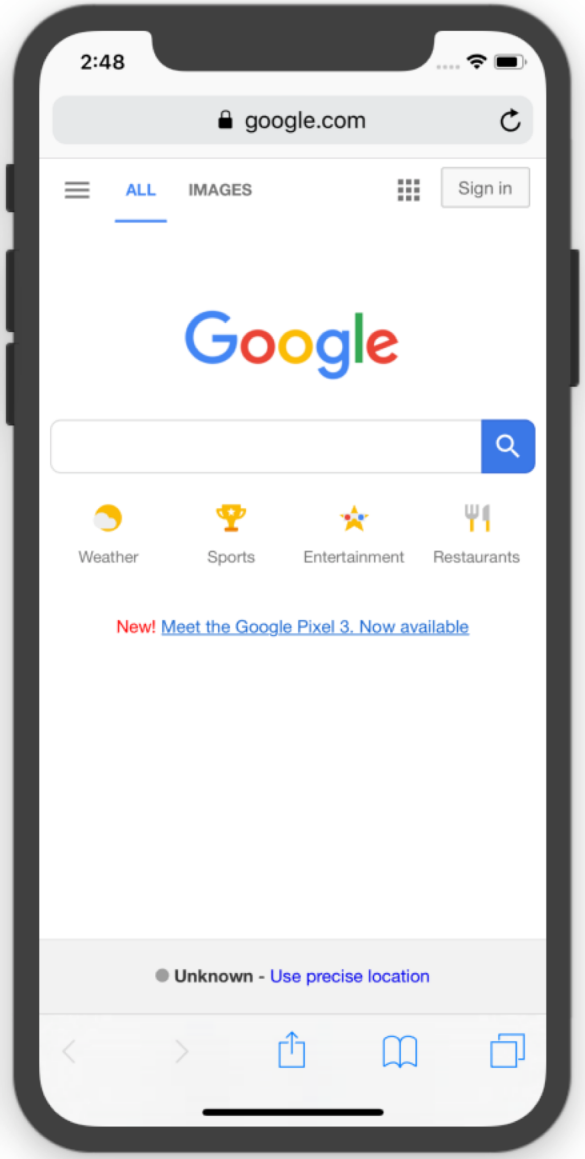
One Project. One Language. Three Apps.

TJ VanToll (@tjvantoll)

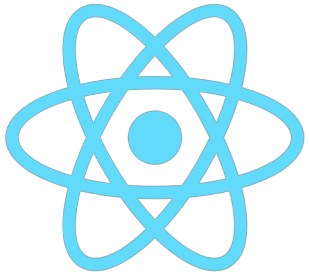
Progress®

iOS Web Android

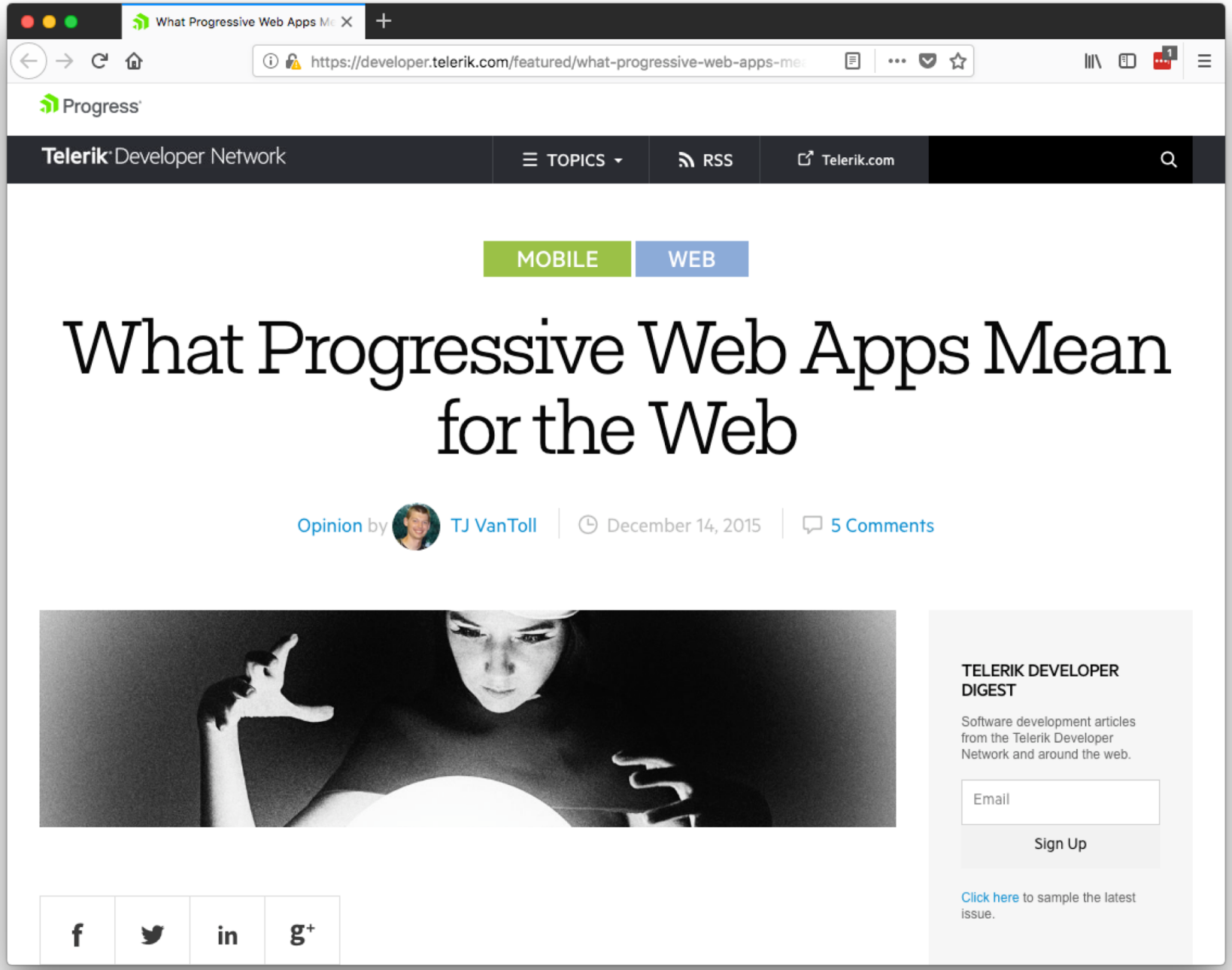


Agenda

- Background (~15 minutes)
- Demos (~25 minutes)



