

(Introduction to)
REACT NATIVE

Zeh Fernando:



Developer at Work&Co in Brooklyn

Born in São Paulo, Brazil

Working as a (mostly front-end) developer since 1994

@zeh on Twitter, etc

What it is



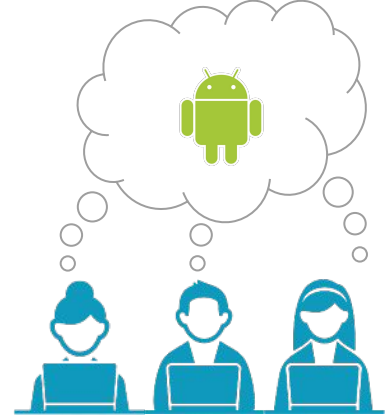
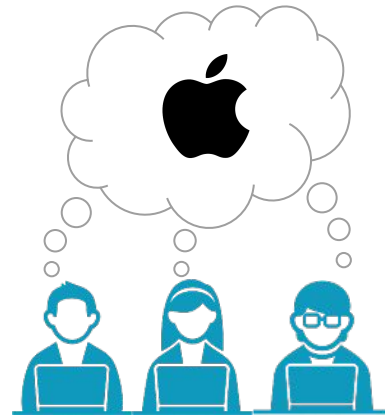
Framework and tools to build native iOS and Android applications using React and JavaScript

What it isn't

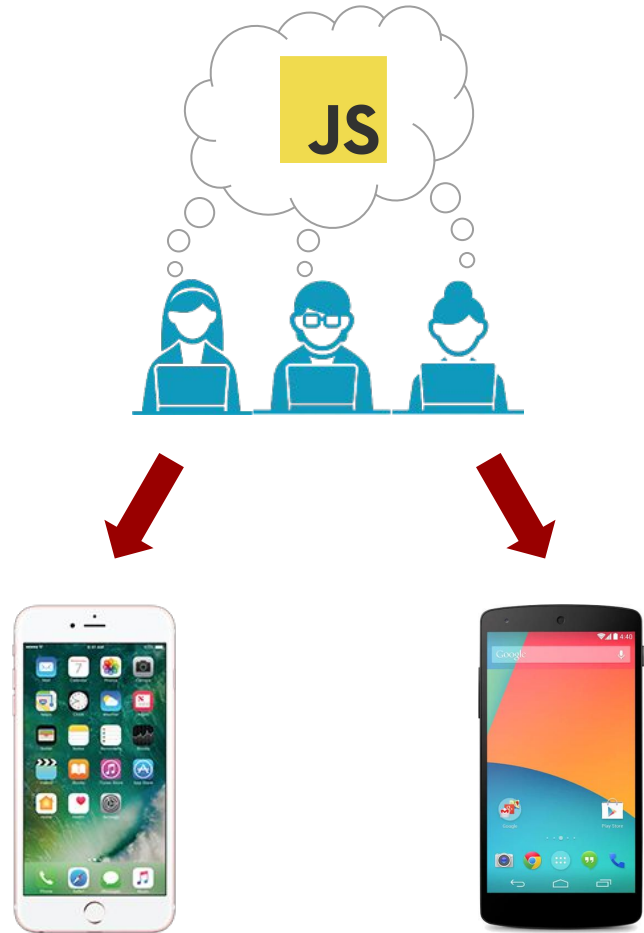


A webview-based application wrapper
like Cordova/PhoneGap/Appcelerator Titanium/Ionic/etc

