First steps with Capacitor… in the real world

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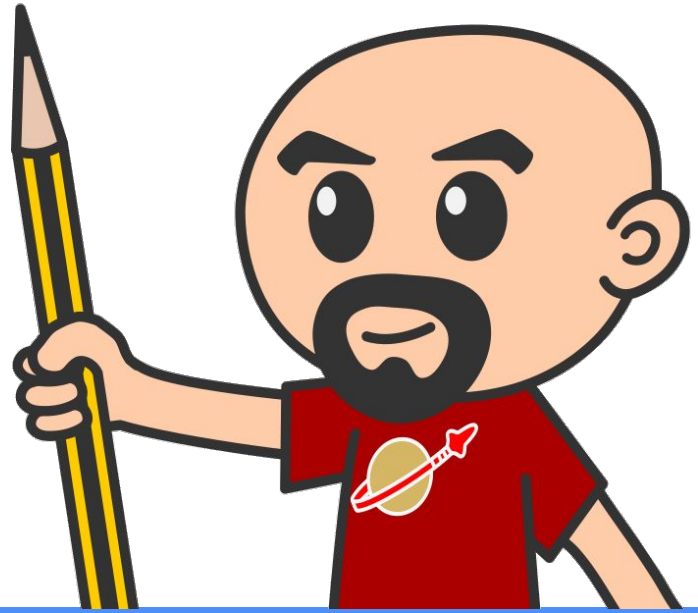
dreamer and all-around geek



OVH
Team DevRel

OVH : Key Figures

1.3M Customers worldwide in 138 Countries

1.5 Billions of investment over five years

+ 2 000 Employees

27 Datacenters

4 DC under construction

2 DC in project

18 Years of Innovation

19 Countries

300k Dedicated Servers

200k Private cloud VMs running

500k Public cloud Instances created in a month

13 Tbps bandwith

33 Points of presence

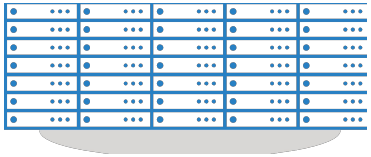
4 Anti DDoS capacity

Hosting capacity : 1.3M Physical Servers

OVH: A Global Leader on Cloud

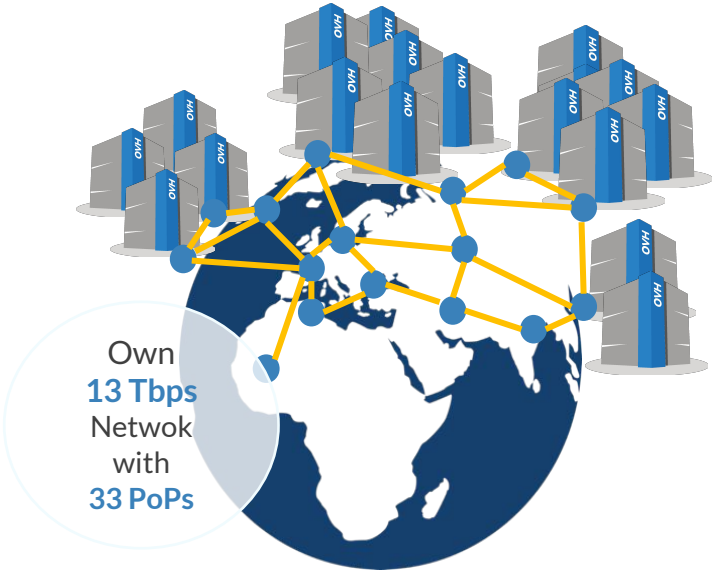
200k Private cloud VMs running

1 **Dedicated IaaS Europe**



Hosting capacity : **1.3M** Physical Servers

360k Servers already deployed



2018
27 Datacenters

2020
50 Datacenters

> **1.3M** Customers in **138** Countries

Ranking & Recognition

1st **European** Cloud Provider*

1st **Hosting** provider in Europe
1st **Provider** Microsoft Exchange
Certified vCloud Datacenter
Vmware Global Service Provider 2013-2016
Veeam Best Cloud Partner of the year (2018)

* *Netcraft 2017 -*

OVH: Our solutions

Cloud

- VPS
- Public Cloud
- Private Cloud
- Serveur dédié
- Cloud Desktop
- Hybrid Cloud