Web vs. Native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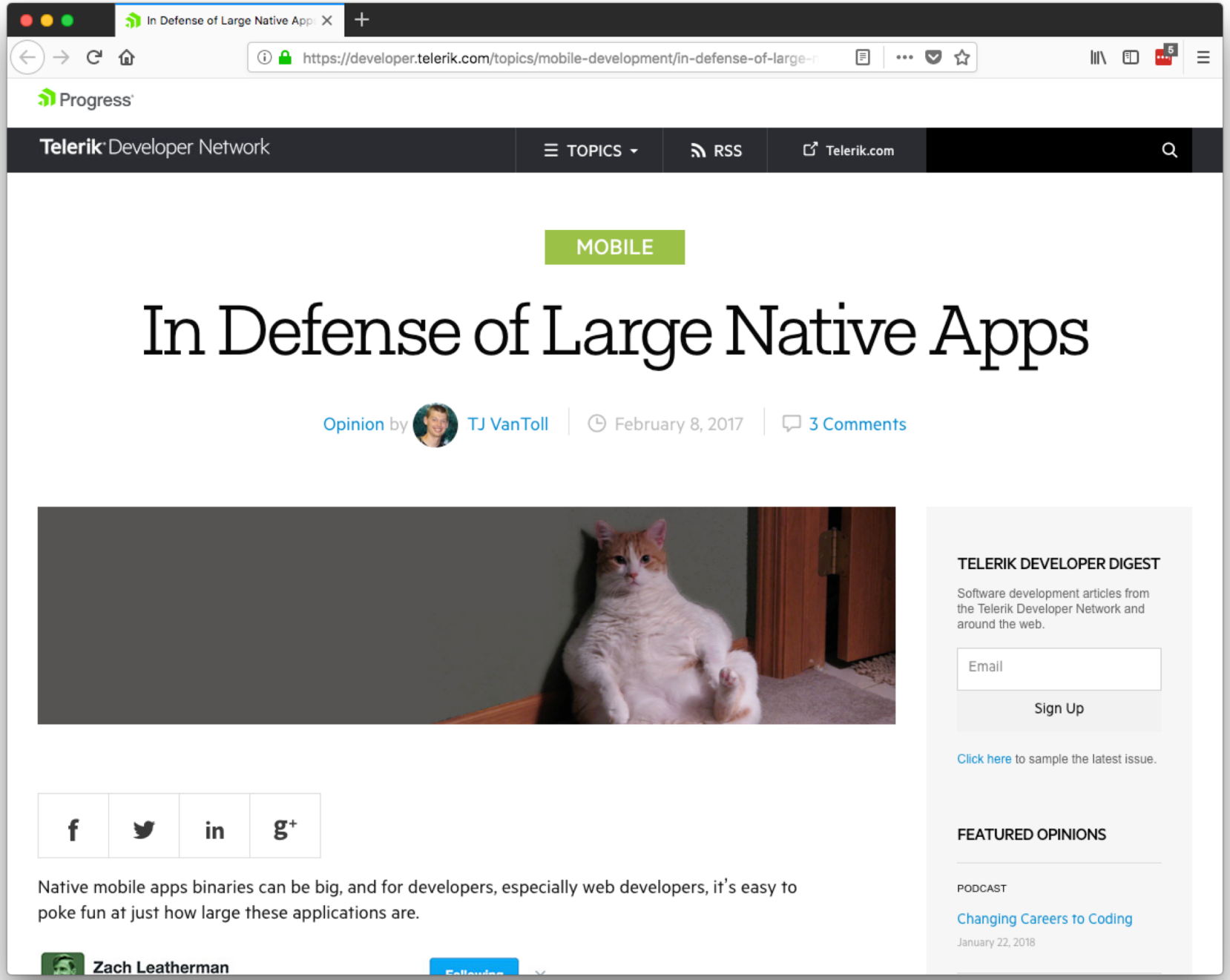
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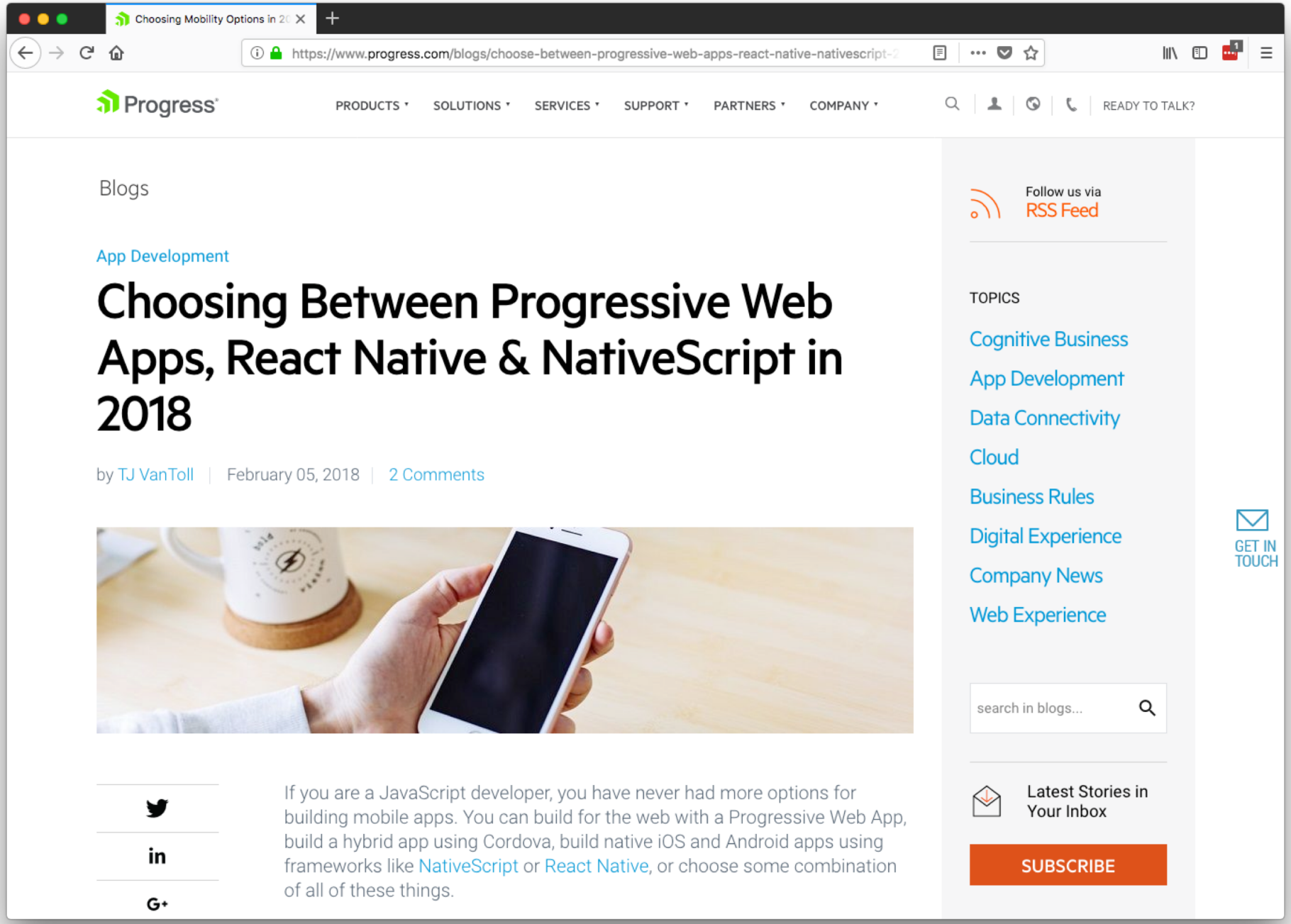
January 22, 2018
Native mobile apps binaries can be big, and for developers, especially web developers, it's easy to poke fun at just how large these applications are.
Zach Leatherman

TJ
VanToll
For...?
Focused on Our Future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App Development
Choosing Between Progressive Web Apps, React Native & NativeScript in 2018
by TJ VanToll | February 05, 2018 | 2 Comments
If you are a JavaScript developer, you have never had more options for building mobile apps. You can build for the web with a Progressive Web App, build a hybrid app using Cordova, build native iOS and Android apps using frameworks like NativeScript or React Native, or choose some combination of all of these things.
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Web vs. Native

Native Benefit: User behavior

"Apps account for over 90% of internet time on smartphones and 77% of internet time on tablets."