Before



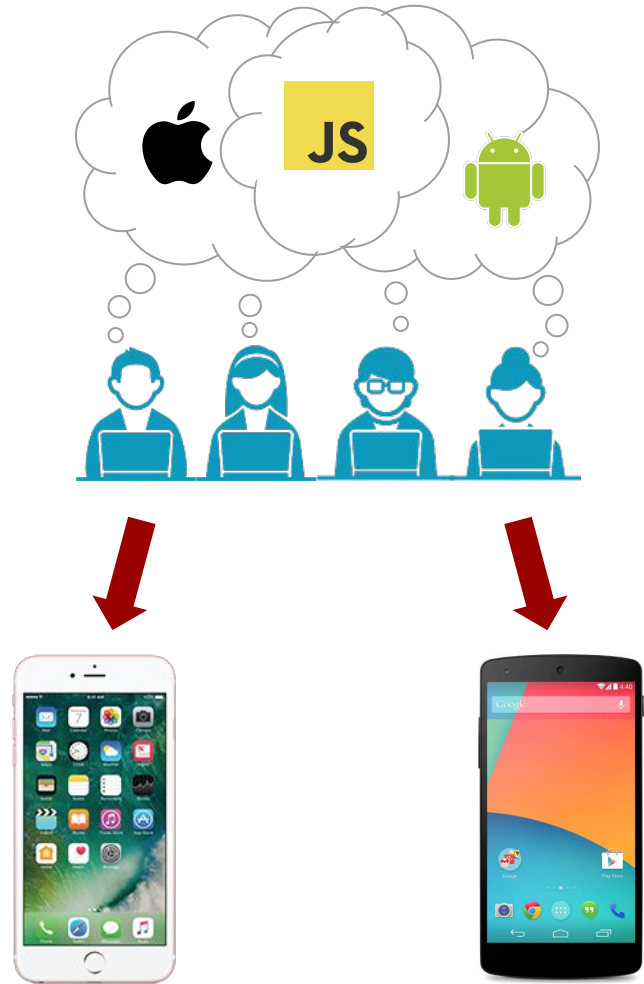
After



After



(Really) After



If you're a (native) mobile developer...

...

Declarative UI development ("what", not "how")

React means continuous diffing & rendering ("reconciliation")

Better developer experience (really!) with reloading

If you're a React (web) developer...



No HTML/DOM, no "browser"

Flexbox(ish) and absolute positioning only

No real CSS, more like inline styles

Lots can be reused, but not everything; you might need native code

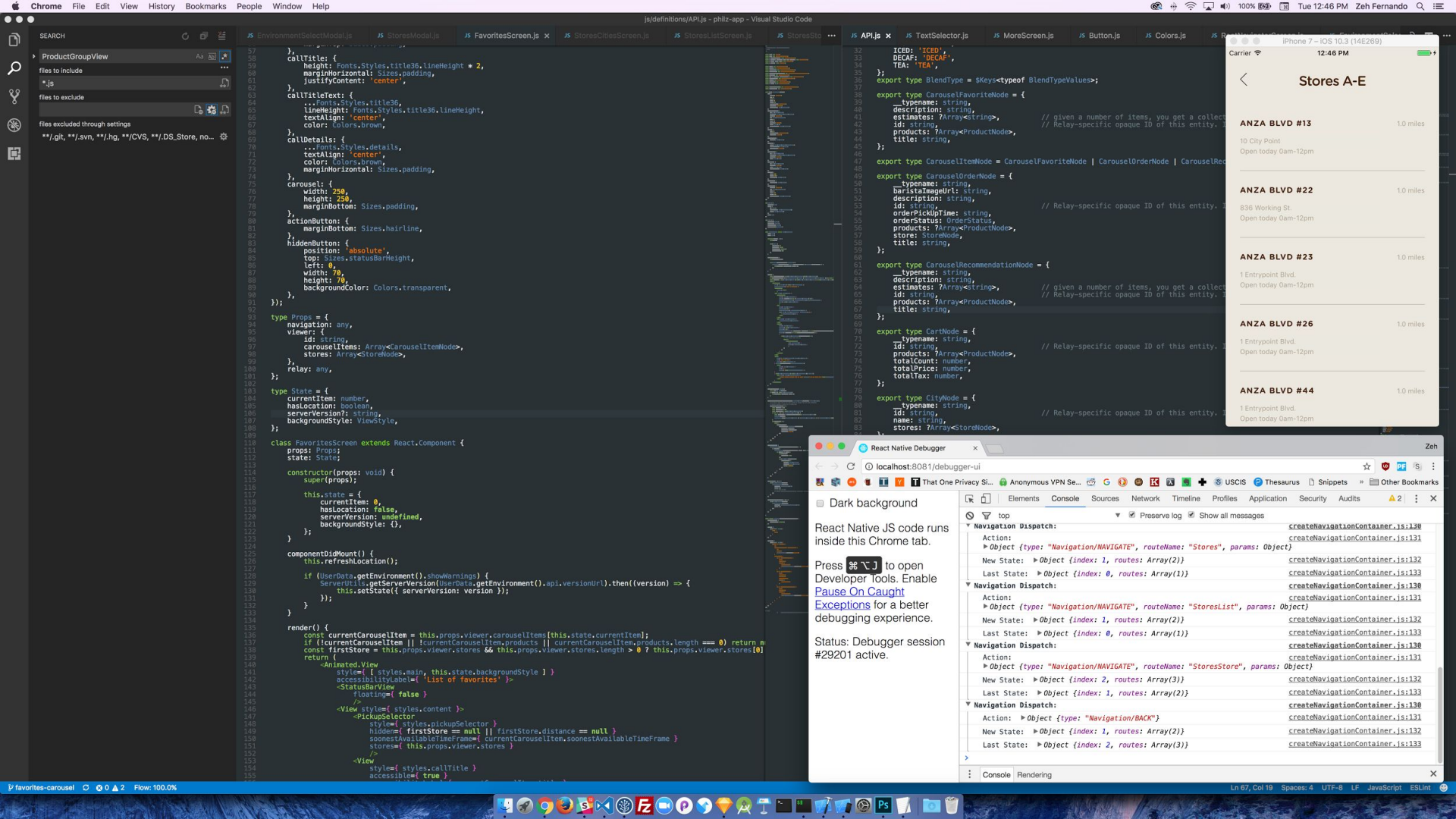
Clever solutions for speed (animations)