Mobile Hosting

- Containers
- Compute
- Database
- Object Storage
- Securities
- Messaging

Web Hosting

- Domain names
- Email
- CDN
- Web hosting
- MS Office
- MS solutions

Telecom

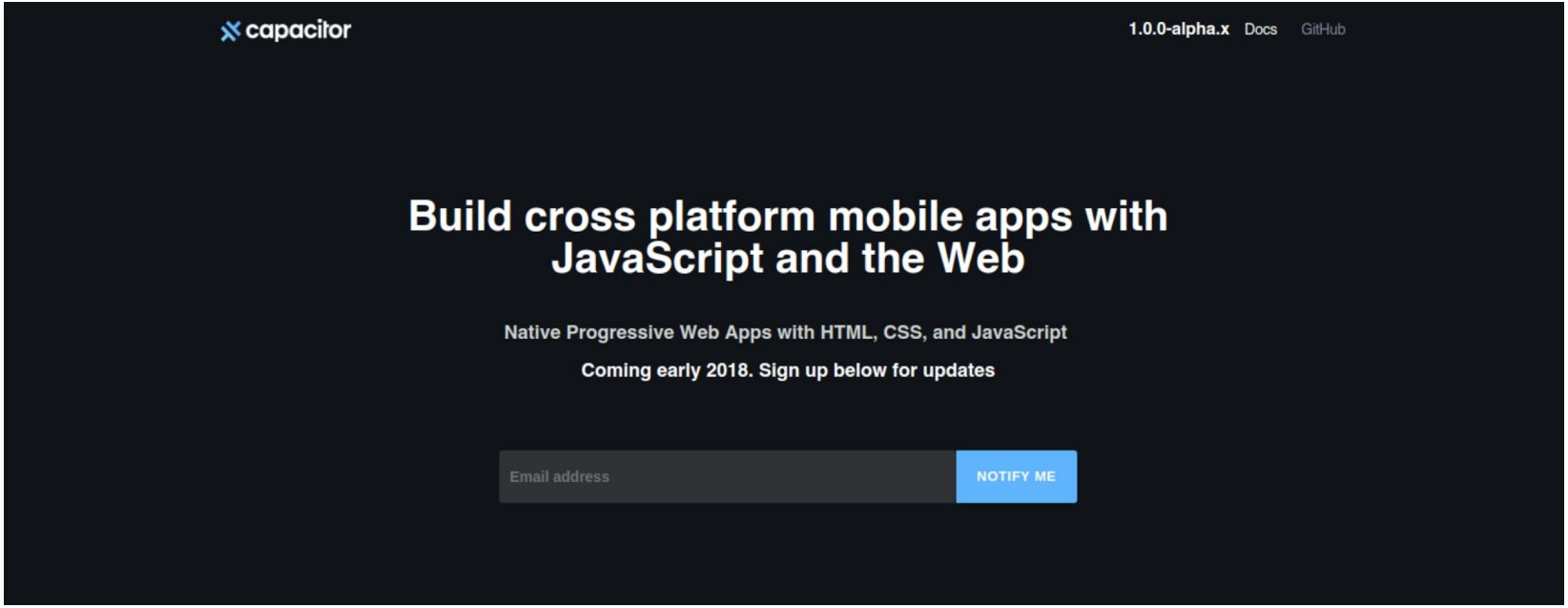
- VoIP
- SMS/Fax
- Virtual desktop
- Cloud HubiC
- Over theBox

Capacitor

The next generation Cordova

What's Capacitor?

Cross-platform app runtime making it easy to build web apps that run natively on iOS, Android and web



Spiritual heir to Apache Cordova

Evolution, not revolution

Spiritual heir to Apache Cordova

Support for many Cordova plugins

Extensible and evolutif

- Close to web-standards
- Plugin API
  - Swift on iOS
  - Java on Android
  - JavaScript for the web.