Source: https://www.emarketer.com/content/mobile-time-spent-2018

Web Benefit: Reach and ease of access

The average mobile web property captures 2.2x more monthly unique visitors than the average mobile app.

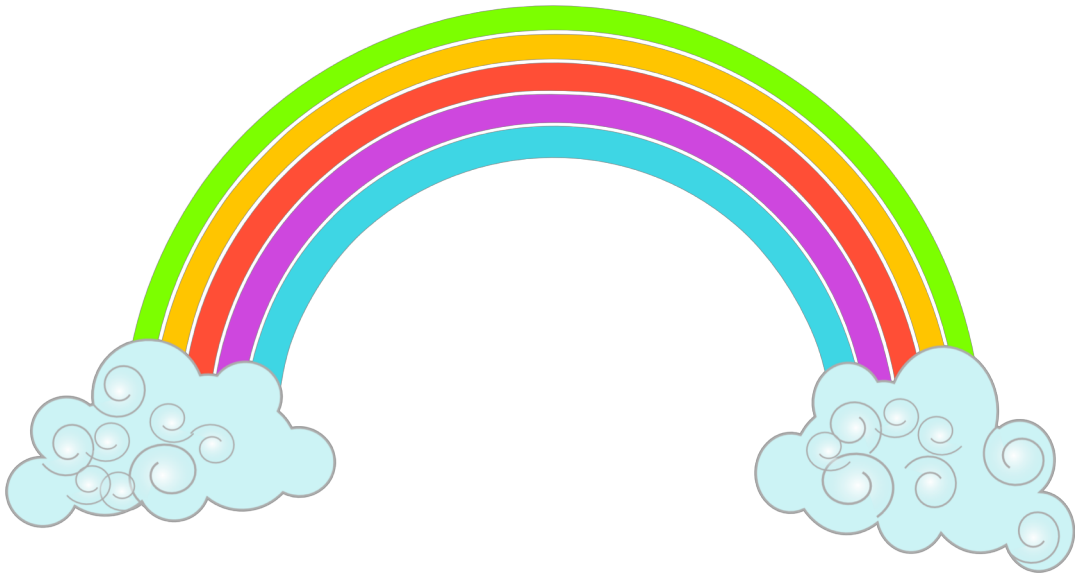
Source: https://www.slideshare.net/comScoremarcom/2017-us-mobile-app-report

