REACTJS RENDER ANYWHERE?

STEPHEN WHITE

CALLISTA

— ENTERPRISE —
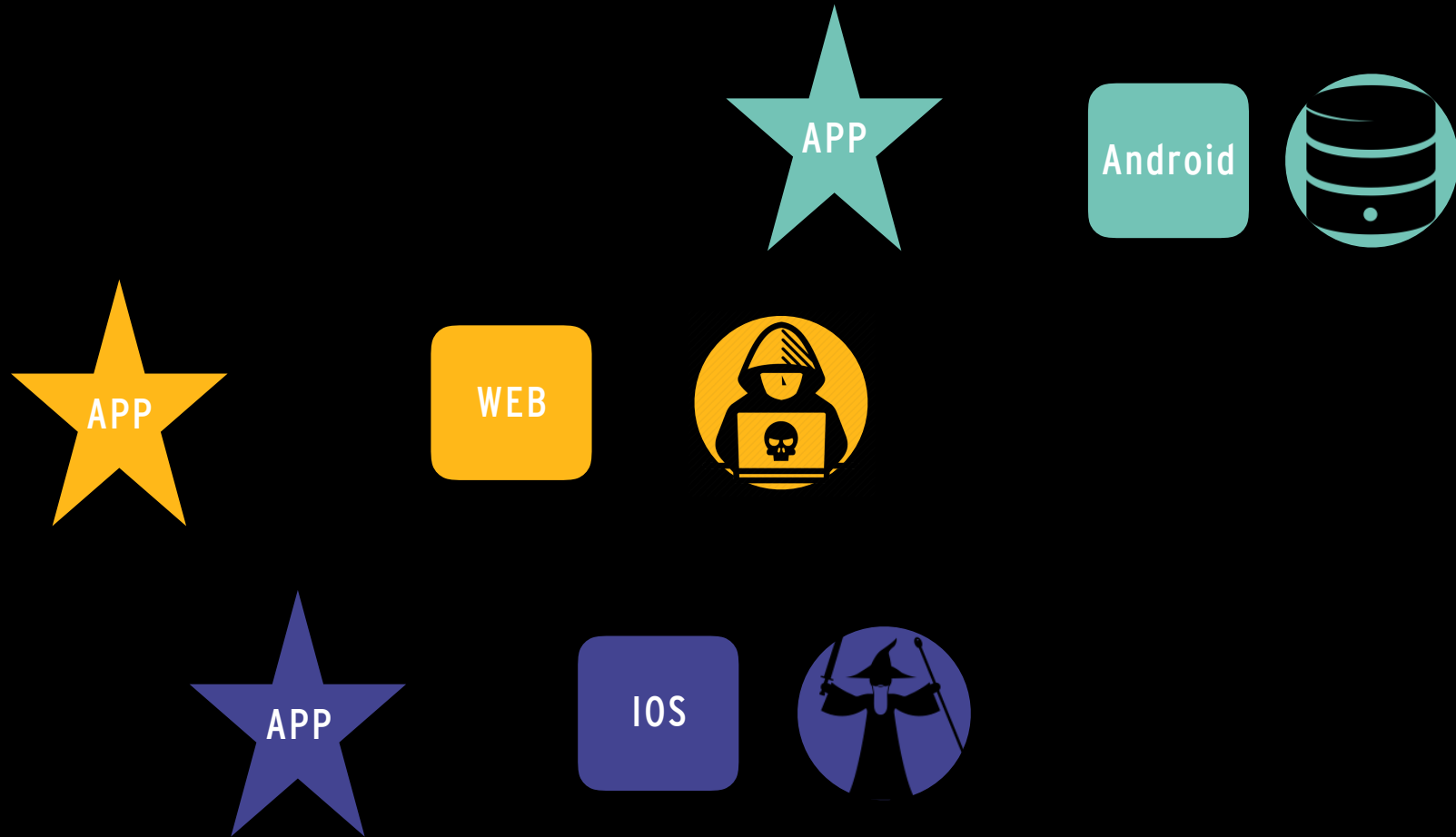
CADEC APP

INSTALL - EXPO

CODE

AGENDA

- Multiple platforms
- Traditional methods
- Learn once write anywhere!
