

HOW REACT NATIVE AND NATIVESCRIPT CHANGE YOUR MOBILE STRATEGY

SEBASTIAN WITALEC

@SEBAWITA





WHY DO I EVEN HAVE TO CHOOSE?

How React Native and NativeScript Change Your Mobile Strategy

Progress

@sebawita

WHAT WE
WANT



REALITY





OBJECTIVE-C
C
SWIFT

JAVA

XAML, C#

XCODE

ECLIPSE

VISUAL
STUDIO

MAC OS X

WINDOWS

ASSEMBLING THE TEAM



IOS



ANDROID



WINDOWS PHON

DIFFERING PACE



HARD TO SYNC RELEASES



DUPLICATE WORK

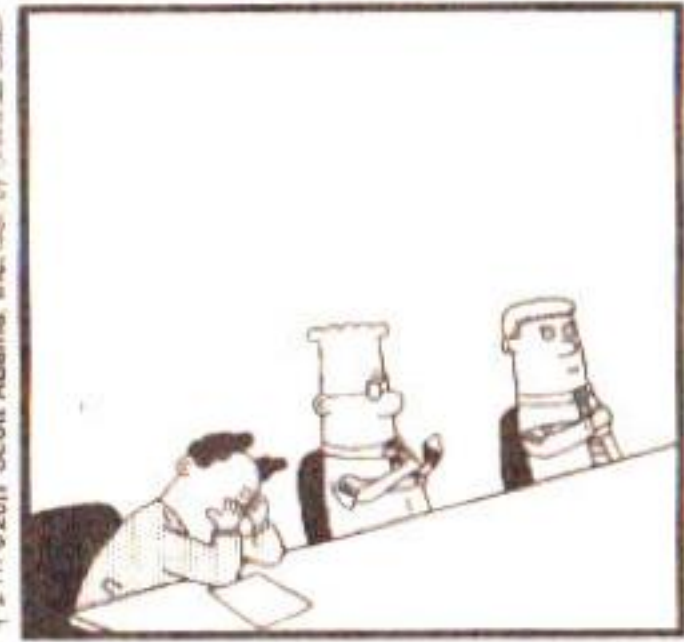
Dilbert



Dilbert.com DilbertCartoonist@gmail.com

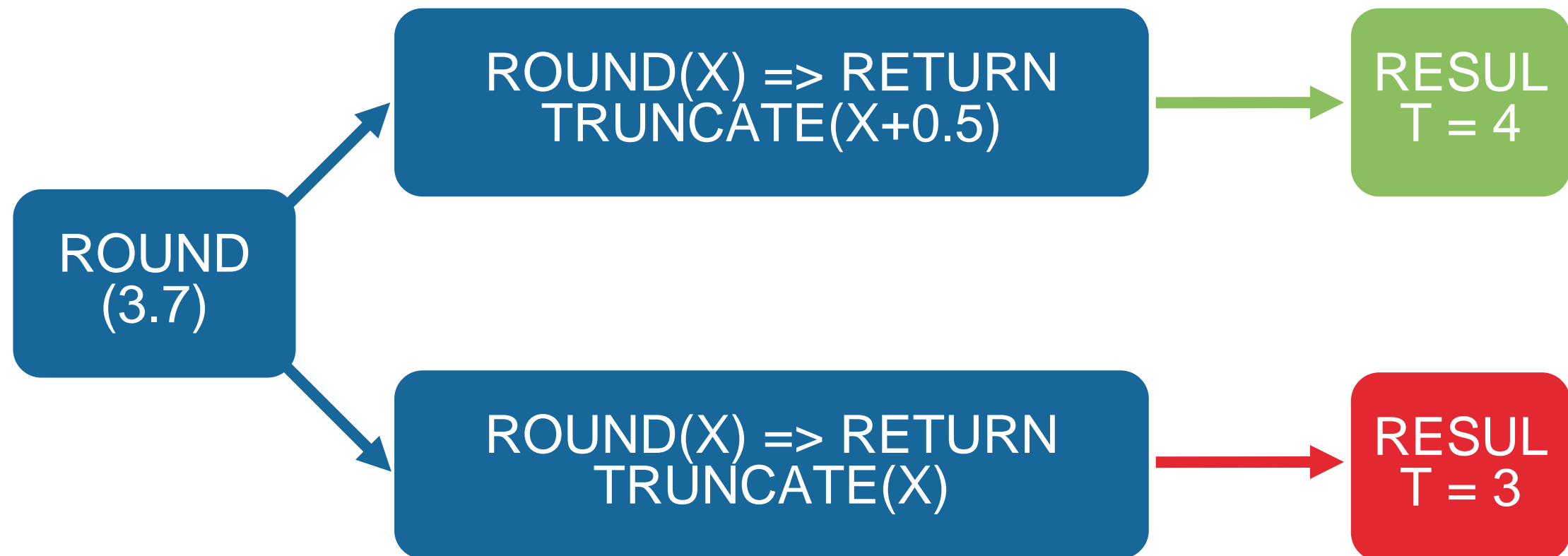


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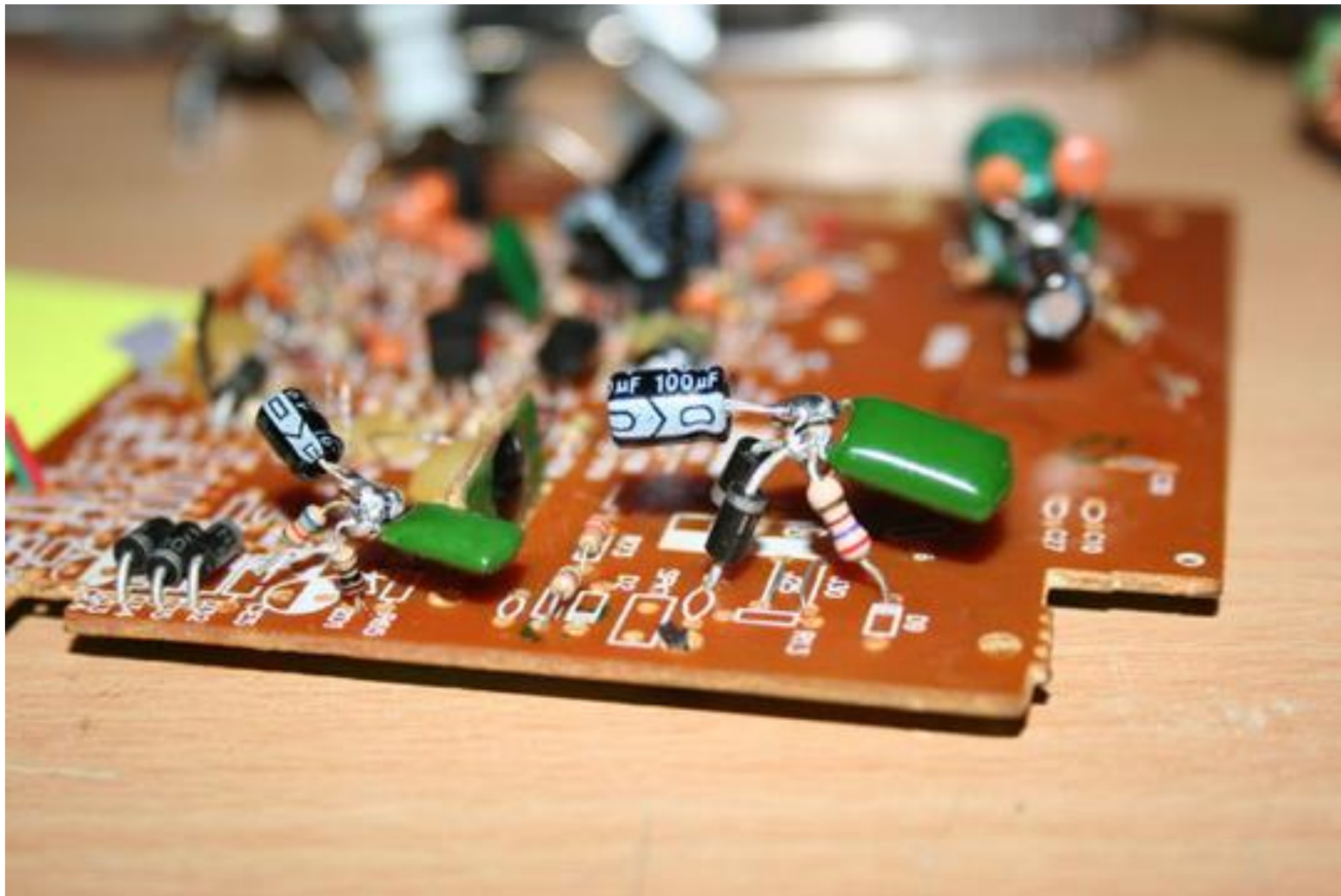
By Scott Adams

INCONSISTENT RESULTS



NO CODE REUSE

BUGS FRAGMENTATION



HIGH COST

EXPENSIVE





WHAT ARE MY ALTERNATIVES?