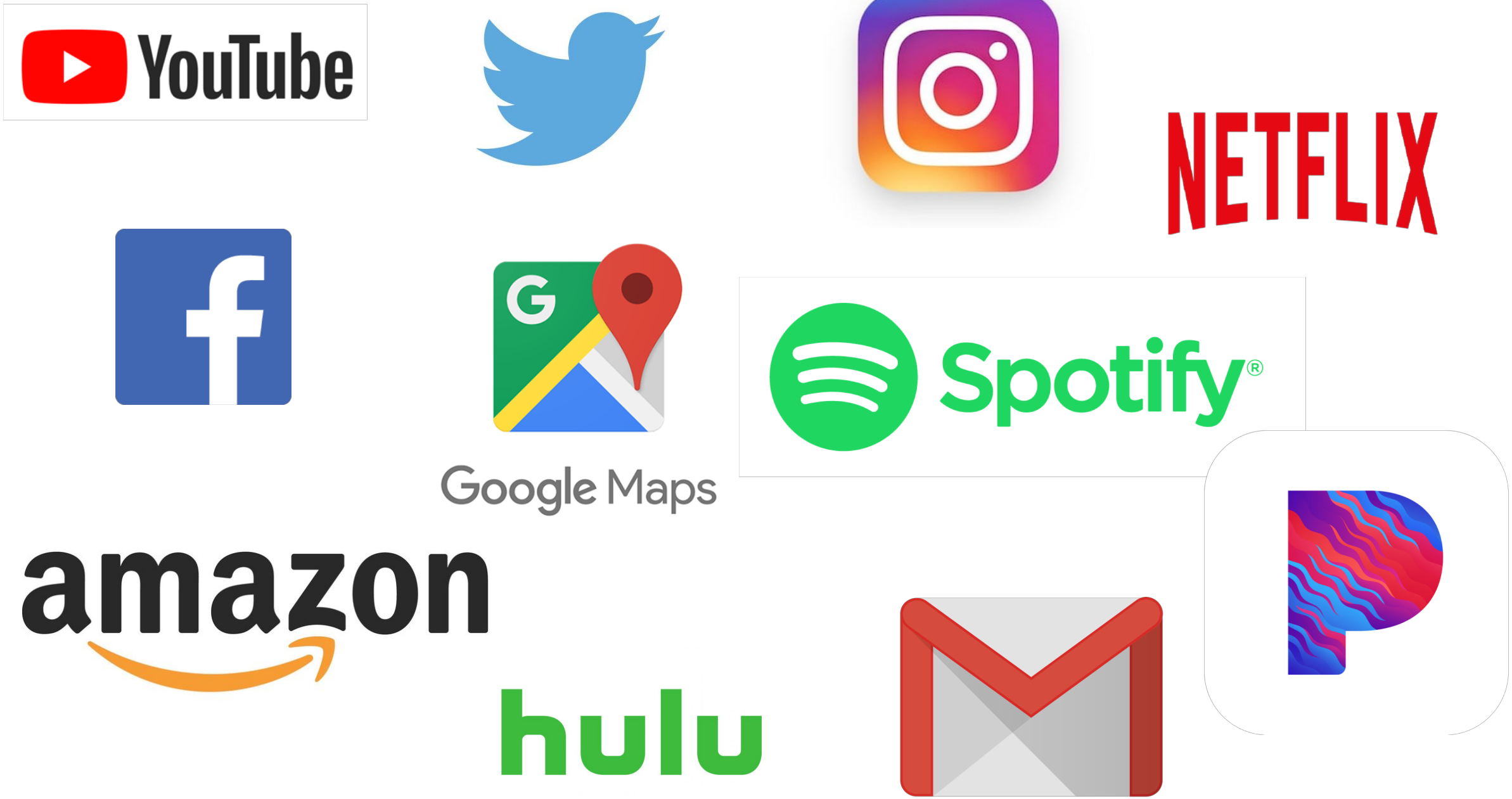
Web vs. Native

~~Web vs. Native~~

Both

~~Web vs. Native~~

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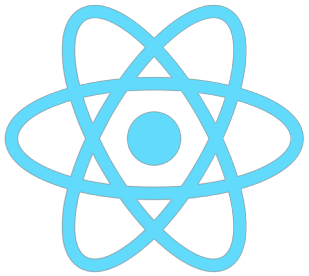
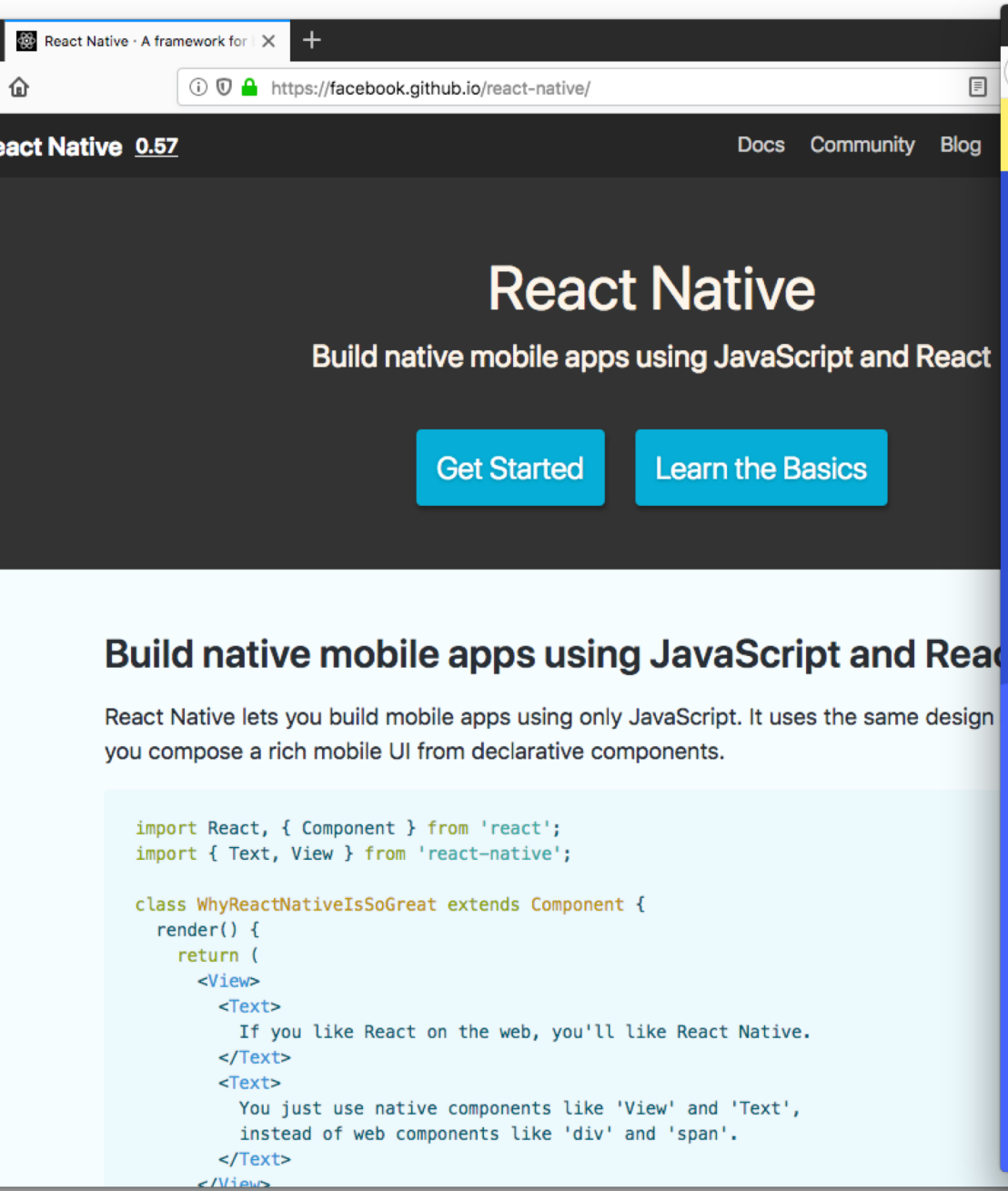
Web vs. Native

Approaches

- 1) React Native Web 
- 2) NativeScript Schematics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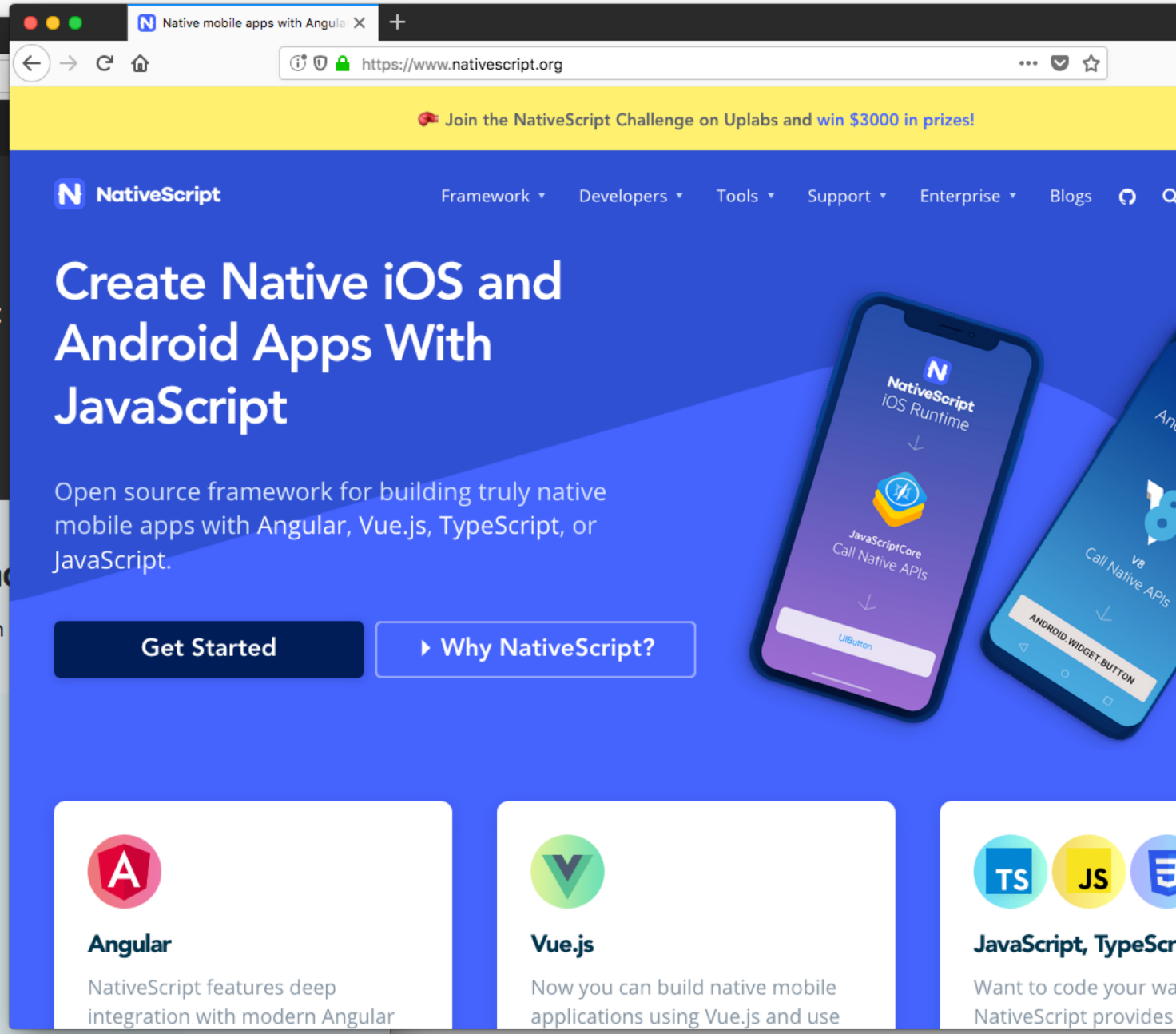
React Native
Build native mobile apps using JavaScript and React
Get Started
Learn the Basics
Build native mobile apps using JavaScript and Reac
React Native lets you build mobile apps using only JavaScript. It uses the same design
you compose a rich mobile UI from declarative components.
import React, { Component } from 'react';
import { Text, View } from 'react-native';
class WhyReactNativeIsSoGreat extends Component {
render() {
return (
<View>
<Text>
If you like React on the web, you'll like React Native.
</Text>
<Text>
You just use native components like 'View' and 'Text',
instead of web components like 'div' and 'span'.
</Text>