Developer Friendly

Easy to get started

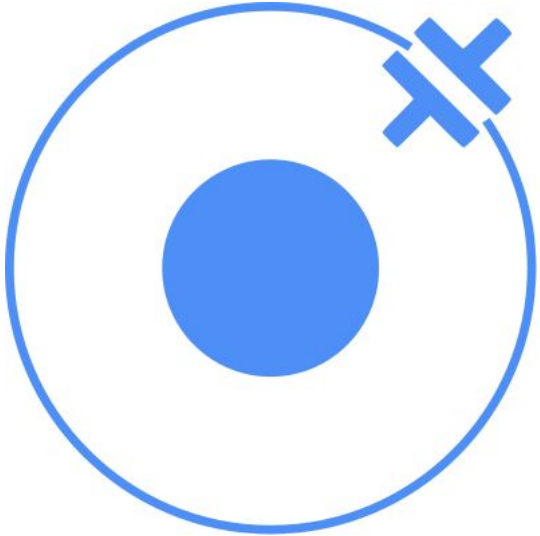
Works on any framework

You still need the platform tools

Android Studio and/or Xcode
to build the native packages

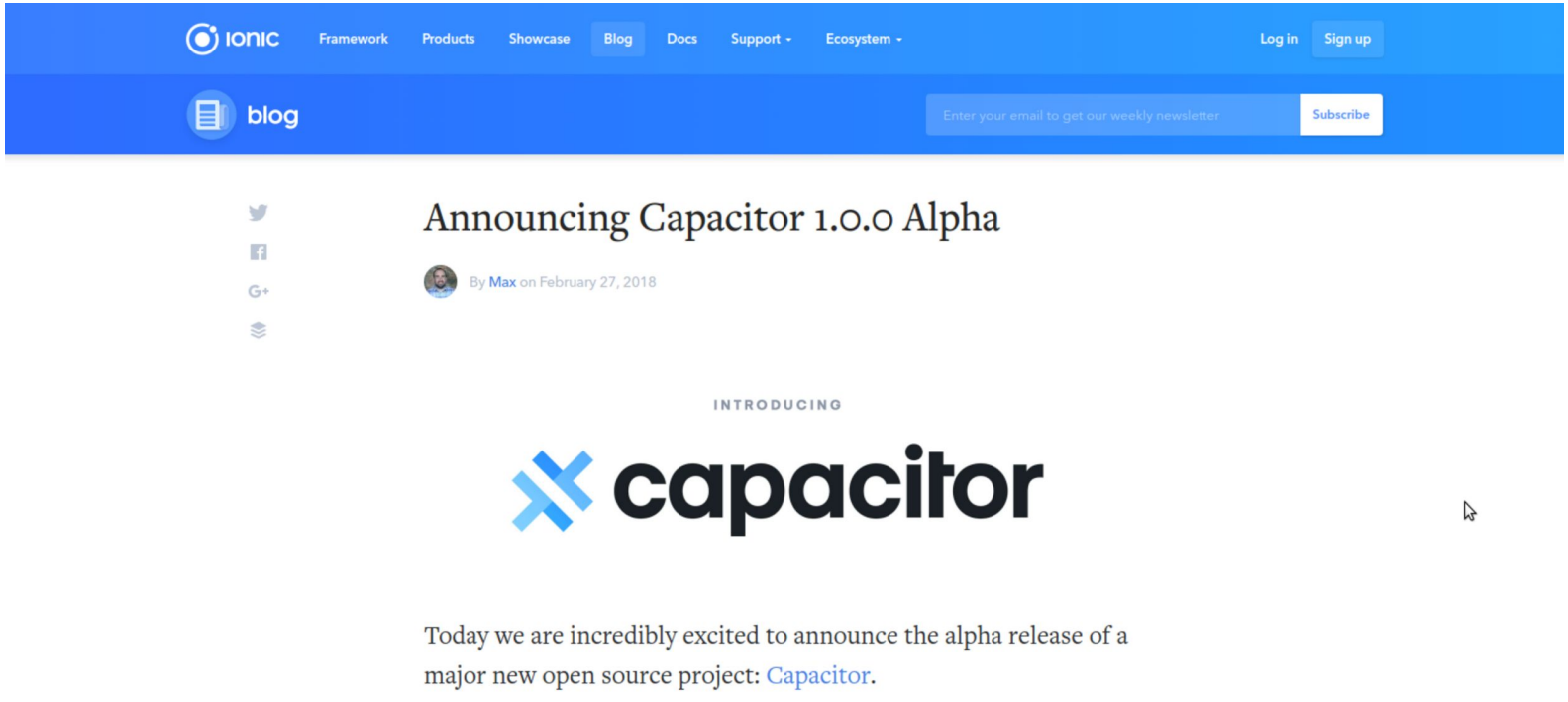
First steps testing Capacitor

Capacitor in an Ionic app



Made by the Ionic team

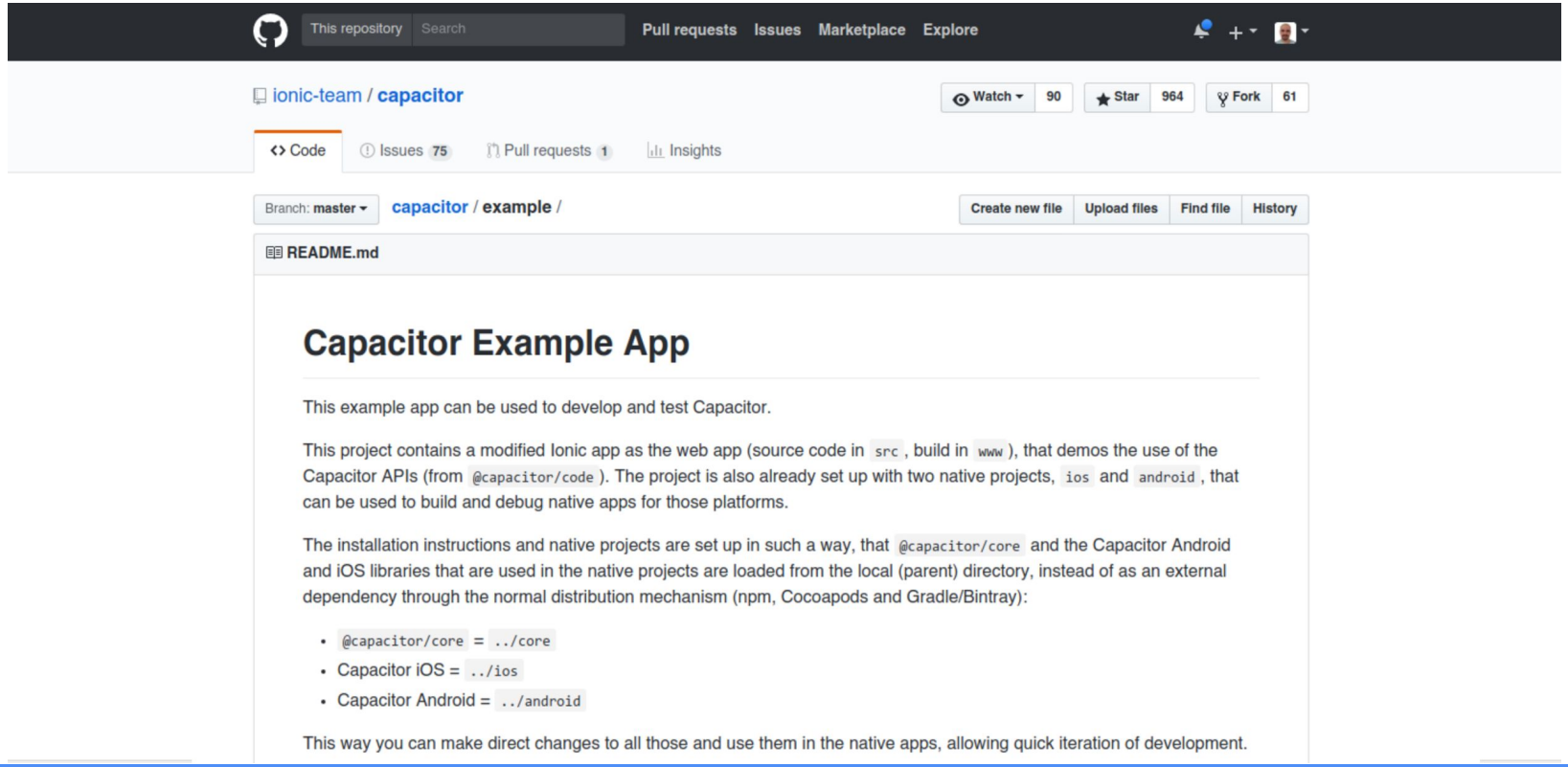
To replace Cordova in next Ionic



Official example built on Ionic

Showcasing the upcoming Ionic 4

Let's try the official example



Using directly the Capacitor repository

Custom built project, not a production app

- @capacitor/core and native libs loaded from local directory