How React Native and NativeScript Change Your Mobile Strategy

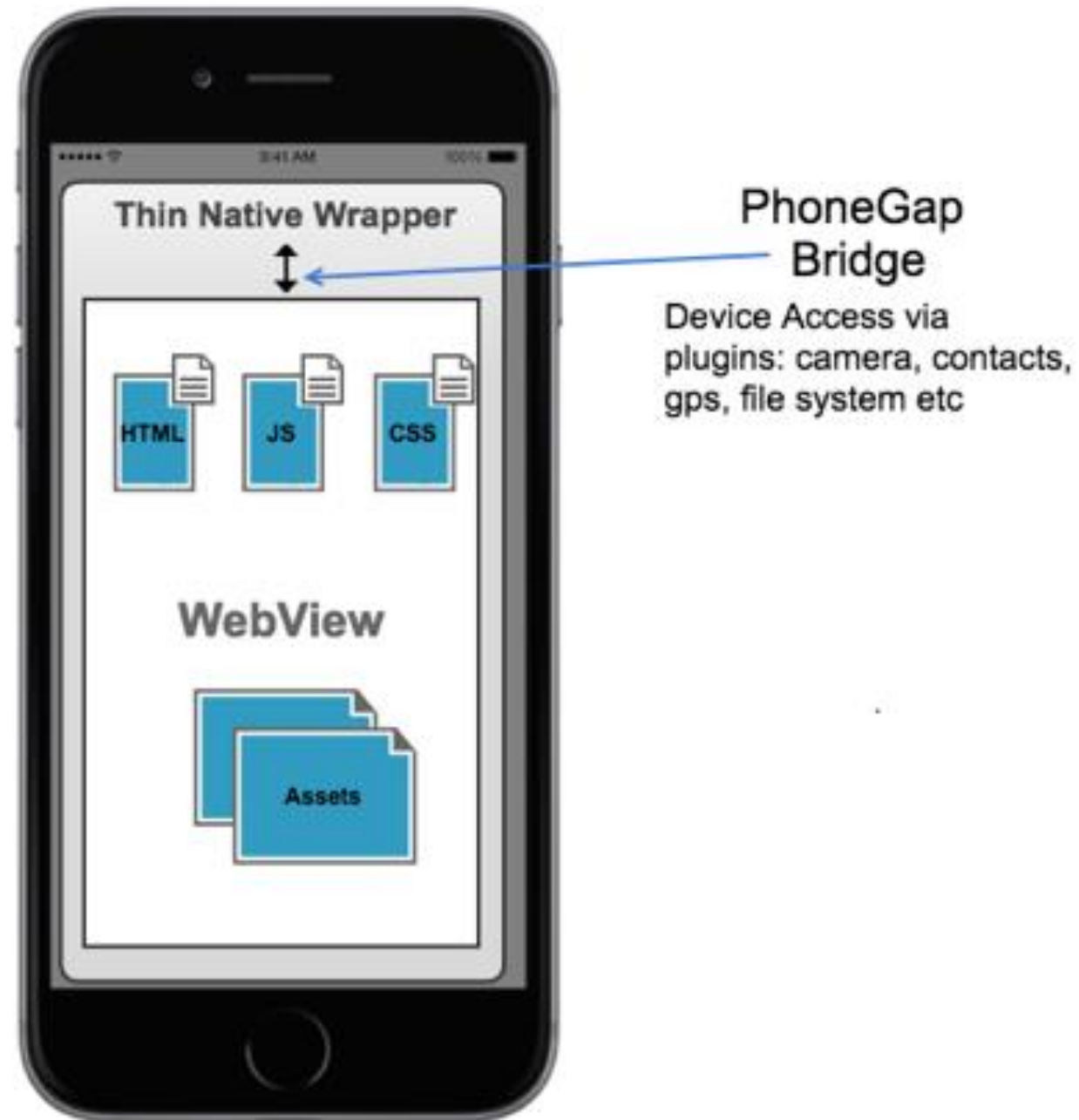
Progress

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ALTERNATIVES

HYBRID

HYBRID



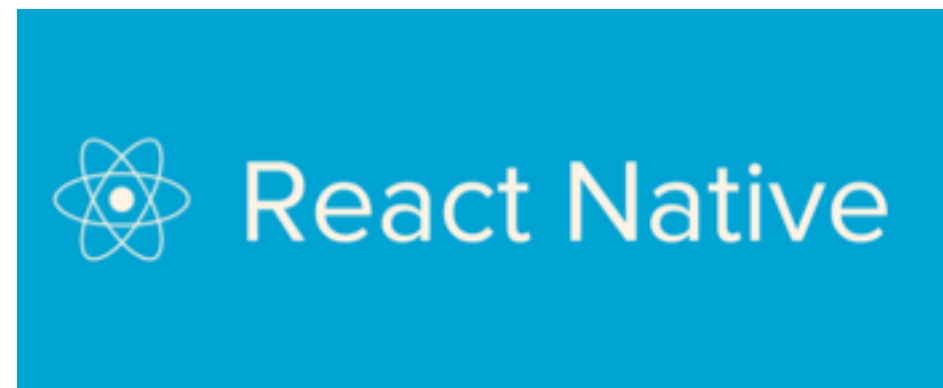


ALTERNATIVES

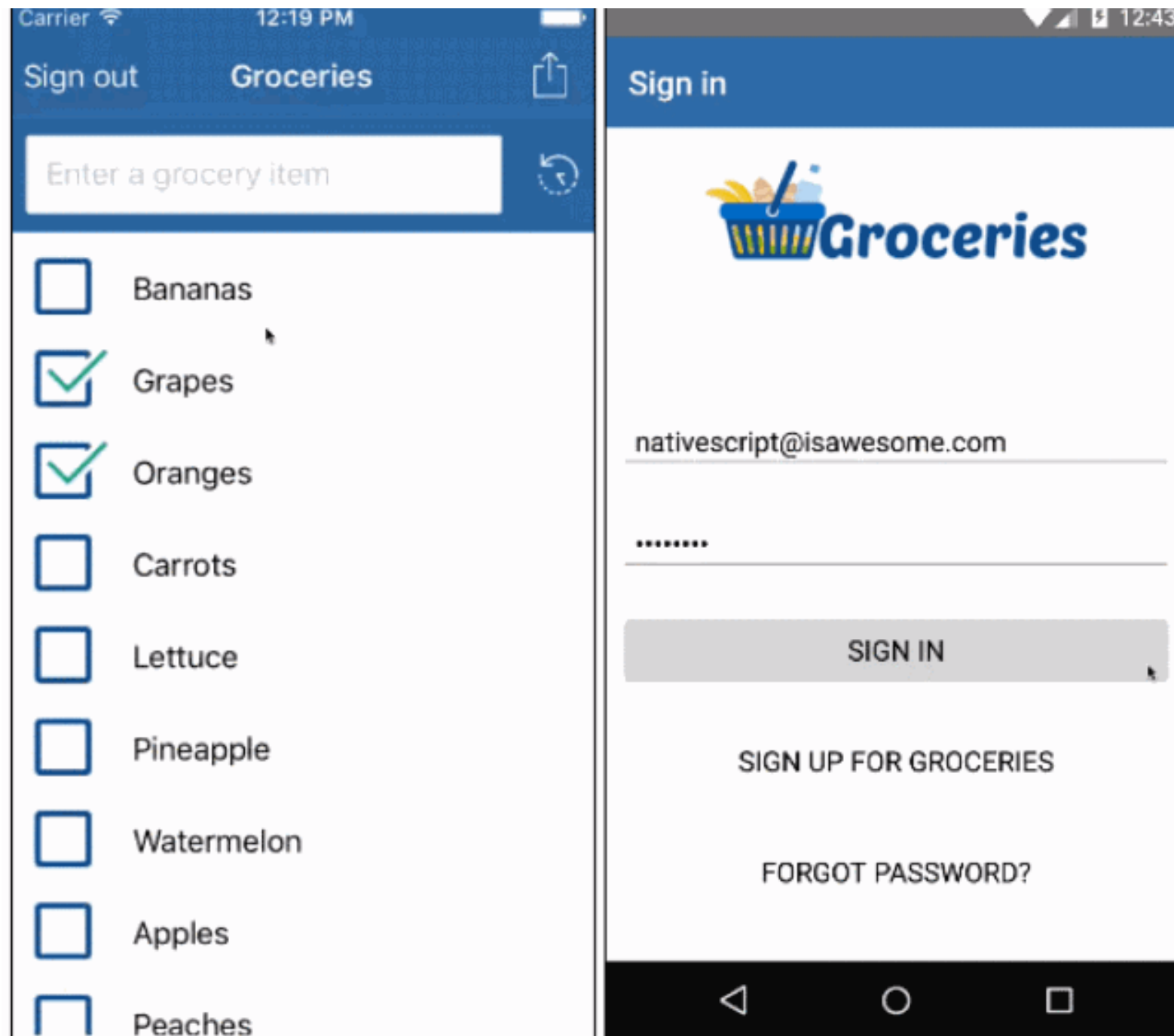
JAVASCRIPT

NATIVE

POPULAR FRAMEWORKS



NATIVE UI FOR BOTH ANDROID AND IOS



UI ABSTRACTION



SegmentedBar

Native Component

Android

`android.widget.TabHost`

iOS

`UISegmentedControl`

EXECUTION AT RUNTIME



ALTERNATIVES

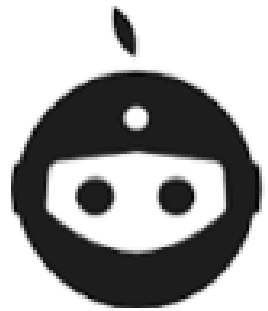
CROSS- COMPILE

POPULAR FRAMEWORKS



Xamarin

C#



ROBOVM

Java



RubyMotion

Ruby

COMPILE TO BINARY

C#

compile

Java

compile

Ruby

compile





PROS AND CONS

How React Native and NativeScript Change Your Mobile Strategy

Progress

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THE GOOD VS THE

PROS AND CONS