Native mobile apps with Angula
https://www.nativescript.org
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NativeScript
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Developers
Tools
Support
Enterprise
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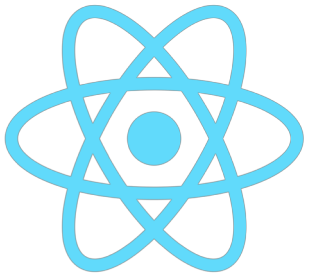
Create Native iOS and Android Apps With JavaScript
Open source framework for building truly native mobile apps with Angular, Vue.js, TypeScript, or JavaScript.
Get Started
Why NativeScript?
NativeScript iOS Runtime
JavaScriptCore Call Native APIs
UIButton
V8 Call Native APIs
ANDROID.WIDGET.BUTTON
Angular
NativeScript features deep integration with modern Angular
Vue.js
Now you can build native mobile applications using Vue.js and use
JavaScript, TypeScr
Want to code your wa
NativeScript provides

```
export default class App extends React.Component {
  render() {
    return (
      <View style={styles.container}>
        <Text style={styles.paragraph}>
          Change code in the editor and watch it change
        </Text>
        <Card title="Local Modules">
          <AssetExample />
        </Card>
      </View>
    );
  }
}
```

```
<ActionBar title="Home" class="action-bar">
</ActionBar>

<GridLayout>
    <ScrollView class="page">
        <StackLayout class="home-panel">
            <!--Add your page content here-->
            <Label textWrap="true" text="Play with NativeScript!"
            <Label textWrap="true" text="Write code in the editor
             class="h2 description-label"></Label>
            <Label textWrap="true" text="Scan the QR code with you
             class="h2 description-label"></Label>
        </StackLayout>
    </ScrollView>
</GridLayout>
```

Approaches

- 1) React Native Web 
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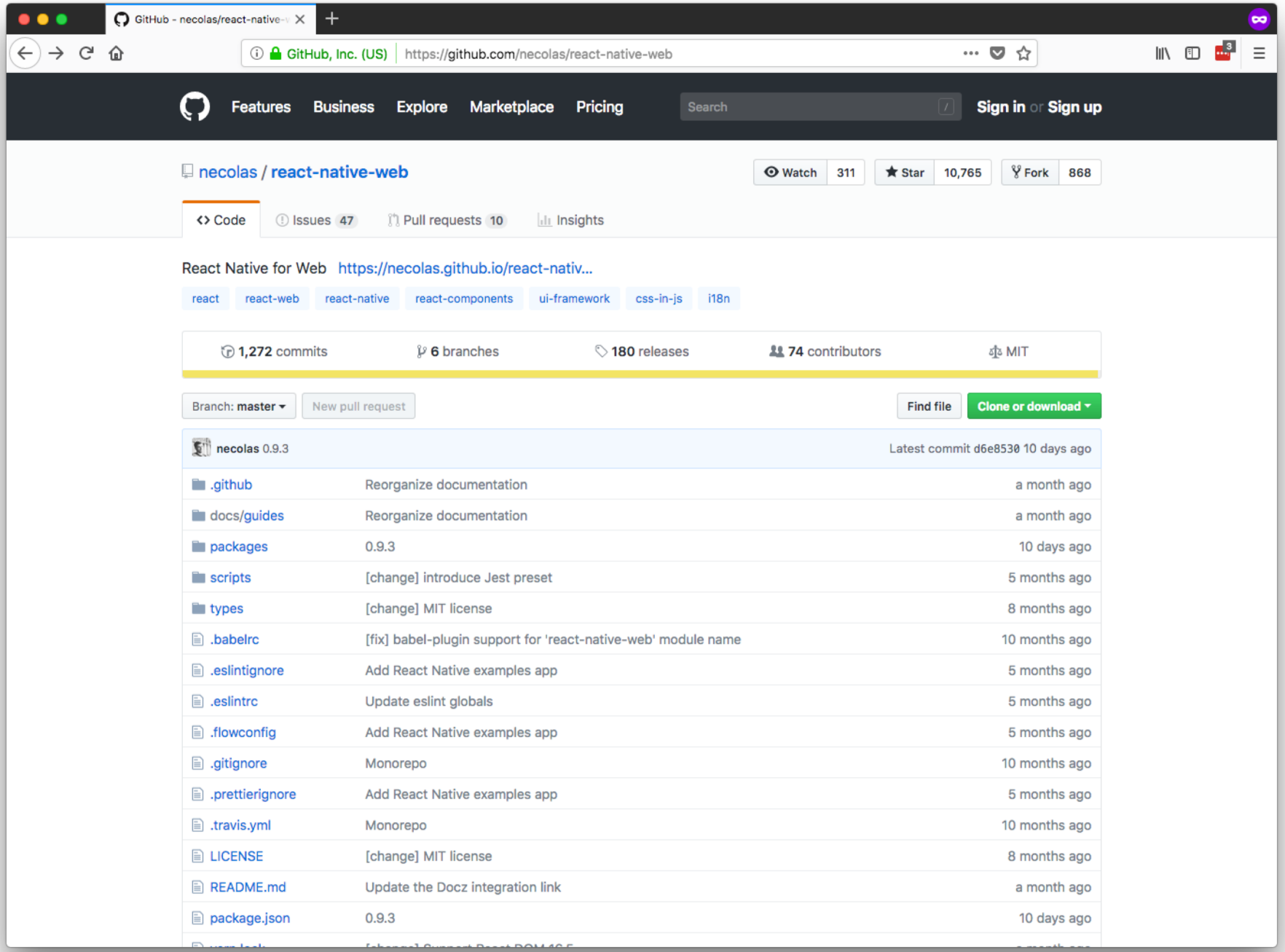
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GitHub, Inc. (US)
https://github.com/necolas/react-native-web
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Search
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Watch 311
Star 10,765
Fork 868
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react
react-web
react-native
react-components
ui-framework
css-in-js
i18n
1,272 commits
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180 releases
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Branch: master
New pull request
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Latest commit d6e8530 10 days ago
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scripts [change] introduce Jest preset 5 months ago
types [change] MIT license 8 months ago
.babelrc [fix] babel-plugin support for 'react-native-web' module name 10 months ago
.eslintignore Add React Native examples app 5 months ago
.eslintrc Update eslint globals 5 months ago
.flowconfig Add React Native examples app 5 months ago
.gitignore Monorepo 10 months ago
.prettierignore Add React Native examples app 5 months ago
.travis.yml Monorepo 10 months ago
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Apps That Work Natively on the

https://blog.angular.io/apps-that-work-natively-on-the-web-and-mobile-9b268

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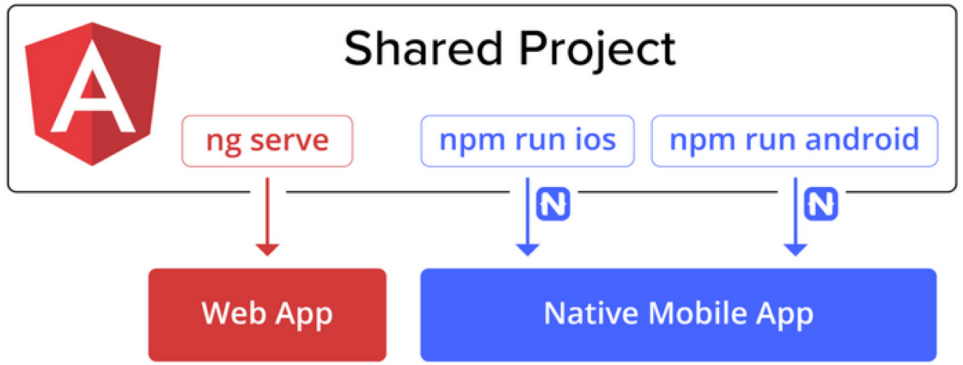
Apps That Work Natively on the Web and Mobile



Today we're happy to announce an exciting new way to build web and mobile apps with Angular and NativeScript.