Let's build the Android version

1. Build Capacitor Core Module

Start by building the Capacitor Core Module in `/core`:

```
cd ../core

npm install
npm run build
npm link
```

2. Build Example App

Switch back over to this example project in `/example` where you first install dependencies and link in the `@capacitor/core` you just built in the step before, then build the app and copy the build files to the correct `public` directories for both the iOS and Android example apps:

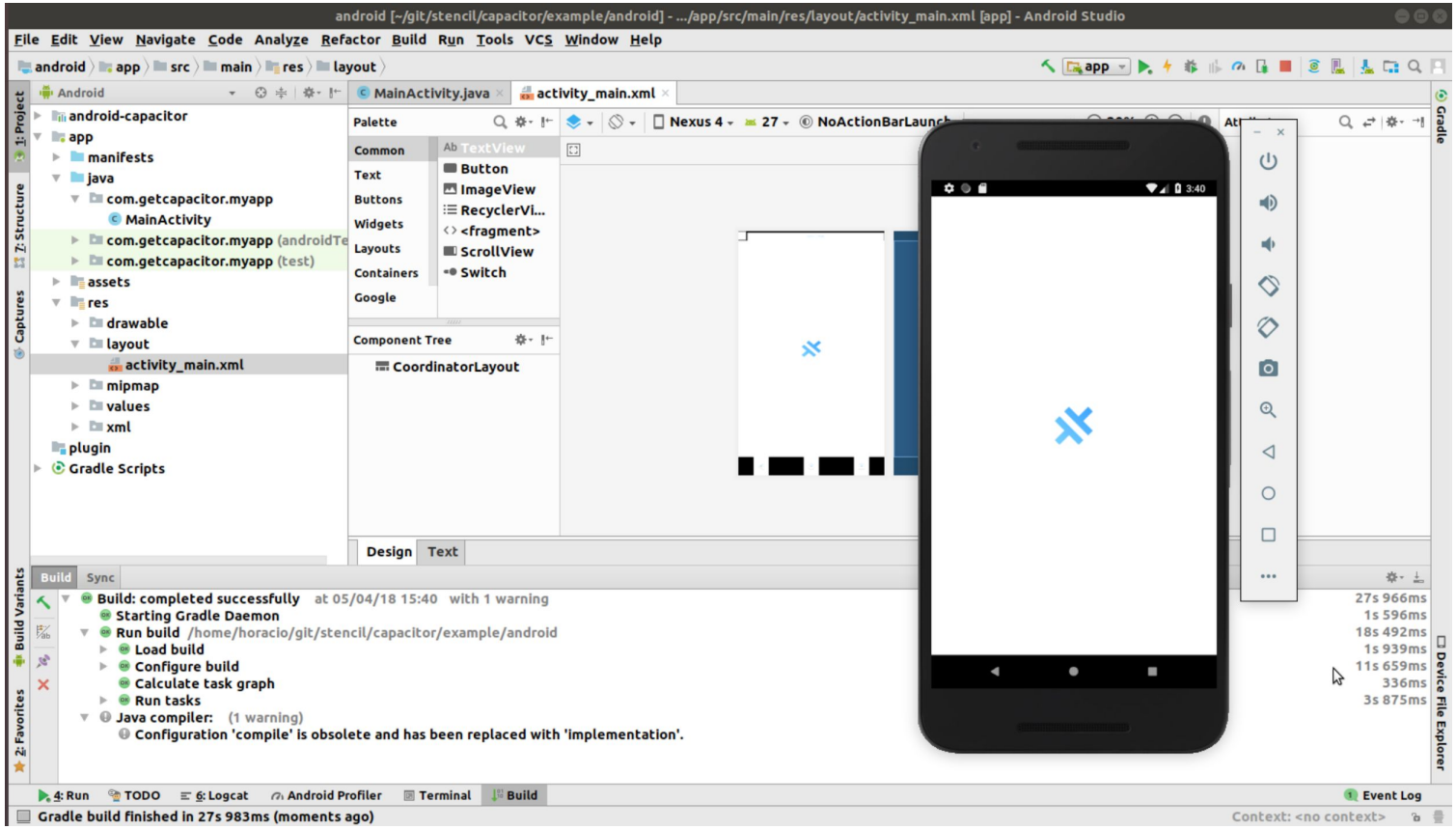
```
cd ../example

npm install
npm link @capacitor/core

npm run build
npm run copy
```