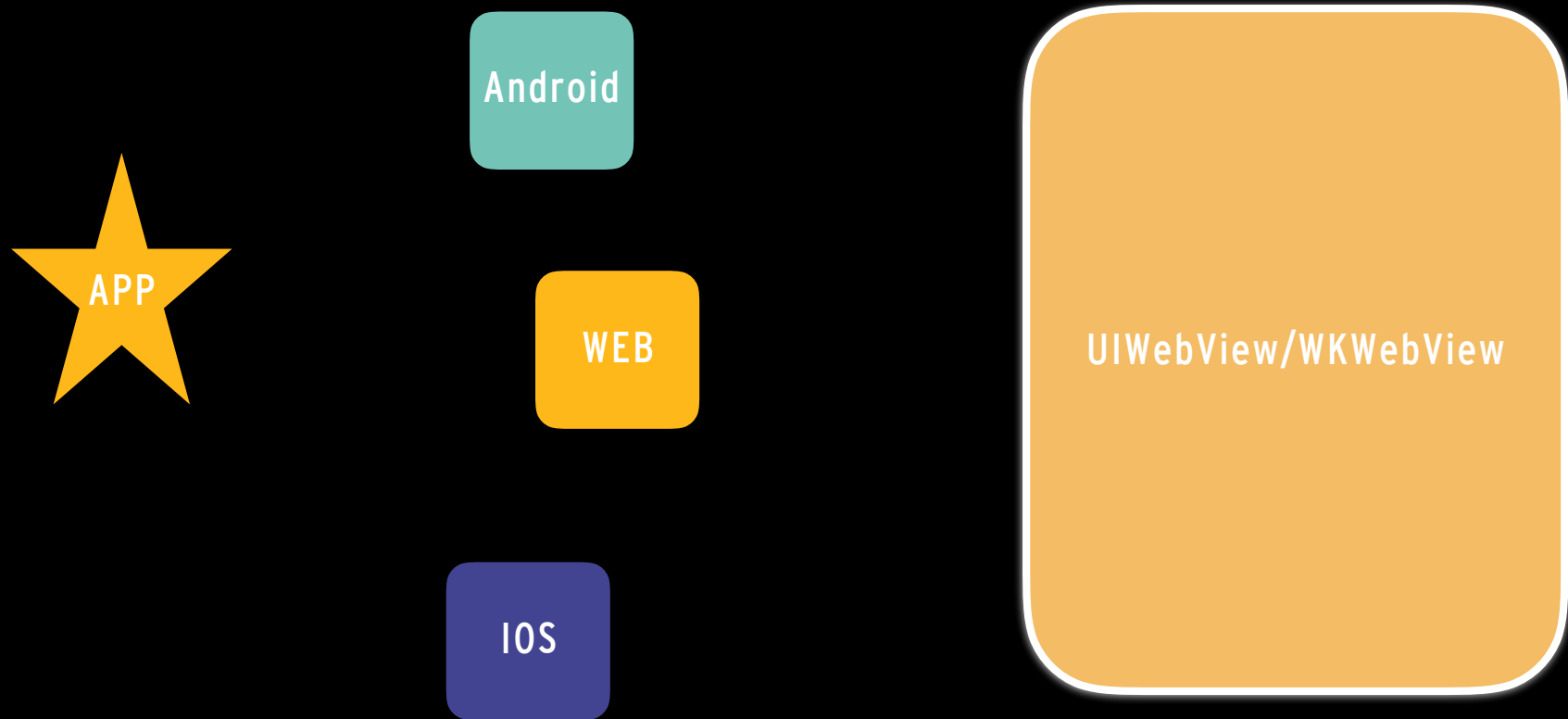- Seperation of the dom - React Native
- Shared code
- Demo
- Conclusions

MULTIPLE PLATFORMS

- Multiple apps for each platform!

TRADITIONAL APPROACH
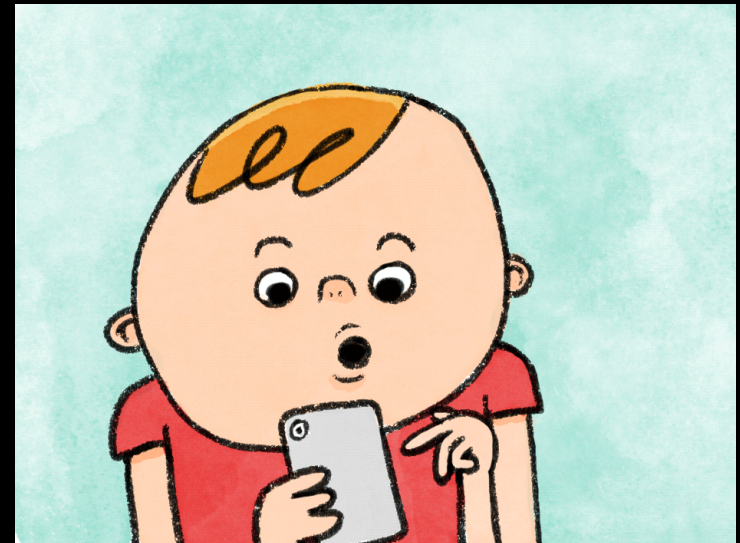
- One app to rule them all!