First, some background: since the beginning of Angular, you could use

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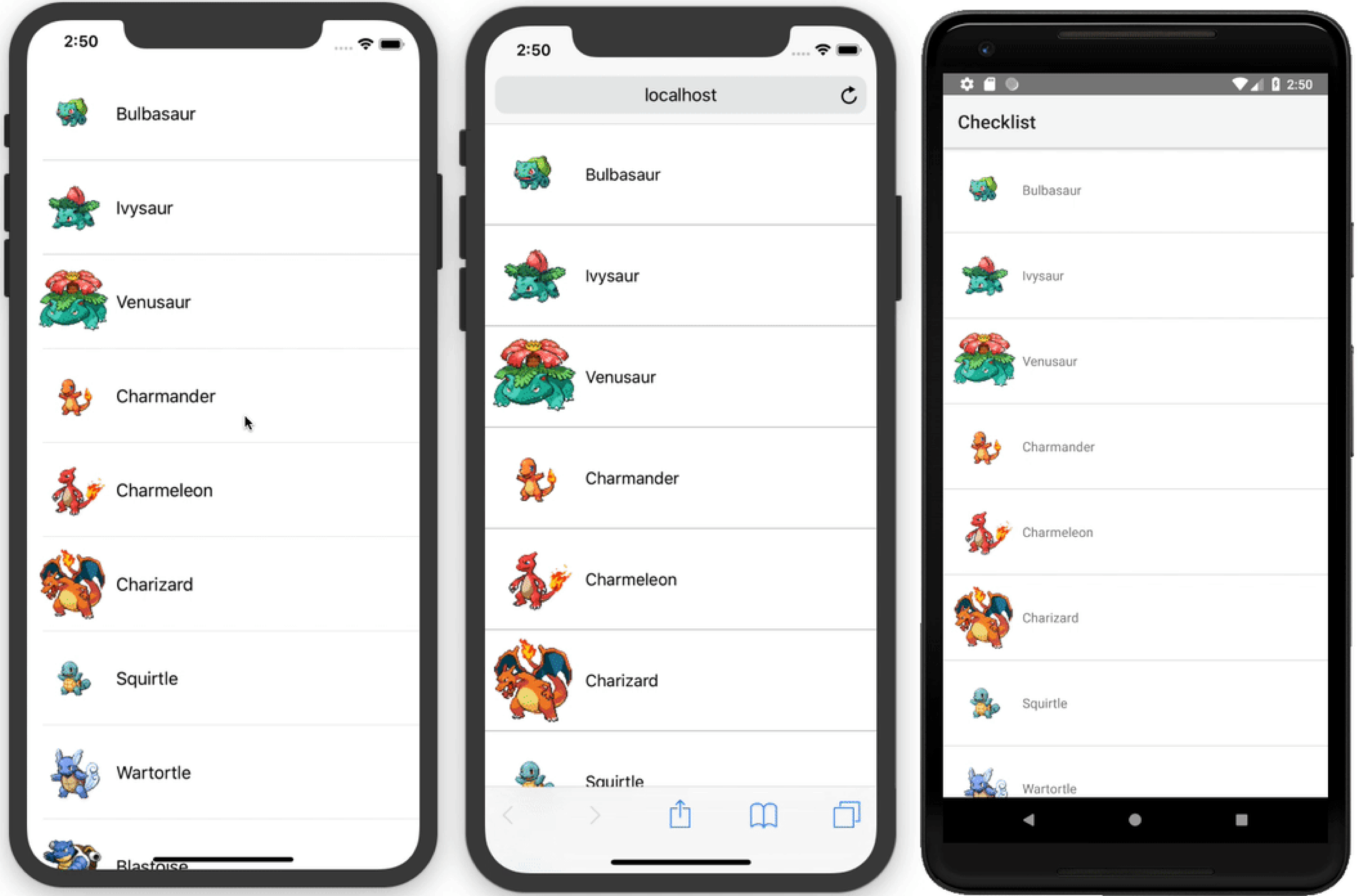
2:50
Bulbasaur
Ivysaur
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Charmander
Charmeleon
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Squirtle
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Ivysaur
Venusaur
Charmander
Charmeleon
Charizard
Squirtle
2:50
Checklist
Bulbasaur
Ivysaur
Venusaur
Charmander
Charmeleon
Charizard
Squirtle
Wartortle

NativeScript
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NativeScript
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Open source framework for building truly native mobile apps with Angular, Vue.js, TypeScript, or JavaScript. Try it:
play.nativescript.org
Earth
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Joined August 2014
884 Following 70K Followers
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#NativeScript 5.0 is on it's way!
Join the launch webinar on November 8th to learn more:
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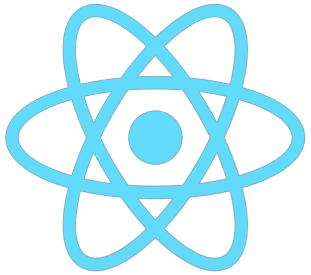

