

REACT NATIVE FOR WEB

@MIKE_PIDGEON

MICHAELPIDGEON.CO.UK



REACT NATIVE

» Write JS/React with React Native JSX syntax (`View`, `TouchableOpacity` etc) -> compose to native components on iOS/Android



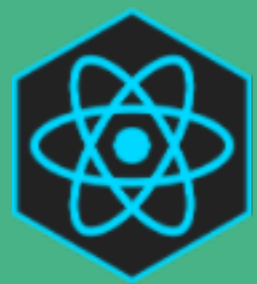
`<View />`

`android.view`

`UIView`

REACT NATIVE FOR WEB

» Write JS/React with React Native JSX syntax (`View`, `TouchableOpacity` etc) -> compose to native components on iOS/Android and to web primitives (`div`, `span` etc)



`<View />`

`android.view`

`UIView`

`<div />`

**“SOUNDS SKETCHY -
USING REACT
NATIVE, TO THEN
COMPOSE BACK TO
THE WEB??”**

- Team A

**“SOUNDS GREAT -
WRITE ONCE, RUN
ANYWHERE! REACT IS
MEANT TO BE CROSS
PLATFORM AFTER ALL.”**

- Team B

THERE ARE DEFINITELY BENEFITS!

- » Quickly prototype and start user testing.
- » Scaffold your application end to end - allow developers to pick off different bits.

BUT IS IT PROD READY?

PROBABLY NOT

I couldn't find much/any evidence of people using it in production.

WHY NOT?

- » Styles are flaky and don't support media queries/pseudo selectors
- » Compatibility issues with npm modules
- » Have to accept sub optimal design, without a lot of code like this:

```
const styles = StyleSheet.create({  
  height: (Platform.OS === 'web') ? 200 : 100,  
});
```


WHY NOT?

- » Styles are flaky and don't support media queries/pseudo selectors
- » Compatibility issues with npm modules
- » Have to accept sub optimal design, without a lot of code like this:

```
const styles = StyleSheet.create({  
  height: (Platform.OS === 'web') ? 200 : 100,  
});
```

Also, it's really difficult to Google error messages...

A BETTER WAY PART 1

- » Re-write components into plain HTML. It's easy and you'll get a better design.
- » Can piggyback on React Native cross platform extensions for this:

```
button.ios.js // iOS: React Native knows to use
button.android.js // Android: React Native knows to use
button.js // Web: nothing clever going on here, webpack just falls back to the default when on web
```

A BETTER WAY PART 2

- » Plan for for cross platform ~~compatibility~~ migration from the start of the project.
- » Extract as much application logic as possible from components into something else.
- » If using RN for Web for prototyping, make sure you plan to deprecate it completely.

HOW NOT TO DO IT

Fasten those seatbelts - we're about to look at some code




```
ing-bottom: 50px; flex: 1 1 0%; overflow-y: hidden;">
-1oszu61 rn-1efd50x rn-14skgim rn-rull8r rn-mm0ijv rn-13yce4e rn-fnigne rn-ndvcnb rn-gxnn5r
alj rn-1wbh5a2 rn-1ro0kt6 rn-16y2uox rn-eqz5dr rn-1mnahxq rn-61z16t rn-p1pxzi rn-11wrixw rn-
rn-wk8lta rn-9aemit rn-1mdbw0j rn-gy4na3 rn-bnwqim" style="background-color: white;">
display: block;">...</div>
overflow-y: scroll; flex-direction: column; overflow-x: hidden;">
"margin: 20px; align-items: center;">
s="rn-1oszu61 rn-1efd50x rn-14skgim rn-rull8r rn-mm0ijv rn-13yce4e rn-fnigne rn-ndvcnb rn-
deolkf rn-6koalj rn-1qe8dj5 rn-1mlwlqe rn-eqz5dr rn-1mnahxq rn-61z16t rn-p1pxzi rn-11wrixw
rn-bcqeeo rn-wk8lta rn-9aemit rn-1mdbw0j rn-gy4na3 rn-bnwqim">
ass="rn-1oszu61 rn-1efd50x rn-14skgim rn-rull8r rn-mm0ijv rn-13yce4e rn-fnigne rn-ndvcnb rn-
deolkf rn-6koalj rn-1qe8dj5 rn-1mlwlqe rn-18u37iz rn-1mnahxq rn-61z16t rn-11wrixw rn-ifefl9
rn-9aemit rn-1mdbw0j rn-gy4na3 rn-bnwqim" style="margin-bottom: 20px;"> == $0
class="opacity-transition" style="opacity: 0; margin-top: 20px; width: 20px; height:
px; background-color: transparent;">...</div>
class="rn-1oszu61 rn-1efd50x rn-14skgim rn-rull8r rn-mm0ijv rn-13yce4e rn-fnigne rn-ndvcnb
5r rn-deolkf rn-6koalj rn-1qe8dj5 rn-1mlwlqe rn-eqz5dr rn-1mnahxq rn-61z16t rn-p1pxzi rn-
rn-ifefl9 rn-bcqeeo rn-wk8lta rn-9aemit rn-1mdbw0j rn-gy4na3 rn-bnwqim">
y class="opacity-transition" style="opacity: 0; width: 349.095px; height: 20px; background-
: transparent;">...</div>
y class="rn-1oszu61 rn-1efd50x rn-14skgim rn-rull8r rn-mm0ijv rn-deolkf rn-6koalj rn-1qe8dj5
lwlqe rn-eqz5dr rn-1mnahxq rn-61z16t rn-p1pxzi rn-11wrixw rn-ifefl9 rn-bcqeeo rn-wk8lta rn-
t rn-1mdbw0j rn-gy4na3 rn-bnwqim" style="background-color: white; border-color: rgb(221,
221); border-width: 1px; height: 486.811px; box-shadow: rgba(0, 0, 0, 0.8) 0px 0px 4px;
: 349.095px;">
div style="position: absolute; line-height: 1; top: 0px; left: 0px; width: 349.095px; height:
.811px; background-image: url("undefined"); background-size: contain; background-repeat: no-
eat;">...</div>
```

```
Styles Computed Ev
Filter
element.style {
  margin-bottom: 20px;
}
.rn-18u37iz {
  -webkit-box-direction: normal;
  -webkit-box-orient: vertical;
  flex-direction: column;
}
.rn-bnwqim {
  position: relative;
}
.rn-gy4na3 {
  padding-left: 0px;
}
.rn-1mdbw0j {
  padding-bottom: 0px;
}
.rn-9aemit {
  padding-right: 0px;
}
.rn-bcgeeo {
```

SUMMARY

- » RN for Web is a great tool for prototyping and early stage UI testing.
- » Write once, ~~run~~ debug anywhere – a hackneyed concept and a well worn gag.
- » Even if a good idea in principle, maybe UI layer is not best place for it.
- » In the meantime, let's make sure we're separating our application logic from our components!