WE WANT 60FPS!!

- One app to rule them all, not quite…

Android

WEB

IOS

App

CADEC APP

INSTALL - EXPO

LEARN ONCE WRITE ANYWHERE

- What is react?
  - Its a declarative way of visualising the state of your application.
  - When the state changes the views update.

A Component

```
export default ({ title, title2, date }) => (
 <HeaderContainer>
  <HeaderText>{title}</HeaderText>
  <HeaderUnderSub>{title2}</HeaderUnderSub>
  <HeaderUnderDate>{date}</HeaderUnderDate>
 </HeaderContainer>
);
```

React renderer →

Android

IOS

WEB

?

LEARN ONCE WRITE ANYWHERE

- What is react?
  - Its a declarative way of visualising the state of your application.
  - When the state changes the views update.

Android

A Component

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export default ({ title, title2, date }) => (
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  <HeaderUnderDate>{date}</HeaderUnderDate>
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);
```
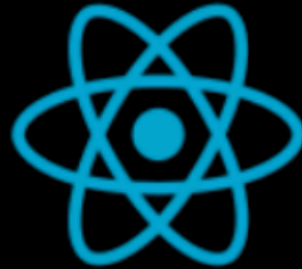
Renderers

REACT VR
REACT HARDWARE
REACT NATIVE
REACT DOM
REACT OSX
REACT WINDOWS
REACT BLESSED

IOS

WEB

?

REACT NATIVE AND THE SEPARATION OF REACT-DOM

80

20

95

5

REACT NATIVE

Text Field - Dis
and sends an ac
target object wh

Slider - Display
of values and all
single value.

Switch - Displa
showing the boo
Allows tapping th

Android
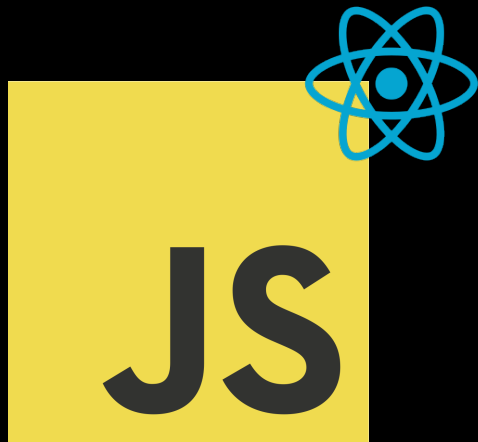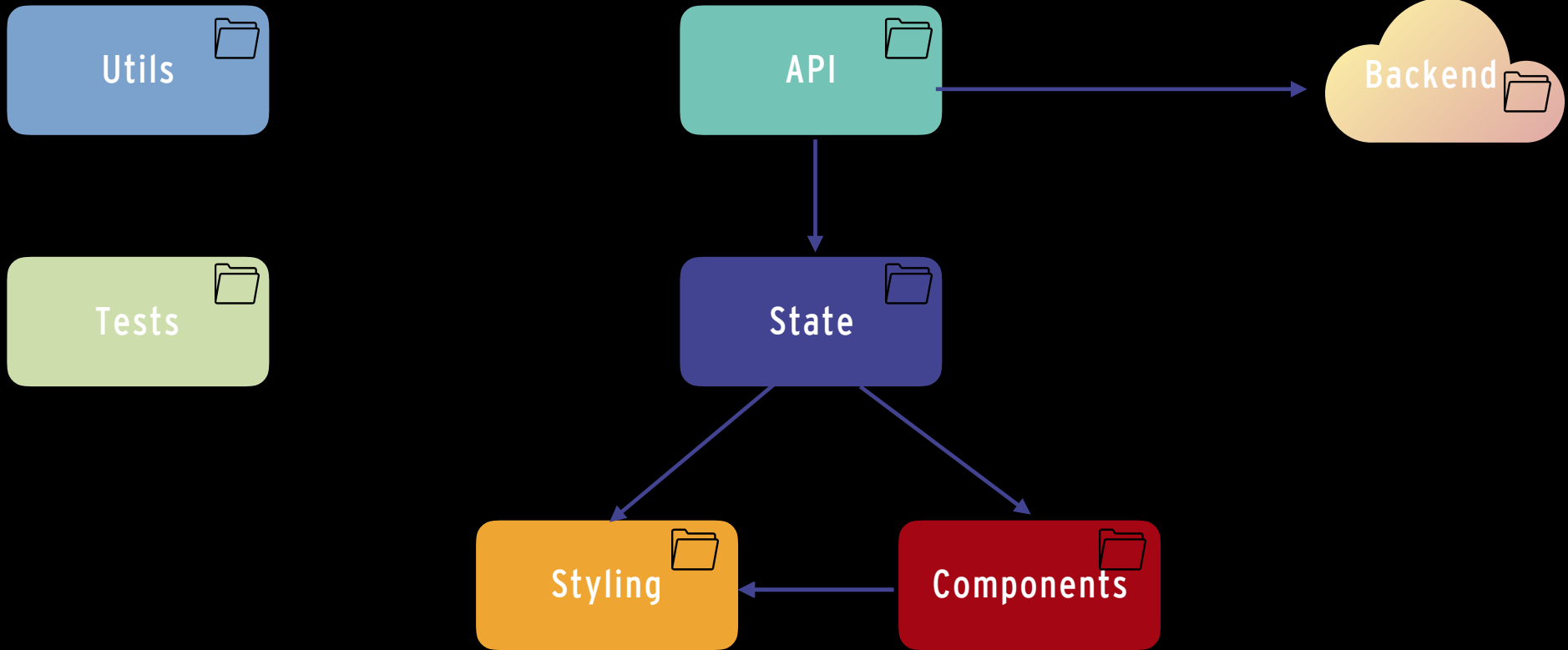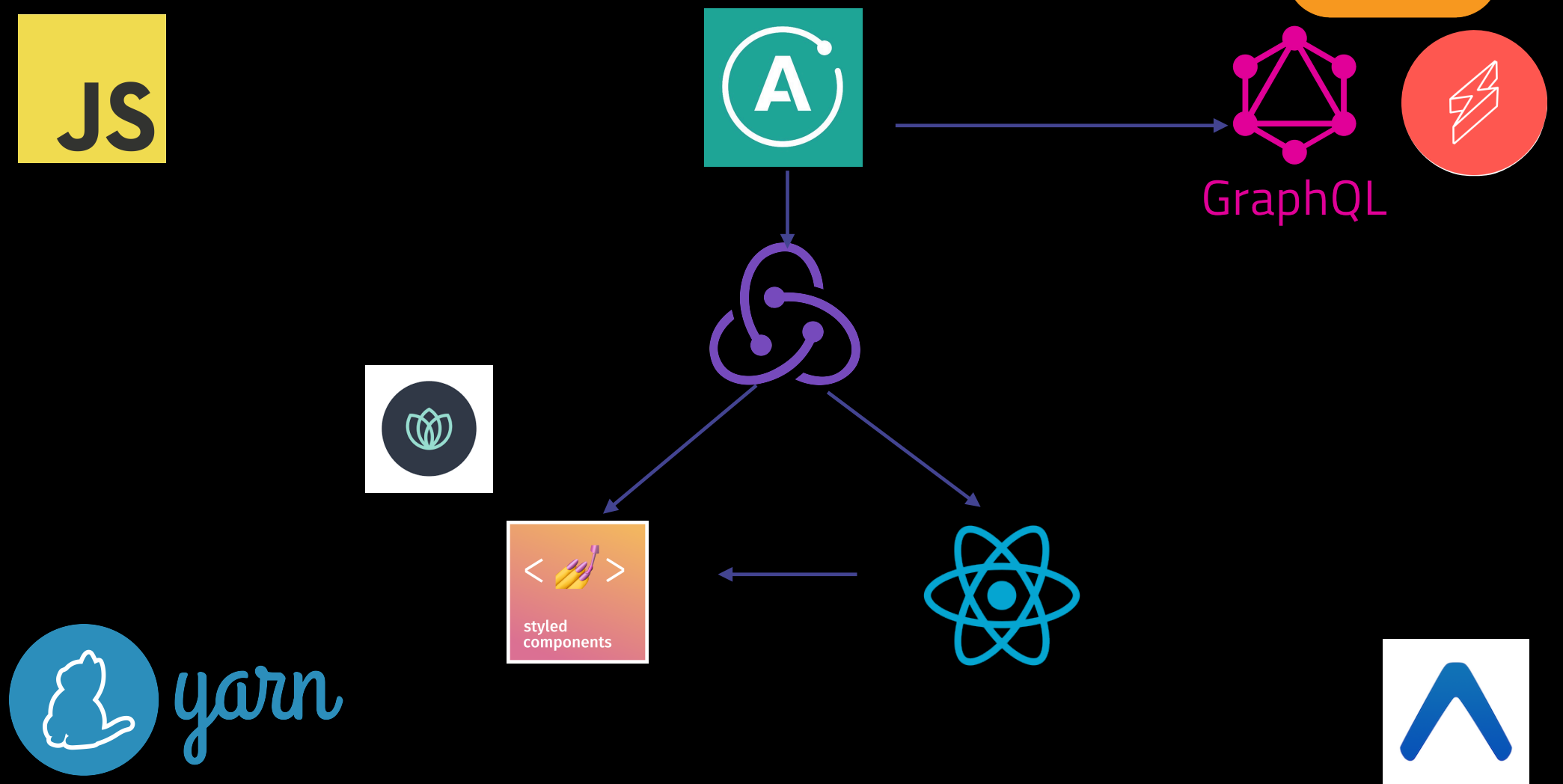
IOS
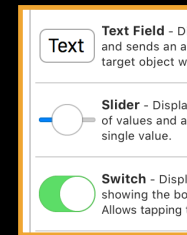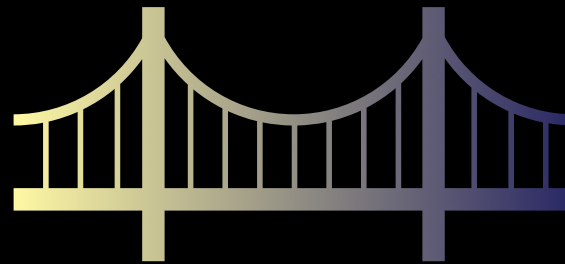
SHARED CODE

SHARED CODE - REACT AND FRIENDS

APP.JS

Native

