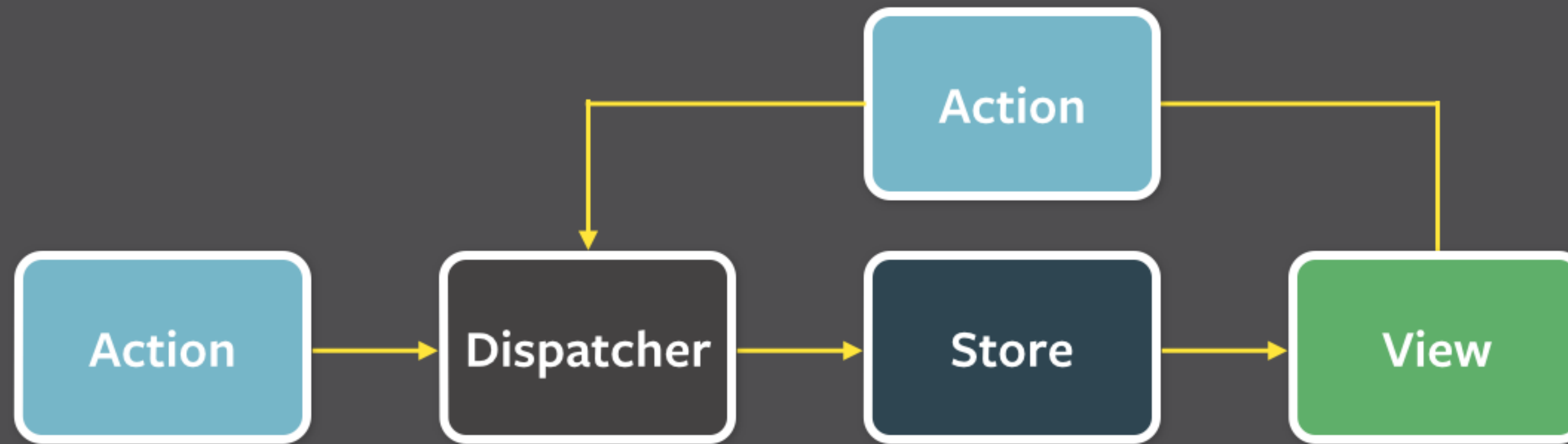
UNIDIRECTIONAL DATA FLOW



This means that all data in an application follows the same lifecycle pattern, making the logic of your app more predictable and easier to understand. It also encourages data normalization, so that you don't end up with multiple, independent copies of the same data that are unaware of one another.









Redux



IMMUTABLE

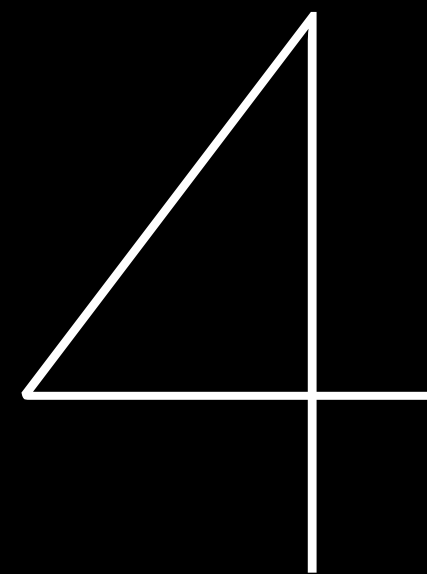
Reselect



CROSS PLATFORM

WITH REACT NATIVE - YOU CAN

- Share UI and Code
- Splinter out React Native Code As Needed
- Go To Swift, Obj-C, Java as well (Native Modules)



BUILD AN APP

Our goal is not to build a platform; it's to be cross all of them.

- Mark Zuckerberg -







STYLING

STYLING IS STILL A WORK IN PROGRESS

- Flexbox
 - Defaults can be non-intuitive
 - Difficult at times to learn
- StyleSheet
 - Styles are objects, which is a blessing and a curse
 - Unified shared styles like CSS require 3rd party

DEVICE SUPPORT

- Official Support is limited (but growing)
 - Network
 - Location
 - Clipboard
 - Camera Roll
 - App Links
 - Accessibility
 - Vibration
 - Push Notifications (iOS ONLY)
- Missing (npm)
 - Audio
 - Video
 - Microphone
 - Bluetooth
 - Permissions
 - Push Notifications (Android)
 - Navigation

UPGRADE PROJECT

SUCKS

memegenerator.net

Back to happiness ...