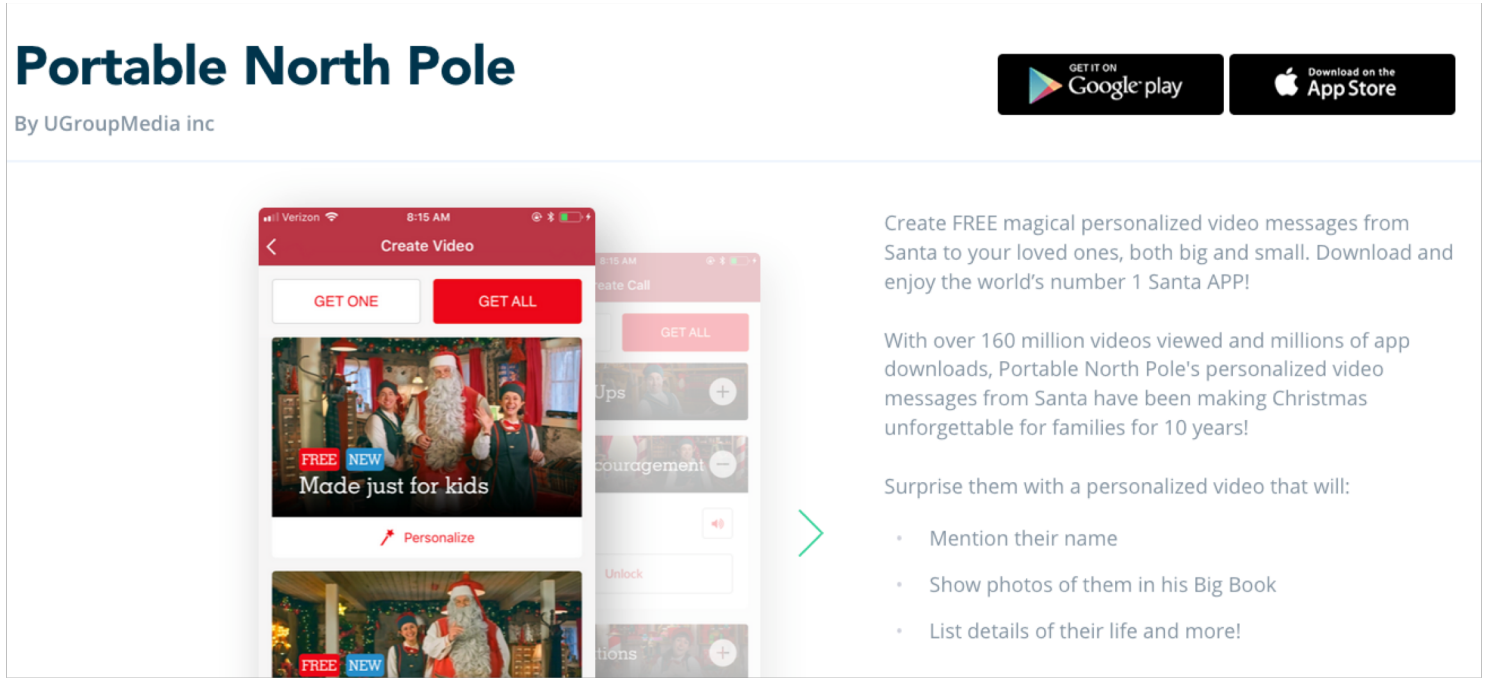
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By UGroupMedia inc
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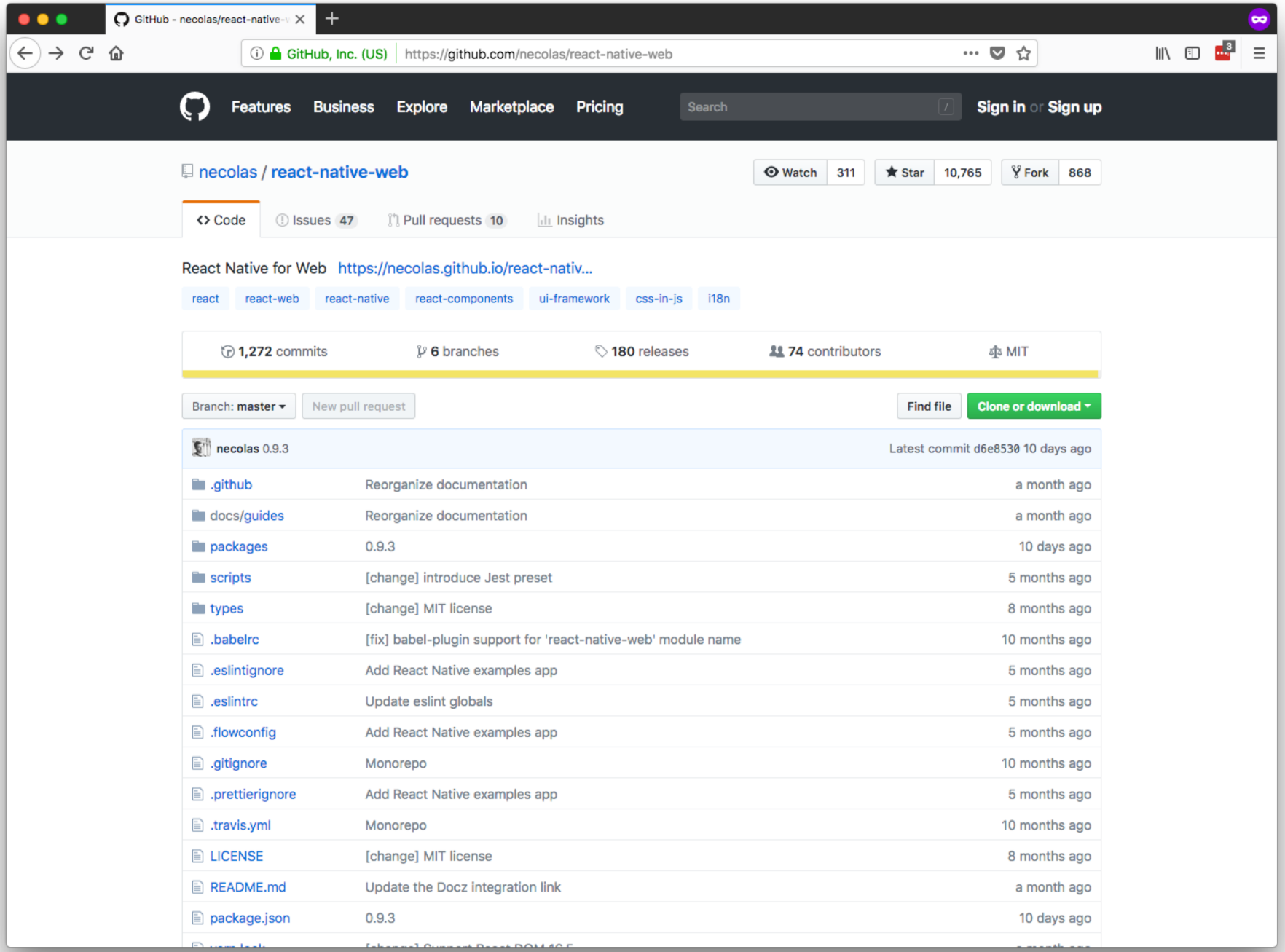
GET ONE
GET ALL
FREE NEW
Made just for kids
Personalize
Create FREE magical personalized video messages from Santa to your loved ones, both big and small. Download and enjoy the world's number 1 Santa APP!
With over 160 million videos viewed and millions of app downloads, Portable North Pole's personalized video messages from Santa have been making Christmas unforgettable for families for 10 years!
Surprise them with a personalized video that will:
Mention their name
Show photos of them in his Big Book
List details of their life and more!