```
export default compose(
  LoadFontsHoc,
  ReduxProviderHoc,
  ApolloProviderHoc(store)
)(App);
```

Web

```
export default compose(
  ReduxProviderHoc,
  ApolloProviderHoc(store))
(App);
```

STYLES

Shared

```
export const HeaderItemStyle = `
 font-size: 35px;
 font-family: 'SparTakus';
 font-style: normal;
`;
```

Native

```
export const HeaderText = styled.Text`
 ${styles.HeaderItemStyle};
 color: #fff;
`;
```

Web

```
export const HeaderText = styled.span `
    ${styles.HeaderItemStyle};`;
```

COMPONENTS - LEARN ONCE WRITE ANYWHERE - HEADER.JS

Native

```
import React from "react";
import {
  HeaderContainer,
  HeaderBackground,
  HeaderText,
  HeaderUnderSub,
  HeaderUnderDate
} from    "cadec-2018-styles/native";
export default ({ title, title2, date }) => (
  <HeaderContainer>
     <HeaderBackground />
   <HeaderText>{title}</HeaderText>
   <HeaderUnderSub>{title2}</HeaderUnderSub>
   <HeaderUnderDate>{date}</HeaderUnderDate>
  </HeaderContainer>
);
```

Web

```
import React from "react";
import {
  HeaderContainer,
  HeaderText,
  HeaderUnderSub,
  HeaderUnderDate
} from    "cadec-2018-styles/web";
export default ({ title, title2, date }) => (
  <HeaderContainer>
   <HeaderText>{title}</HeaderText>
   <HeaderUnderSub>{title2}</HeaderUnderSub>
   <HeaderUnderDate>{date}</HeaderUnderDate>
  </HeaderContainer>
);
```

DEVELOPER EXPERIENCE

PROS CONS

PROS

- Shared code base
- Utilise your web skills
- Amazing DX!
- Live code updating
- Modular and intuitive architecture
- Huge Community

CONS

- It's not Swift
- It's not Java/Kotlin
- Still need native experts
- Great for business applications but if you need that bespoke native feeling ..
- Startup performance

UTILISE YOUR WEB SKILLS

DEVELOPER EXPERIENCE

CUT COSTS

GIVE THE KIDS 60FPS

OTHER REACT RENDERERS

- React Hardware - *http://iamdustan.com/react-hardware/*
- React VR - *https://facebook.github.io/react-vr/*
- React Native Windows – *https://github.com/Microsoft/react-native-windows*
- React Native OSX – *https://github.com/ptmt/react-native-macos*
- React Native - *https://facebook.github.io/react-native/*
- React Dom - *https://reactjs.org*

- Cadec-2018-reactjs
  - API
  - Backend
  - Native
  - State
  - Styles
  - Utils
  - Web