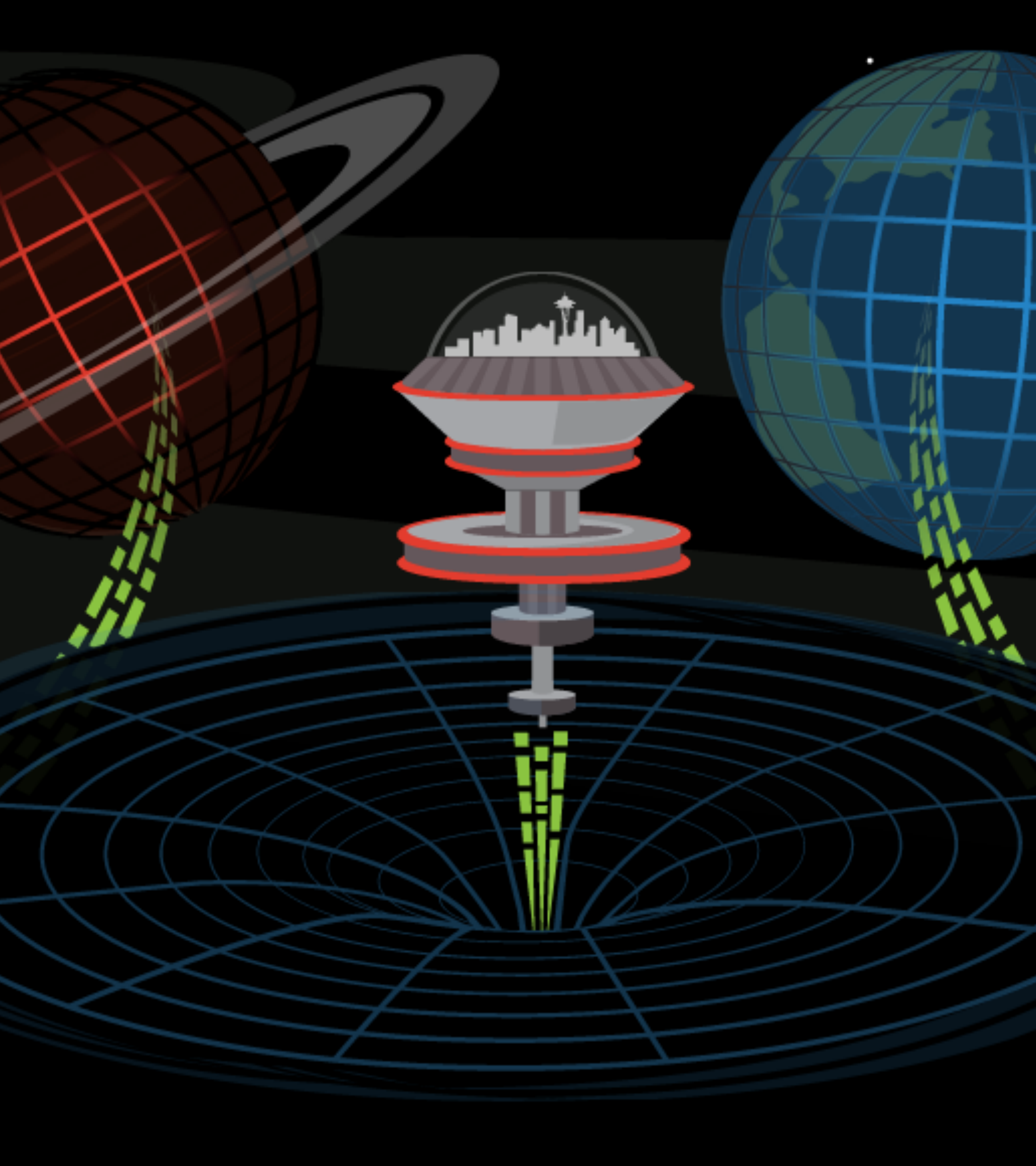




BUDDYBUILD

Build, deploy and gather feedback for your iOS and Android apps in one seamless, iterative system.





CODEPUSH

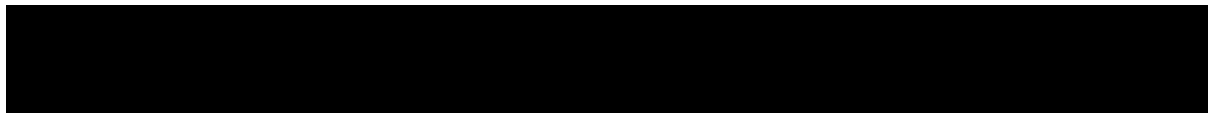
CodePush is a cloud service that enables React Native developers to deploy mobile app updates directly to their users' devices. It works by acting as a central repository that developers can publish certain updates to (e.g. JS, HTML, CSS and image changes), and that apps can query for updates from (using our provided client SDKs).

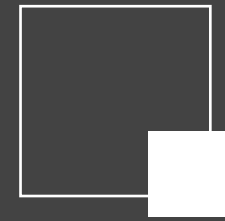




PEPPERONI

Pepperoni is a blueprint for building cross-platform mobile experiences rapidly with ready-to-use integrated building blocks for common mobile app features.





THANK YOU

ANY QUESTIONS?

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