

# Class 30 React Native, Drag and Drop and DSA Review

seattle-javascript-401n14

# Career Coaching

Monday JAN 27 2020	Tuesday JAN 28 2020	Wednesday JAN 29 2020 Optional	Thursday JAN 30 2020	Friday JAN 31 2020	Saturday FEB 01 2020	Sunday FEB 02 2020	
CCW #1	Class 29	Virtual Lab 29	CCW #1		Class 30 + Interview Prep		
Monday FEB 03 2020	Tuesday FEB 04 2020	Wednesday FEB 05 2020	Thursday FEB 06 2020	Friday FEB 07 2020	Saturday FEB 08 2020	Sunday FEB 09 2020	
Co-working	Virtual Class 31	CCW#2	CCW #2 (Con't)		Class 32 + Interview Prep + CCW #3		
Monday FEB 10 2020	Tuesday FEB 11 2020	Wednesday FEB 12 2020	Thursday FEB 13 2020	Friday FEB 14 2020	Saturday FEB 15 2020	Sunday FEB 16 2020	
Co-working	Finals	Finals	Co-working		Finals		
Monday FEB 17 2020	Tuesday FEB 18 2020	Wednesday FEB 19 2020	Thursday FEB 20 2020	Friday FEB 21 2020	Saturday FEB 22 2020	Sunday FEB 23 2020	
Co-working	Finals	Finals	Co-working		Final Presentation		

## ToDo Application

- We've made a (mostly-complete) ToDo application for web
- Let's now learn React Native
  - Get our web app to be a phone app
  - Add phone-specific features
  - Implement drag-and-drop



## Why Change Things?

- React is great, but it's built around HTML
- Phones don't use HTML in their applications
  - They use a custom UI API
  - A "div" in HTML might equal a "box" in some other UI API
- Developers don't want to learn two different frameworks
- React Native is the answer



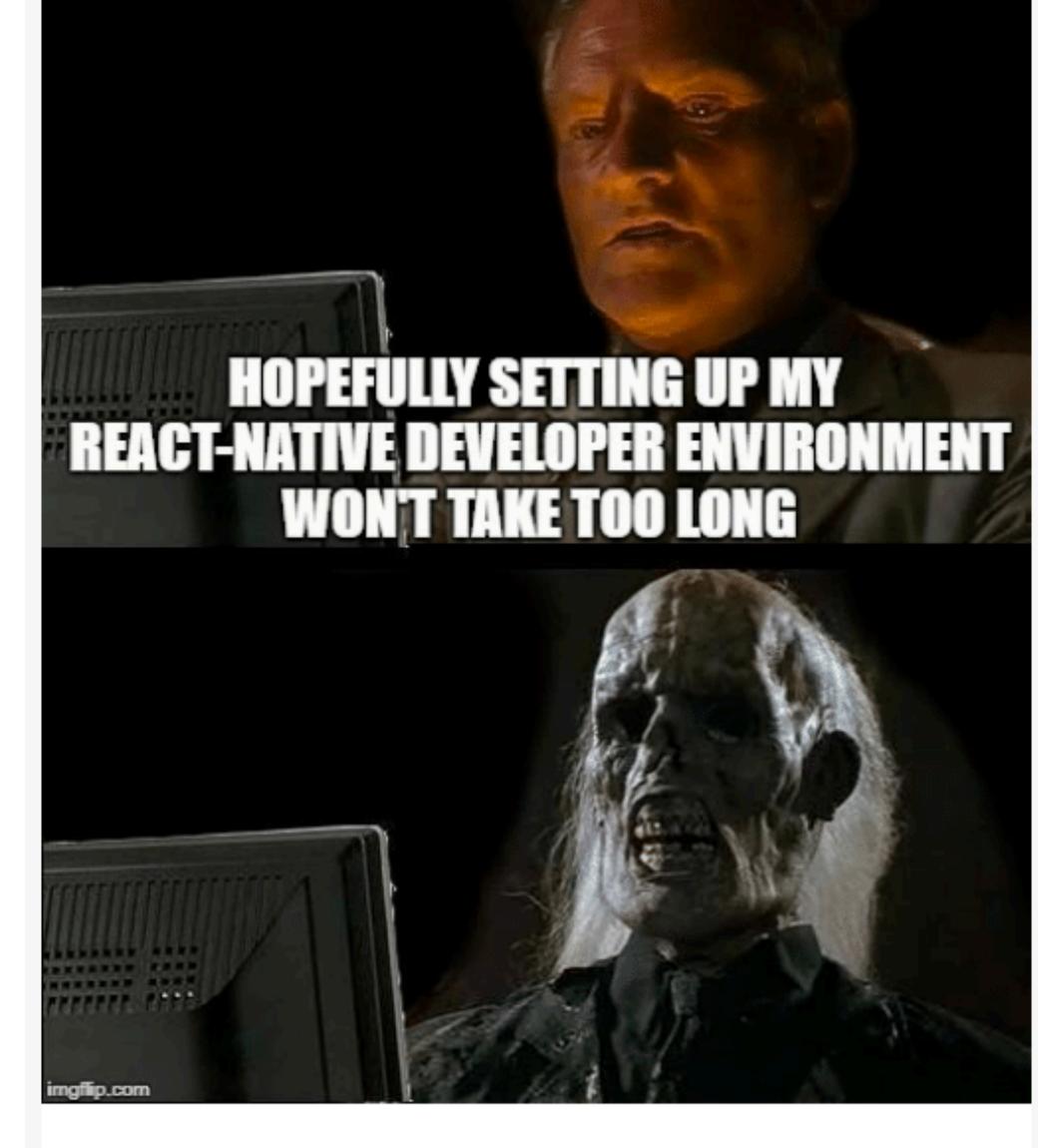
## What is React Native?