3. Build and run the native Capacitor Apps

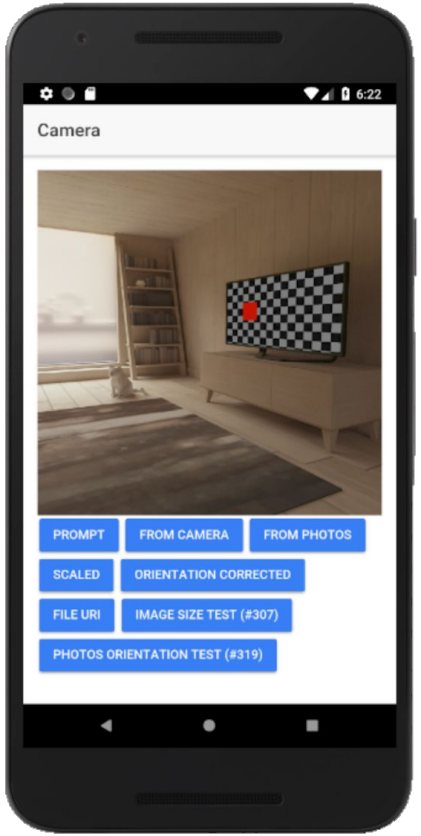
Now that everything is in place you can build the native Capacitor Apps:

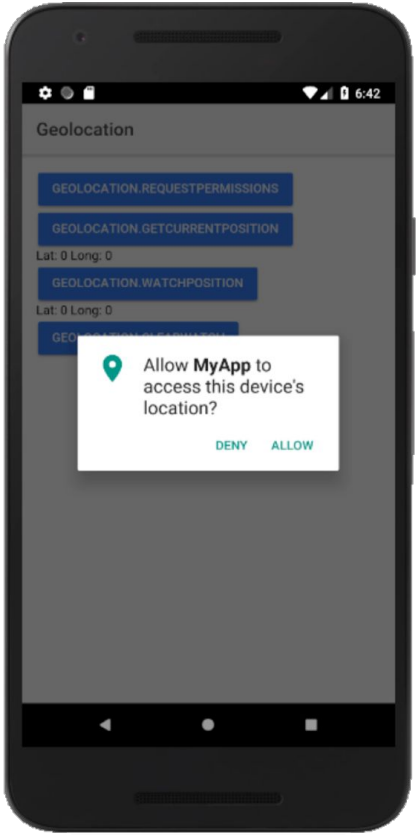
Some pre-building and building needed...