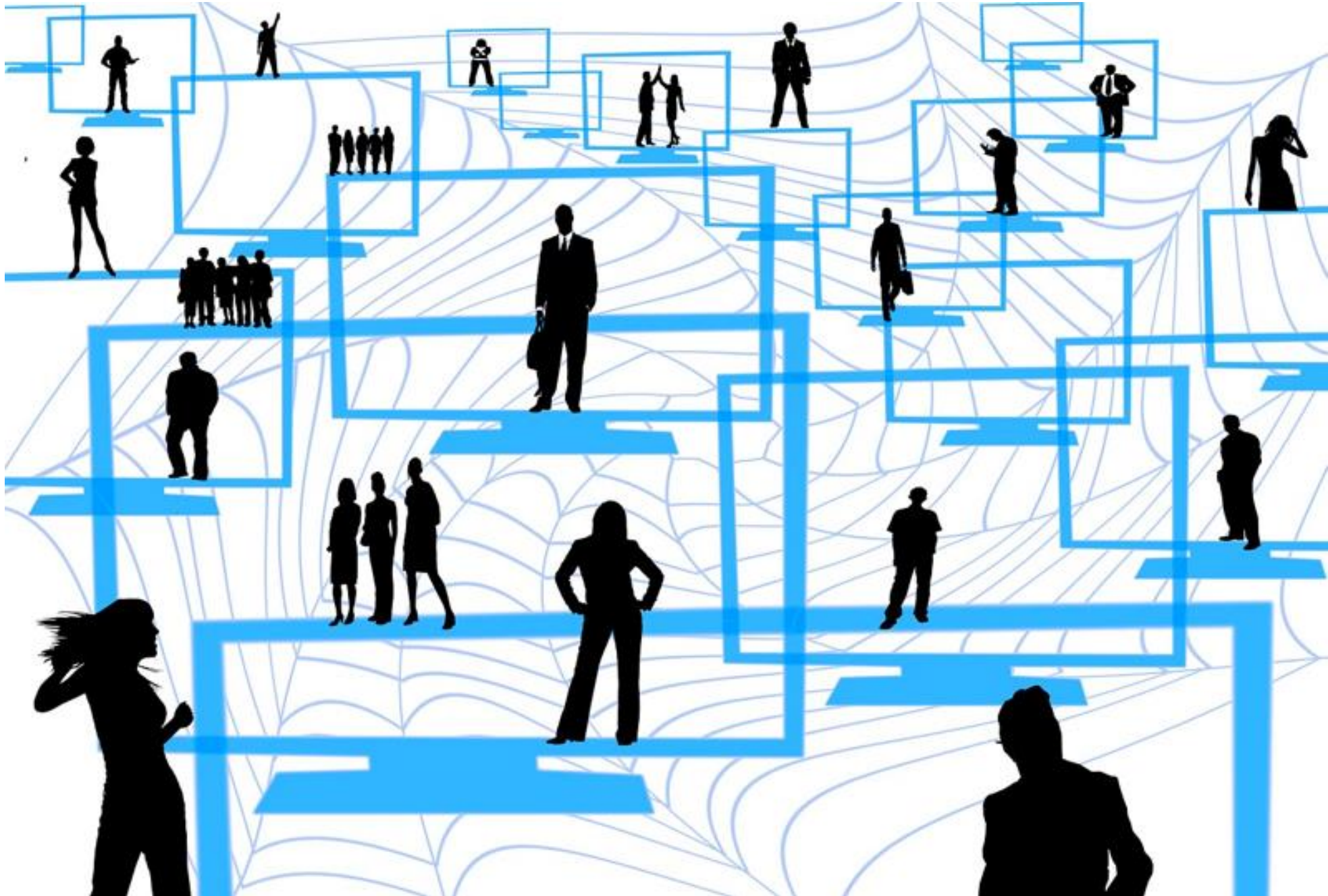
NATIVE

NATIVE

PERFORMANCE



USER EXPERIENCE



PROS AND CONS

HYBRID

WIDE REACH

AMAZON
FIRE OS

ANDROID

BLACKBE
RRY 10

FIREFOX
OS

IOS

UBUNTU

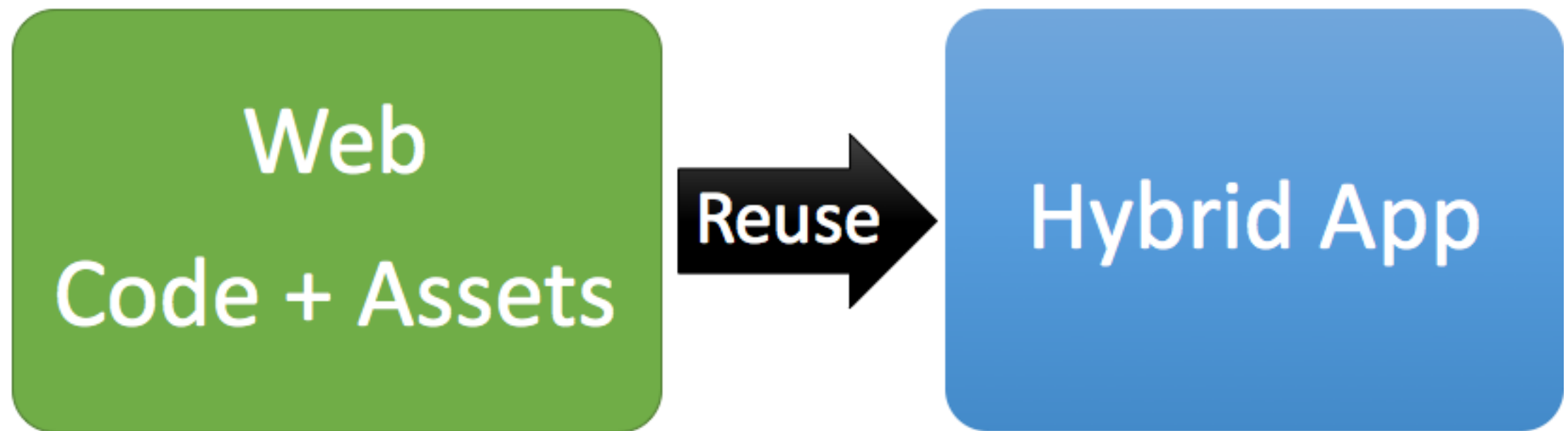
WINDOWS
PHONE

TIZEN

MATURE FRAMEWORKS



WEB CODE REUSE



HYBRID

PERFORMANCE



WEB UI != NATIVE UI



PROS AND CONS

CROSS- COMPILE

PICK YOUR LANGUAGE



USE EXISTING LIBRARIES



COMPILE



N700 Shinkansen

Max speed: 270 km/h

Time to reach max speed: 3 minutes

LIMITED CODE SHARING



PROS AND CONS

JAVASCRIPT

NATIVE

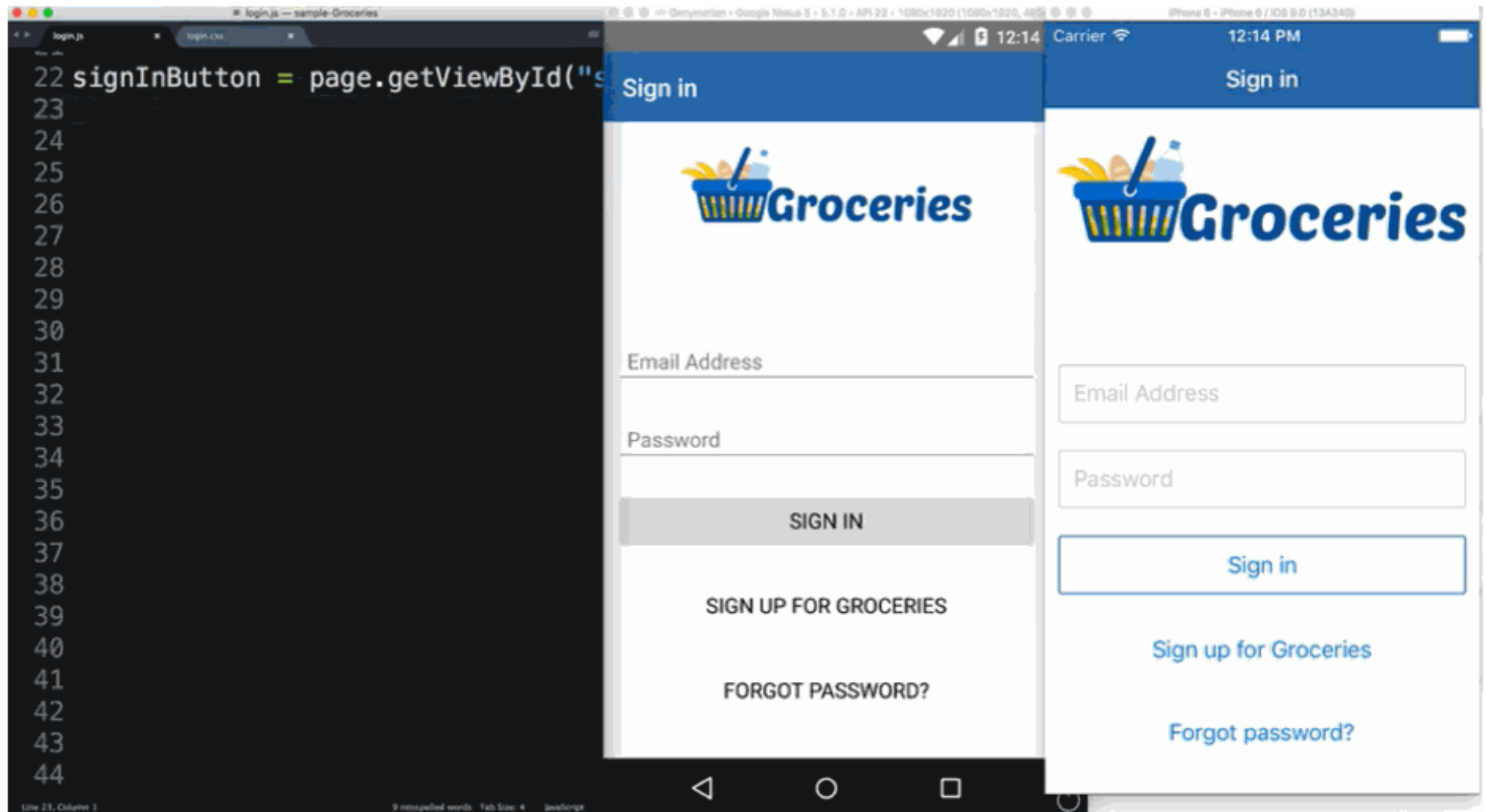
THE OLD GUIDELINES

Guideline	Native	Hybrid	JS Native
Best performance + Native UI	★		
Web skill reuse + Fast development cycle		★	

INTRODUCING THE NEW GUIDELINES

Guideline	Native	Hybrid	JS Native
Best performance + Native UI	★		★
Web skill reuse + Fast development cycle		★	★

LIVESYNC



3RD PARTY LIBRARIES

The image is a composite of two screenshots from the CocoaPods website. The top screenshot shows a search for 'moodstocks' with filters for 'Either OS', 'IOS & OSX', 'IOS', and 'OSX'. The search results show 'Moodstocks-IOS-SDK 3.5' with a description 'Real-time on-device image recognition SDK for iOS.' and a tag 'IOS only'. An orange arrow points to the version number '3.5'. The bottom screenshot shows the 'Morphy Toolbar' library page, which includes a description, a 'JitPack 1.0.5' tag, and three mobile app screenshots showing the toolbar in use. The first two screenshots show a blue header with a back arrow and a minion icon, while the third shows a yellow header with a minion icon.

CocoaPods

Search pods **Either OS** IOS & OSX IOS OSX

moodstocks

Moodstocks-IOS-SDK 3.5 **IOS only**

Real-time on-device image recognition SDK for iOS.