- A way to convert React code into application code that is tailored to the device it's running on
- React Native will compile into
  - An iOS application using iOS UI
  - An Android application using Andriod UI
  - A web application using HTML



## What Do We Need?

- Xcode or Android Studio
  - Something that lets us emulate a phone on our laptop
- Expo CLI
  - Gives us everything we need to set up a dev environment
  - Similar to webpack, react-scripts
- expo.io Makes it easy to deploy an application to your phone
- snack.io Lets you run your application in a browser



An eternity later....

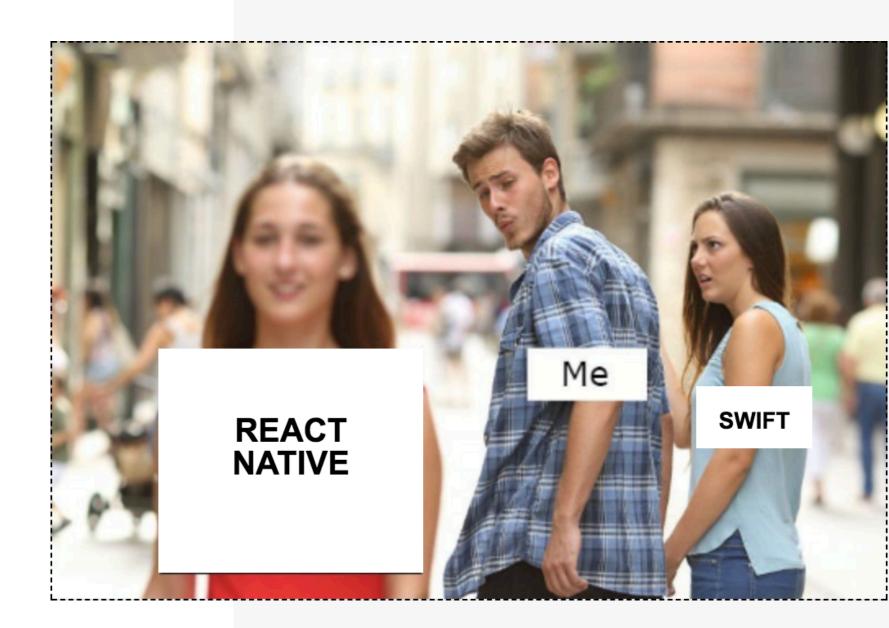
## Demo

Making Hello World in React Native.

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## ReactJS vs. React Native

- React Native does not create HTML, so we have to think a little differently about our components
- Styling
  - We're not using CSS
  - Styles defined in JavaScript that looks like CSS
  - No Mixins or Sass niceties
- Routing
  - React-router doesn't work
  - Navigator React Native component



## The Major Differences - Tags

ReactJS	React Native		
<div></div>	<view></view>		
	<text></text>		
<input/>	<textinput></textinput>		
<img/>	<lmage></lmage>		
<button></button>	<button></button>		
<input type="checkbox"/>	<switch></switch>		
<select></select>	<picker></picker>		
<input type="range"/>	<slider></slider>		
<ul><!-- The state of the state</td--><td colspan="3"><flatlist> <sectionlist></sectionlist></flatlist></td></ul>	<flatlist> <sectionlist></sectionlist></flatlist>		

React Native Tag	Use
<alert></alert>	Alert dialog box
<modal></modal>	Creates a modal window
<linking></linking>	Lets you create app links
<imagepickerios></imagepickerios>	Lets you choose an image on phone
<datepickerios></datepickerios>	Lets you pick a date
<scrollview></scrollview>	Lets you create a scrollable container

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## The Major Differences - Style

- We're not doing HTML + CSS anymore!
- Use JavaScript to make CSS-Like styles
- Dimensions are not pixel based, so they have no unit
  - width=100, height=100
- We don't have flexbox, we have flex
  - flex, flexDirection, alignItems, justifyContent



## Questions?