Fixed build workflow, but webpack-ish

```
import React, { Component } from 'react';
import { Image, ScrollView, StyleSheet, Text, View } from 'react-native';
import { SomeNativeComponent } from './SomeNativeComponent';

const styles = StyleSheet.create({
  container: {
    padding: 20,
  },
  bigblue: {
    color: 'blue',
    fontWeight: 'bold',
    fontSize: 30,
  },
  red: {
    color: 'red',
  },
});

export default class ScrollingImageWithText extends Component {
  render() {
    return (
      <ScrollView>
        <SomeNativeComponent text={'The title'} />
        <View style={styles.container}>
          <Image source={{ uri: 'https://i.chzbgr.com/full/7345954048/h7E2C65F9/' }} />
          <Text style={styles.bigblue}>
            If you like React on the web, you'll like React Native.
          </Text>
        </View>
        <Text style={[styles.bigblue, styles.red]}>
          This is another piece of text.
        </Text>
      </ScrollView>
    );
  }
}
```



But!

...

Not 100% mature; can be buggy, inconsistent

Confusion in regards to standard approach to things

You need developers with some native knowledge

When should you use React Native...



You're not afraid of JavaScript/React

You want a consistent cross-platform app

You have custom designs

You want it fast

You value developer comfort

..and when you should not



You don't need cross-platform apps

Your app's designs are heavily platform-specific

You don't have the time or energy to
spend on something not 100% mature yet



Curious?

Success stories and case studies

<https://facebook.github.io/react-native/showcase.html>

Who's using React Native?

Thousands of apps are using React Native, from established Fortune 500 companies to hot new startups. If you're curious to see what can be accomplished with React Native, check out these apps!