We now have an Android project

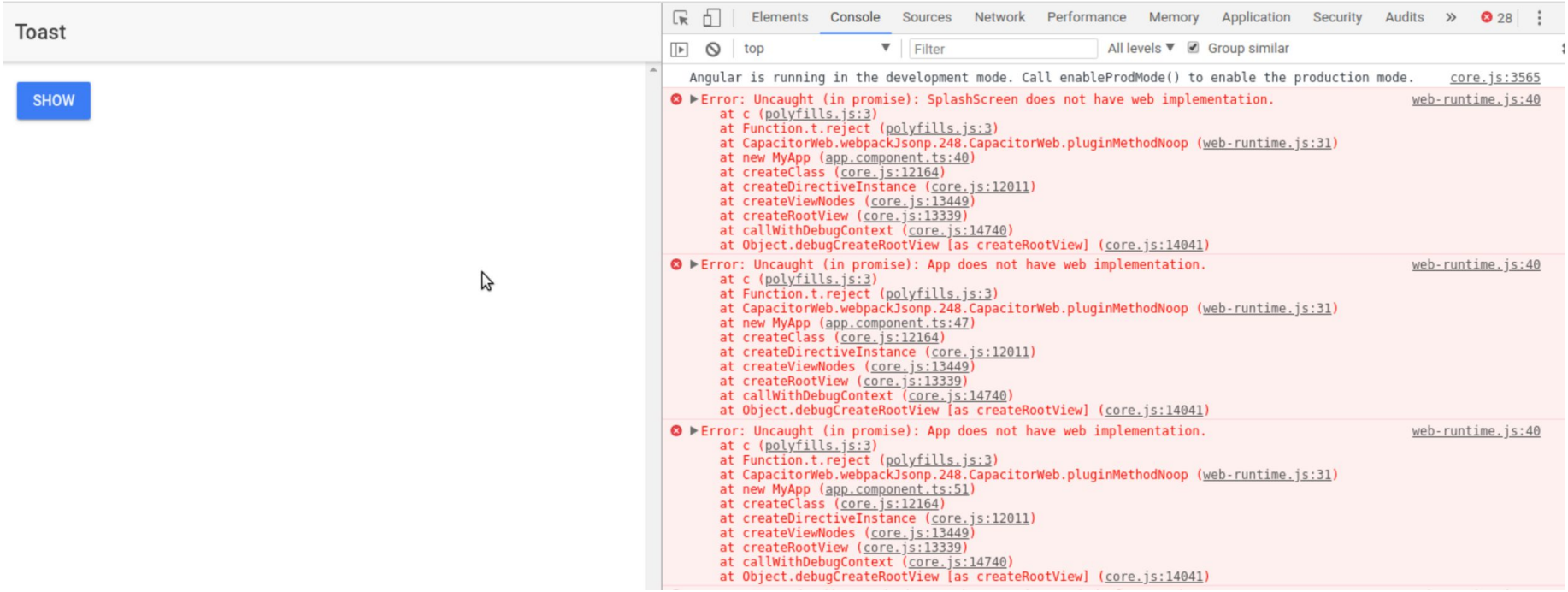


Easy and painless Android app



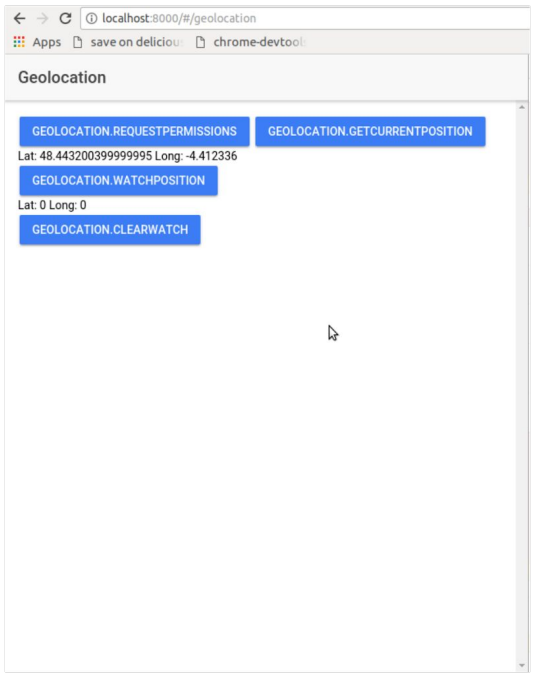


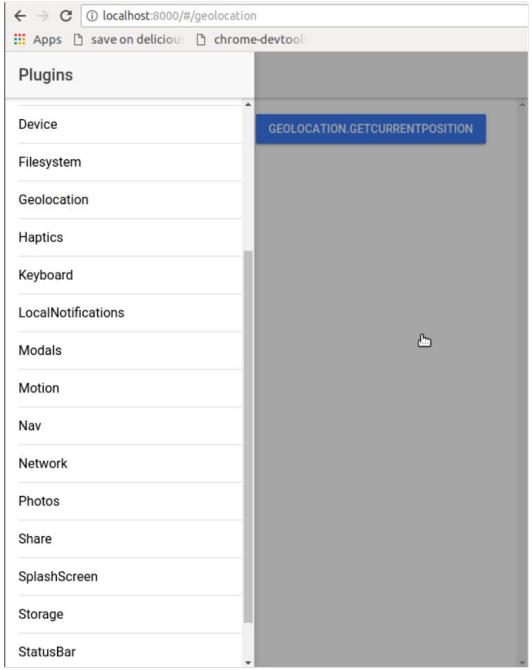
And in PWA mode?

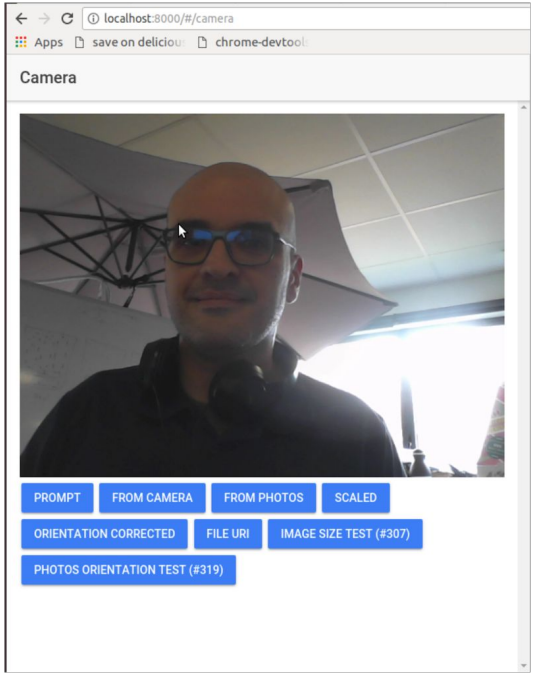


Some elements haven't web implementation (yet?)

But it still works!







It fails gracefully for unsupported plugins

First test: successful!

Capacitor 1 - Scepticism 0

Let's try something harder

stencil & capacitor

Capacitor without Ionic

I want to use it Capacitor
with my own toolset

I'm a Web Components guy

And I speak a lot about Polymer

But Polymer is in a transition phase

Polymer 2.x : bower based

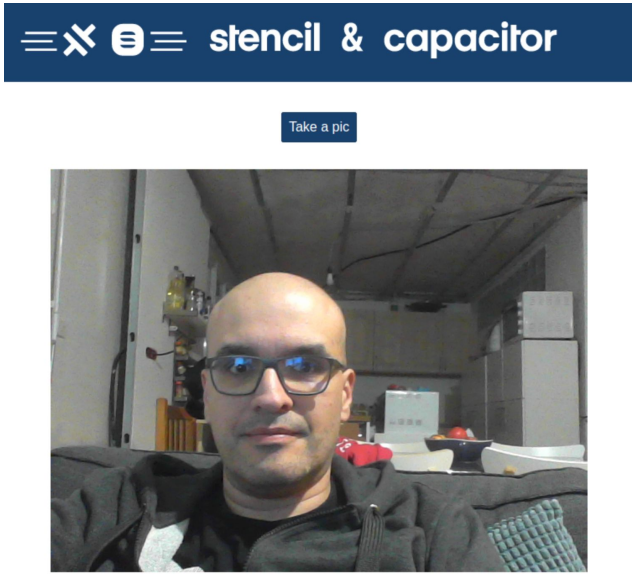
Upcoming Polymer 3: npm based

So what to use?