Demo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Find file
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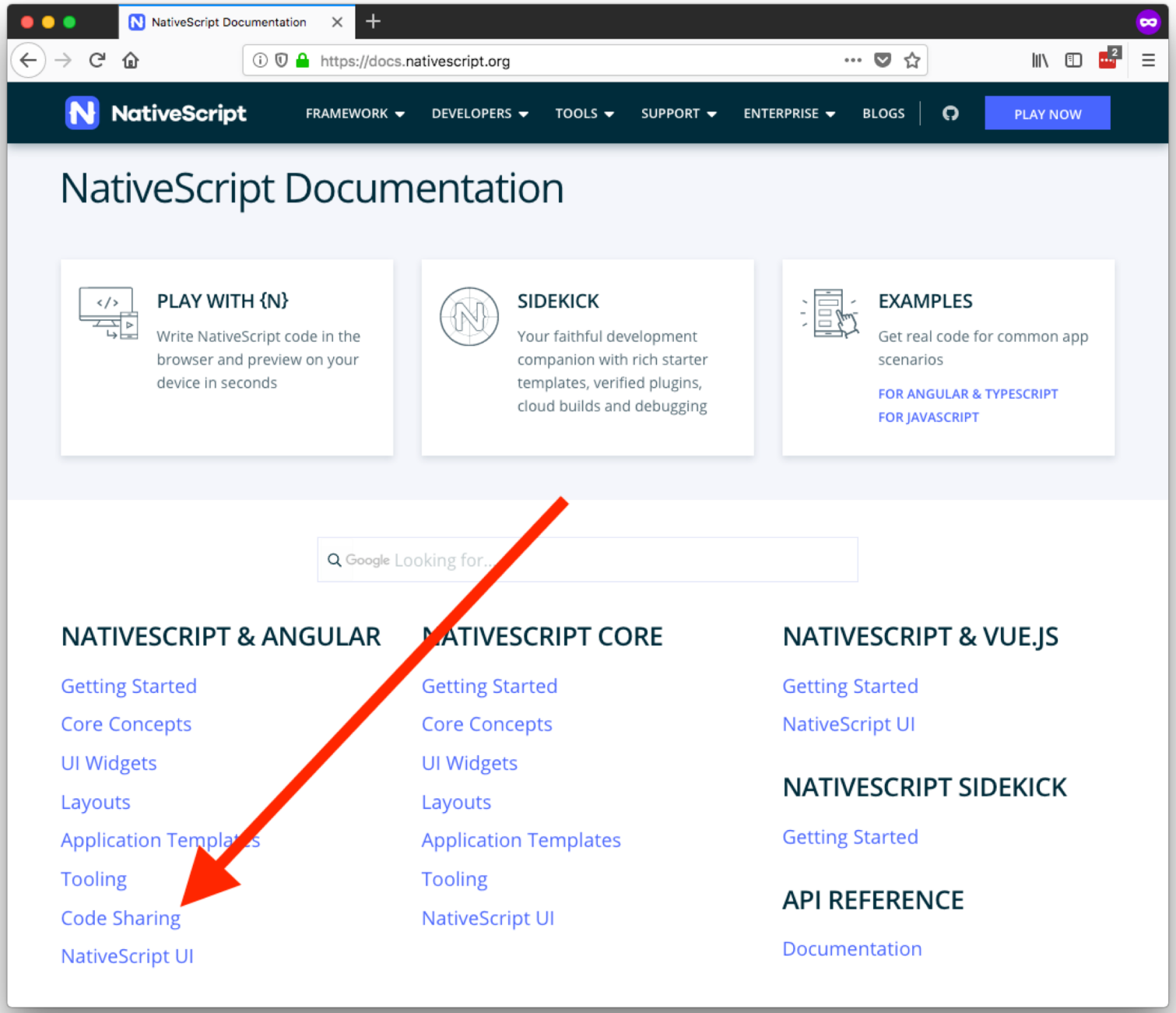
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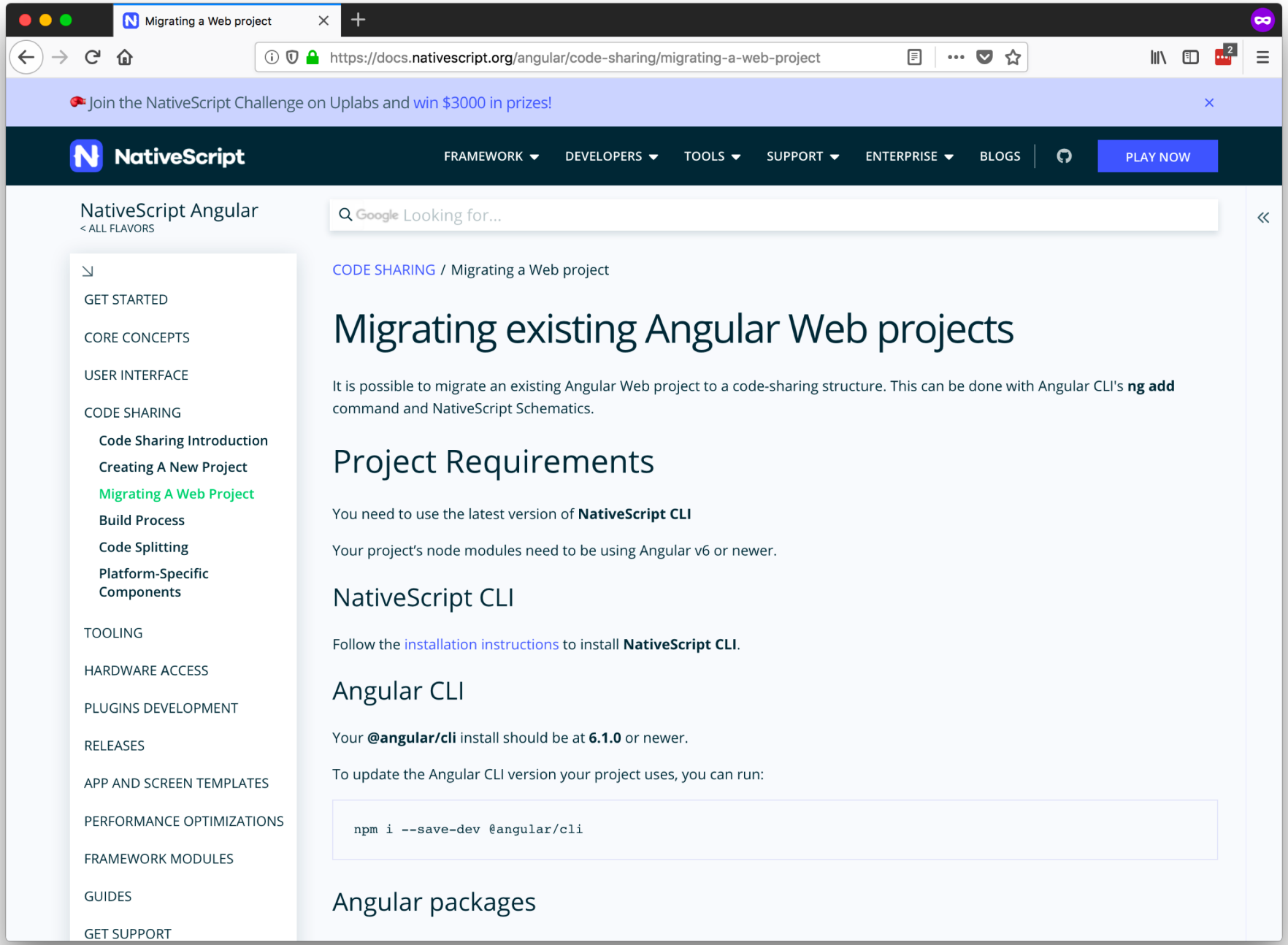
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USER INTERFACE
CODE SHARING
Code Sharing Introduction
Creating A New Project
Migrating A Web Project
Build Process
Code Splitting
Platform-Specific Components
TOOLING
HARDWARE ACCESS
PLUGINS DEVELOPMENT
RELEASES
APP AND SCREEN TEMPLATES
PERFORMANCE OPTIMIZATIONS
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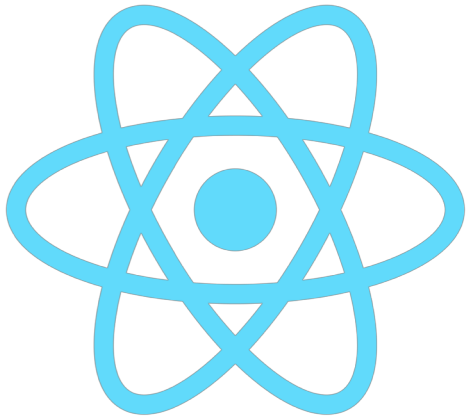
GET SUPPORT
CODE SHARING / Migrating a Web project
Migrating existing Angular Web projects
It is possible to migrate an existing Angular Web project to a code-sharing structure. This can be done with Angular CLI's ng add command and NativeScript Schematics.
Project Requirements
You need to use the latest version of NativeScript CLI
Your project's node modules need to be using Angular v6 or newer.
NativeScript CLI
Follow the installation instructions to install NativeScript CLI.
Angular CLI
Your @angular/cli install should be at 6.1.0 or newer.
To update the Angular CLI version your project uses, you can run:
npm i --save-dev @angular/cli
Angular packages



What do you think?

Thanks!

@tjvantoll