Moodstocks

Android Arsenal Weapons Battlefield Ratings Contact Social

JitPack 1.0.5 Android Arsenal morphy-toolbar

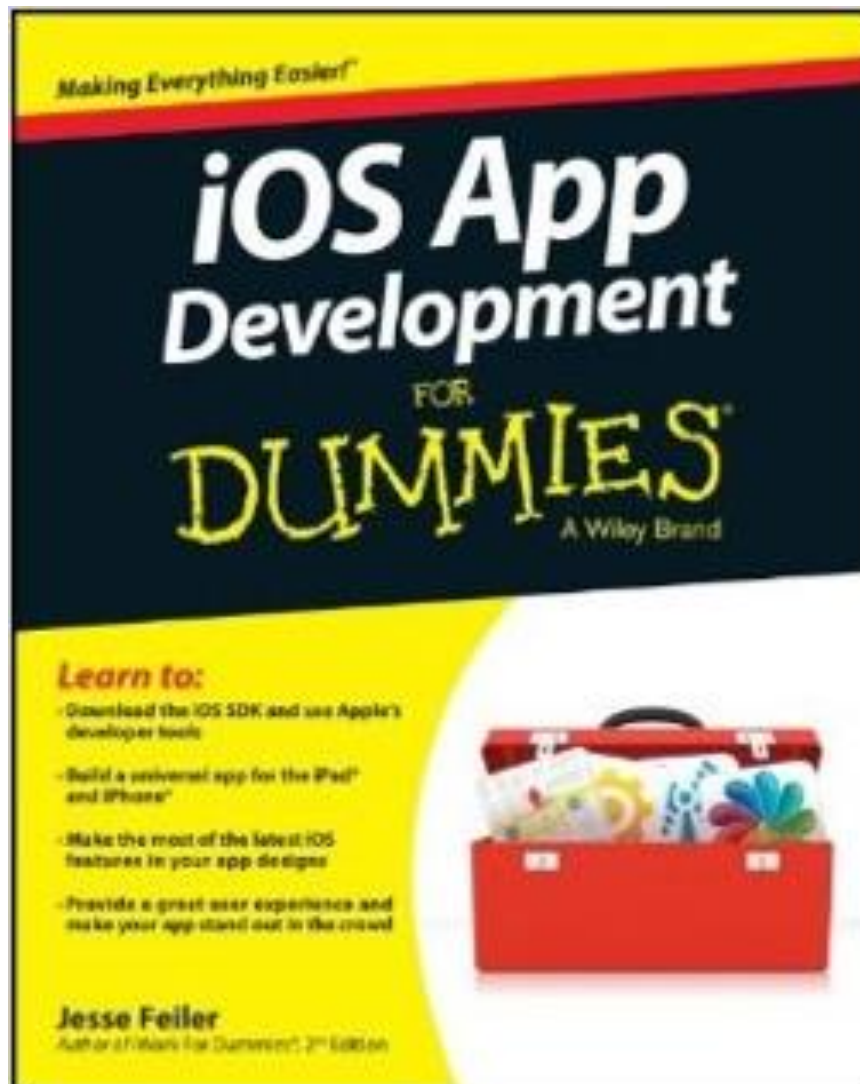
Morphy Toolbar

Minions [not so] serious talk 160 participants

Minions [not so] serious talk 160 participants

Minions [not so] serious talk 160 participants

PLATFORM SPECIFIC KNOWLEDGE



CSS TO STYLE YOUR APP

Supported Properties

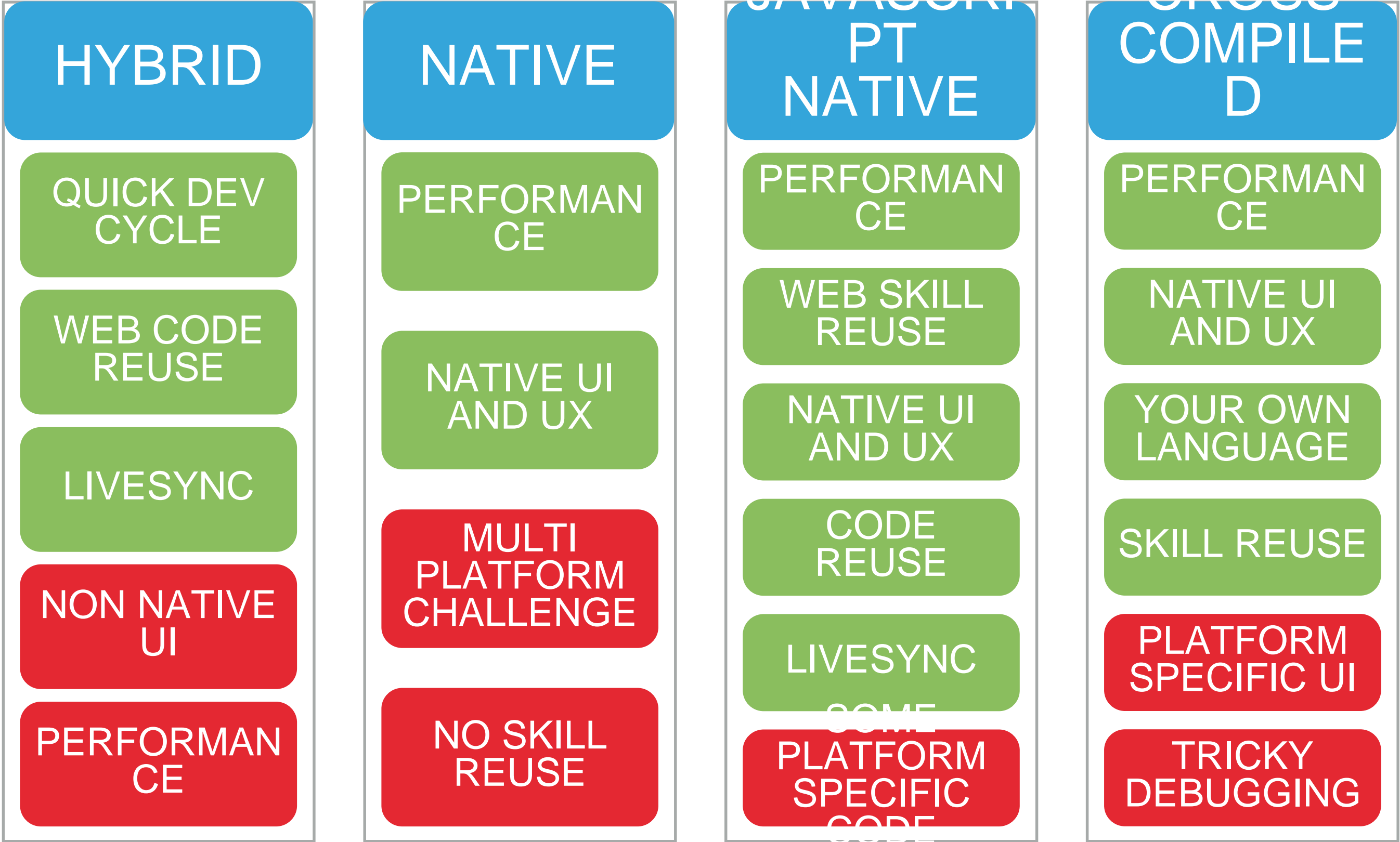
This is the list of the properties that can be set in CSS or through the style property of each View:

CSS Property	JavaScript Property	Description
color	color	Sets a solid-color value to the matched view's foreground.
background-color	backgroundColor	Sets a solid-color value to the matched view's background.
font-size	fontSize	Sets the font size of the matched view (only supports device-independent units).