Facebook

iOS · Android

Using React Native in the
Facebook App



Facebook Ads Manager

iOS · Android

How We Built the First
Cross-Platform React
Native App



Facebook Groups

iOS

React Native: Bringing
Modern Web Techniques to
Mobile



Instagram

iOS · Android

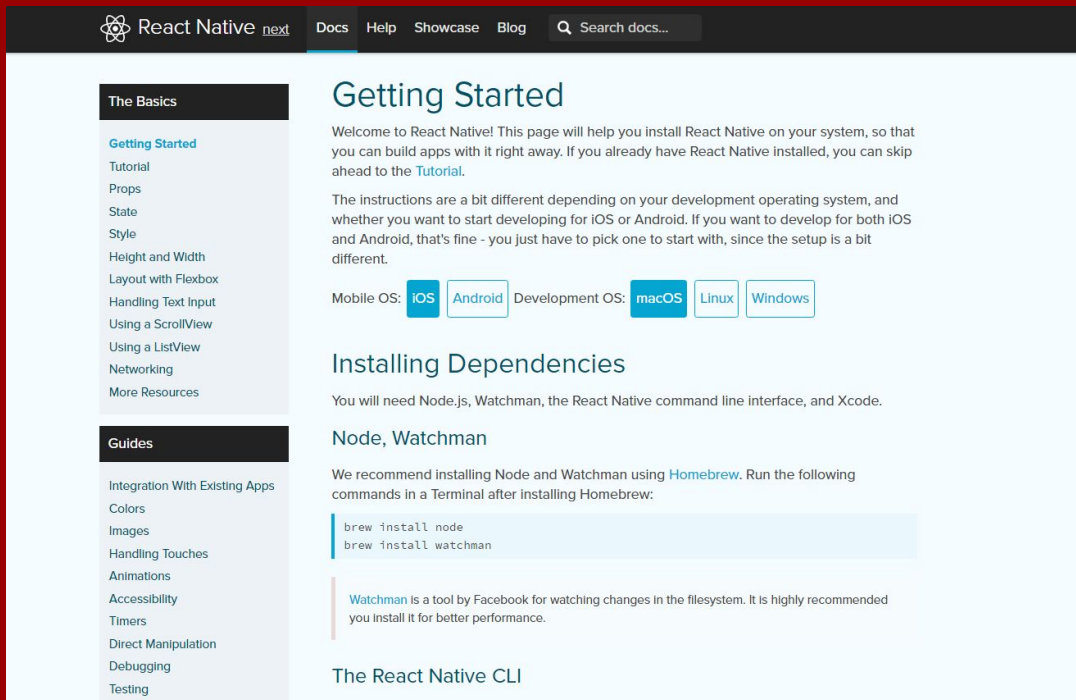
React Native at Instagram



Get started

Official intro+tutorial (pretty good)

<https://facebook.github.io/react-native/docs/getting-started.html>



The screenshot shows the 'Getting Started' page of the React Native documentation. The top navigation bar includes the React Native logo, the word 'next', and links for 'Docs', 'Help', 'Showcase', and 'Blog'. A search bar is also present. The left sidebar is divided into 'The Basics' and 'Guides' sections. 'The Basics' includes links to 'Getting Started', 'Tutorial', 'Props', 'State', 'Style', 'Height and Width', 'Layout with Flexbox', 'Handling Text Input', 'Using a ScrollView', 'Using a ListView', 'Networking', and 'More Resources'. 'Guides' includes links to 'Integration With Existing Apps', 'Colors', 'Images', 'Handling Touches', 'Animations', 'Accessibility', 'Timers', 'Direct Manipulation', 'Debugging', and 'Testing'. The main content area is titled 'Getting Started' and contains a welcome message, instructions on how to choose a development system (iOS or Android for mobile, macOS, Linux, or Windows for development), and a section for 'Installing Dependencies' which lists the required tools (Node.js, Watchman, React Native CLI, Xcode) and provides a code block for installing Node and Watchman using Homebrew. A note mentions that Watchman is highly recommended for better performance.

React Native next

Docs Help Showcase Blog 🔍 Search docs...

The Basics

- [Getting Started](#)
- [Tutorial](#)
- [Props](#)
- [State](#)
- [Style](#)
- [Height and Width](#)
- [Layout with Flexbox](#)
- [Handling Text Input](#)
- [Using a ScrollView](#)
- [Using a ListView](#)
- [Networking](#)
- [More Resources](#)

Guides

- [Integration With Existing Apps](#)
- [Colors](#)
- [Images](#)
- [Handling Touches](#)
- [Animations](#)
- [Accessibility](#)
- [Timers](#)
- [Direct Manipulation](#)
- [Debugging](#)
- [Testing](#)

Getting Started

Welcome to React Native! This page will help you install React Native on your system, so that you can build apps with it right away. If you already have React Native installed, you can skip ahead to the [Tutorial](#).

The instructions are a bit different depending on your development operating system, and whether you want to start developing for iOS or Android. If you want to develop for both iOS and Android, that's fine - you just have to pick one to start with, since the setup is a bit different.

Mobile OS: [iOS](#) [Android](#) Development OS: [macOS](#) [Linux](#) [Windows](#)

Installing Dependencies

You will need Node.js, Watchman, the React Native command line interface, and Xcode.

Node, Watchman

We recommend installing Node and Watchman using [Homebrew](#). Run the following commands in a Terminal after installing Homebrew:

```
brew install node
brew install watchman
```

[Watchman](#) is a tool by Facebook for watching changes in the filesystem. It is highly recommended you install it for better performance.

The React Native CLI

Examples (check UIExplorer)

<https://github.com/facebook/react-native#examples>

Roadmap

<https://github.com/facebook/react-native/wiki/Roadmap>

Many third-party components

<https://github.com/react-native-community> (semi-official)

<https://js.coach/react-native> (curated list)