Stencil, of course!

The magical, reusable web component compiler

Let's begin with a simple example



A Camera app, working well on web mode

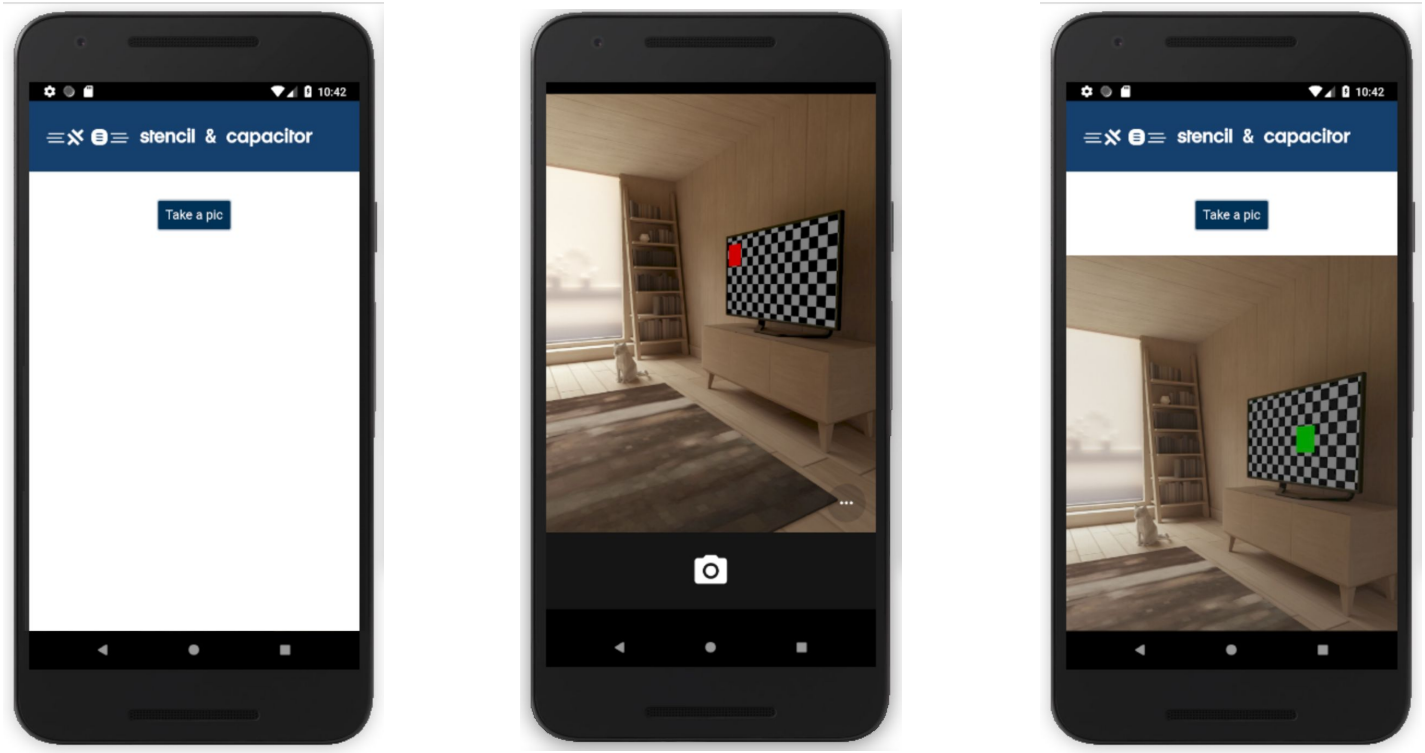
Using standard Media Capture and Streams API