PROS AND CONS

OVERVIEW

OVERVIEW





THE BIG PICTURE

How React Native and NativeScript Change Your Mobile Strategy

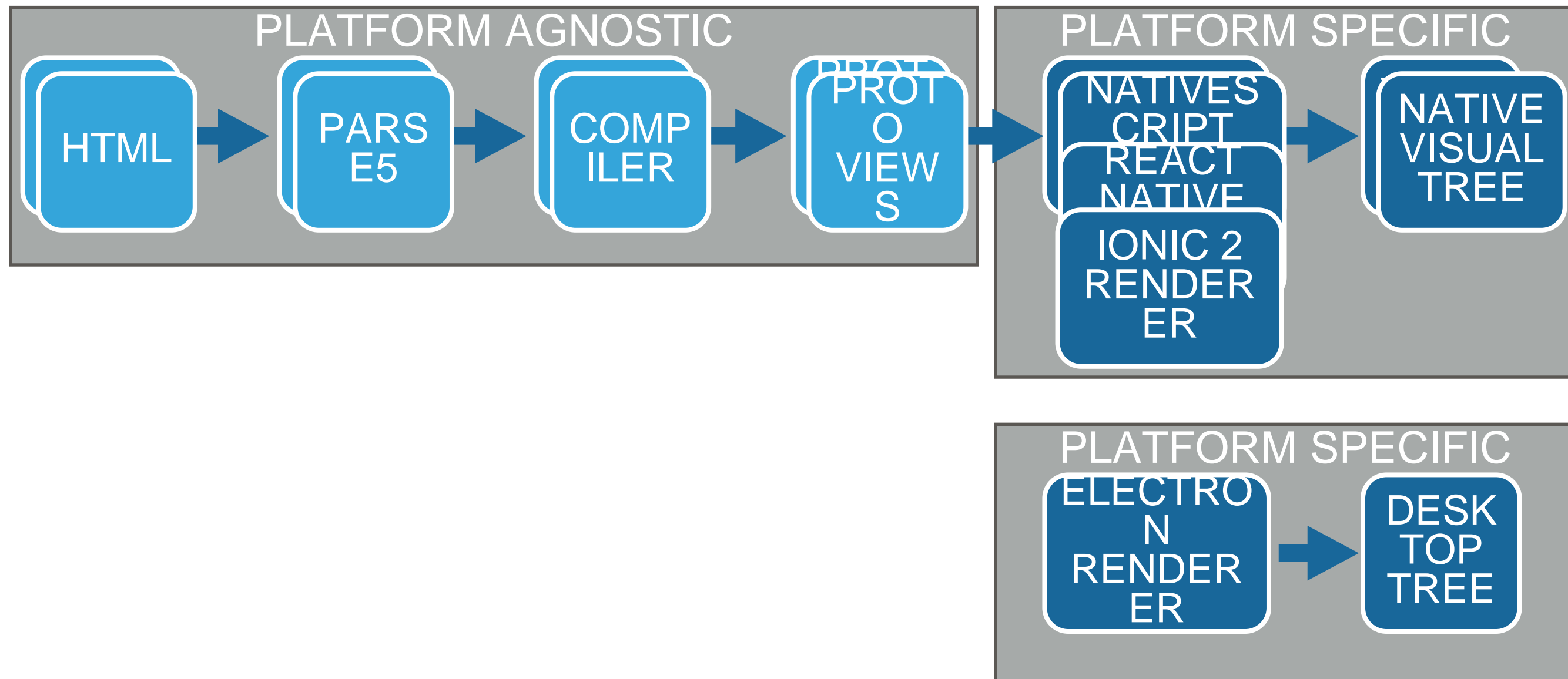
Progress

@sebawita

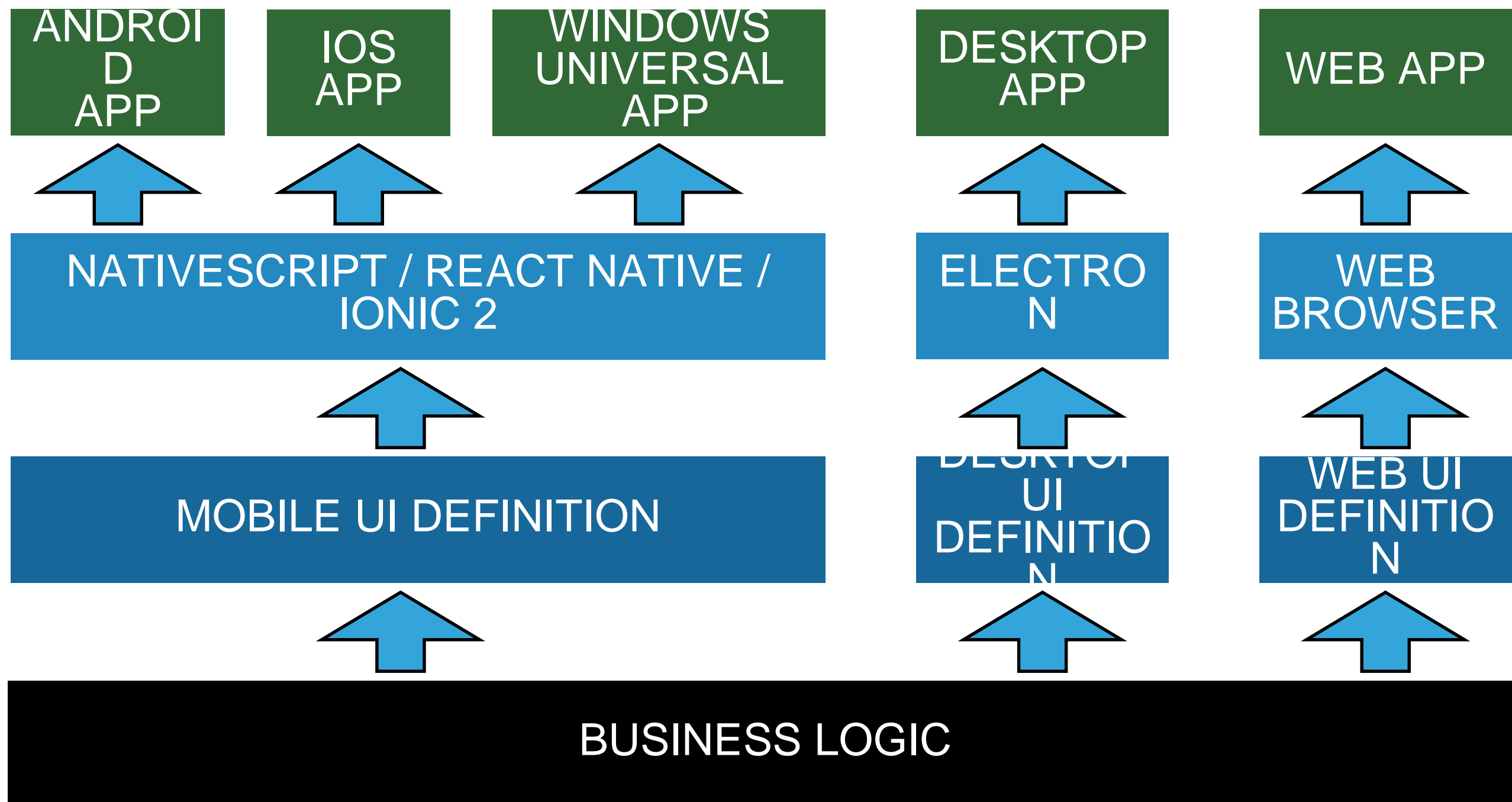
DESKTOP / WEB / MOBILE



ANGULAR 2 - PLATFORM AGNOSTIC ARCHITECTURE



BUSINESS LOGIC CODE SHARING



DEMO

ANDROID



IOS



WEB





HOW DOES THAT AFFECT YOUR MOBILE

How React Native and NativeScript Change Your Mobile Strategy

Progress

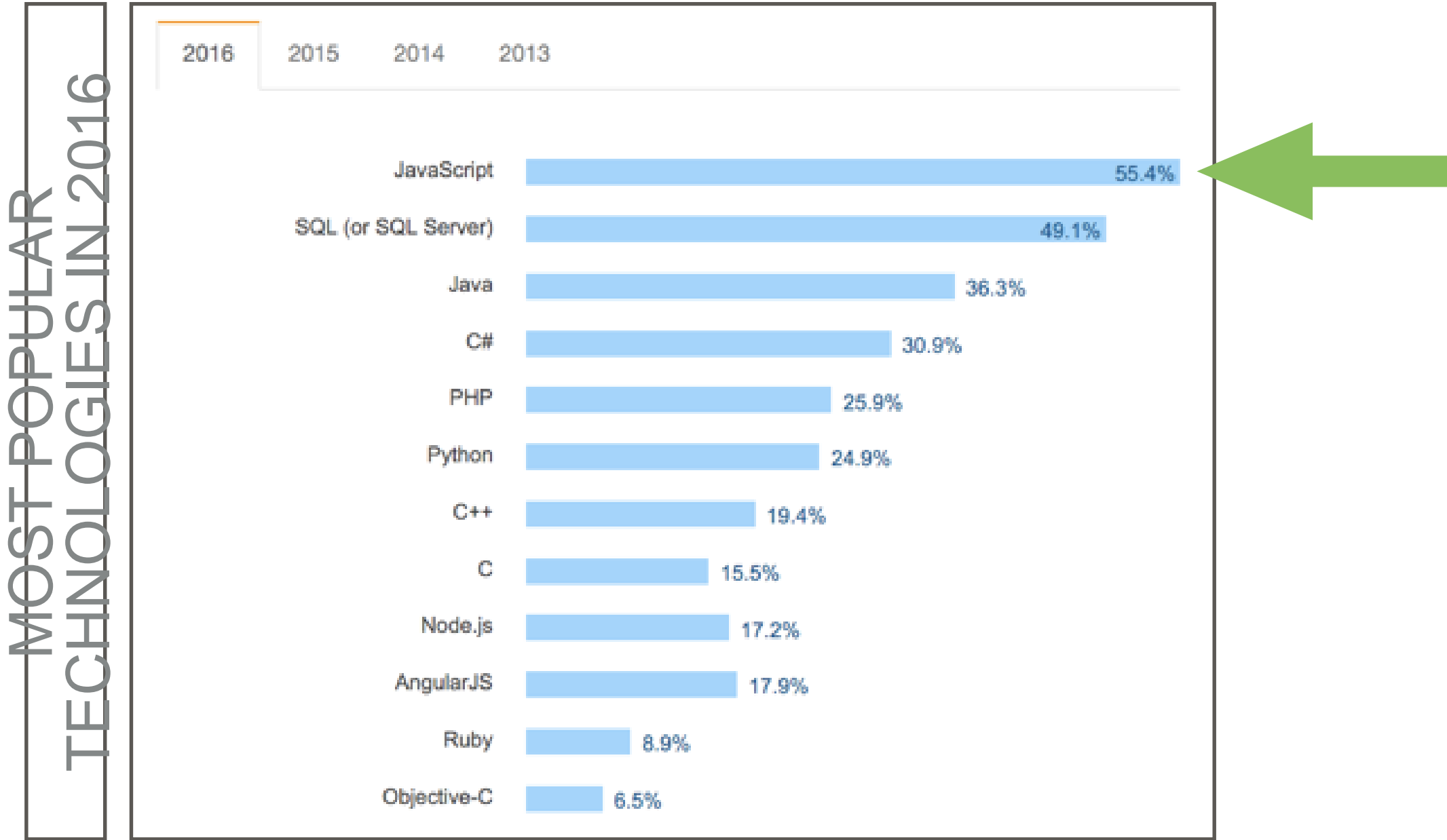
@sebawita

HOW DOES THAT AFFECT YOUR MOBILE STRATEGY?

ONE CORE DEV TEAM

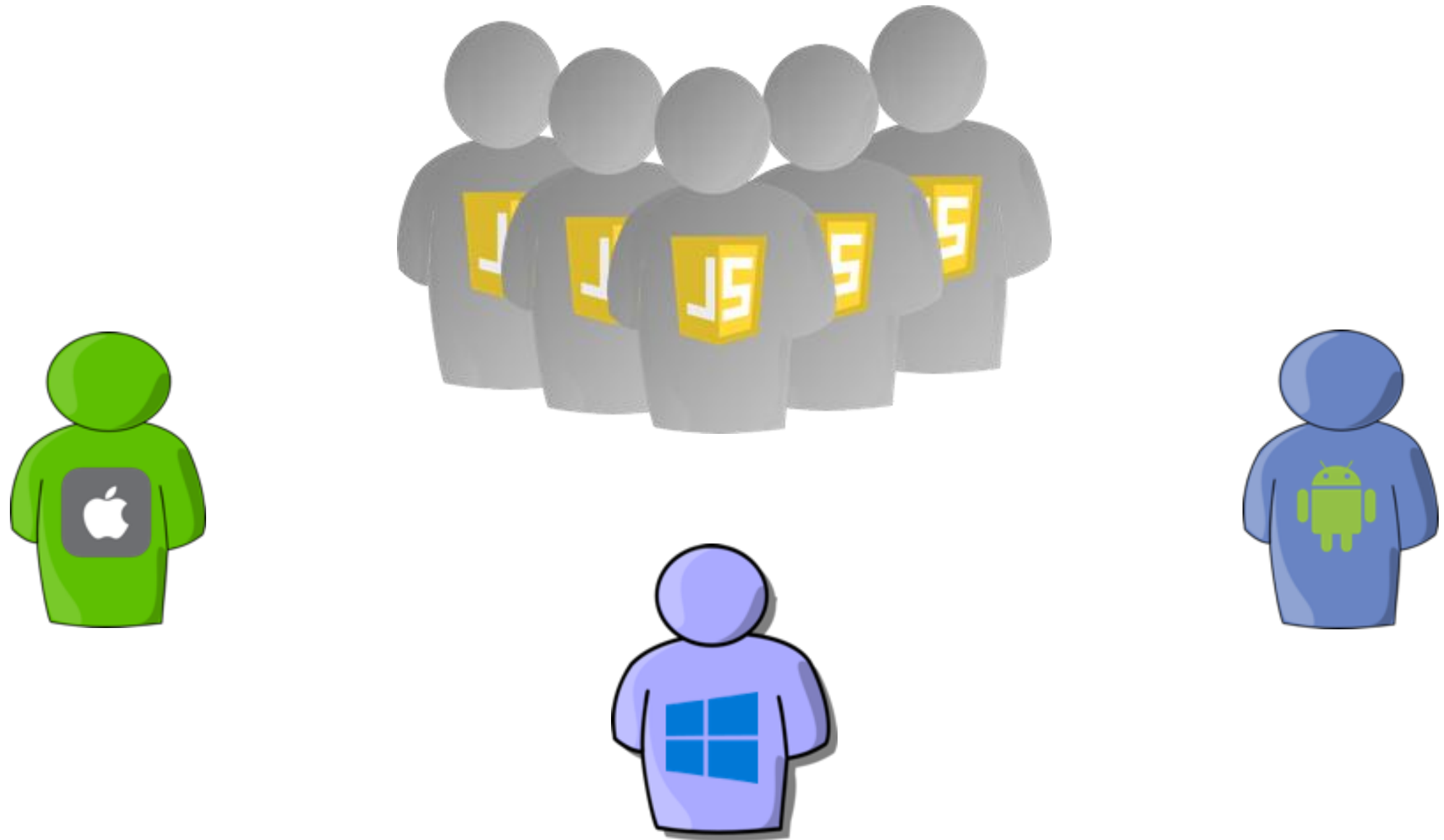


EASIER HIRING



<http://stackoverflow.com/research/developer-survey-2016#technology-most-popular-technologies>

OPTIMAL TEAM SETUP



HOW DOES THAT AFFECT YOUR MOBILE STRATEGY?

QUICKER TURNAROUND = MORE PRODUCTIVITY



HOW DOES THAT AFFECT YOUR MOBILE STRATEGY?

ANGULAR 2 -> CODE SHARING BEYOND MOBILE



Q&A

THANK
YOU

COME AND TALK
TO US AT #B37