Let's charge it with Capacitor

We want the same behavior

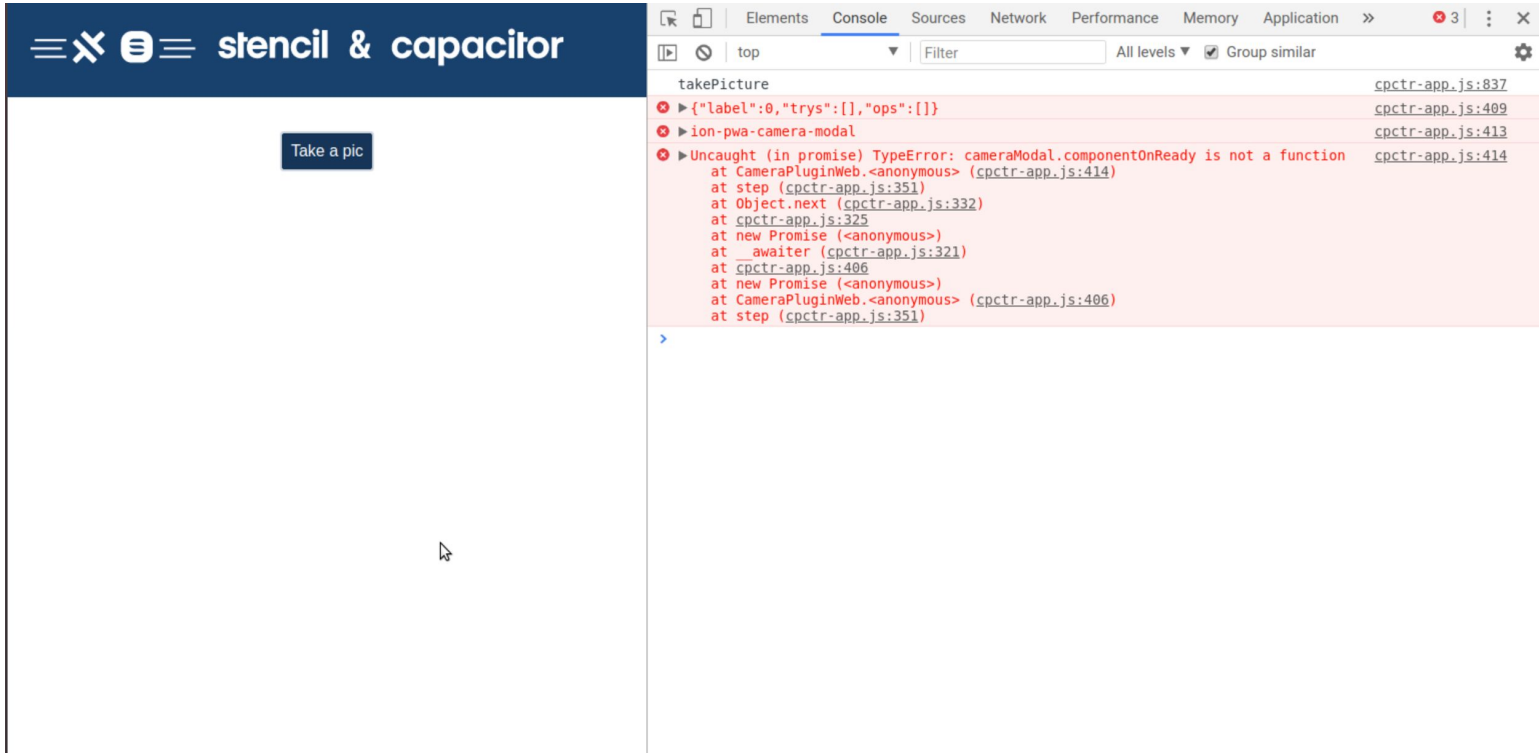
But now in Android, iOS AND web

And does it work?



Yes it does… in native mode only!

But not in PWA mode :(



And a big question: why?

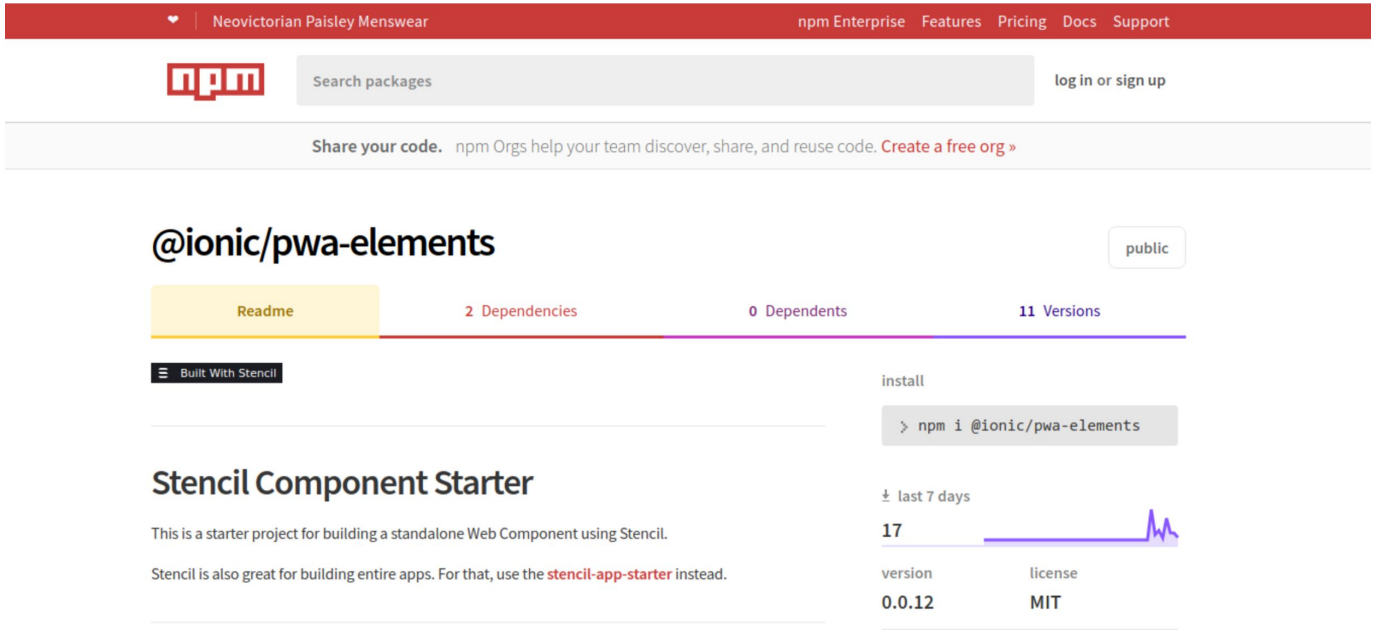
Well, let's spot the differences...

Searching on the example code

hmmmm, @ionic/pwa-elements, what's that?

@ionic/pwa-elements

A non-documented private-repository w.i.p.
Stencil-based project by Ionic team



Adding @ionic/pwa-elements

According to Stencil doc:

In a stencil-app-starter app

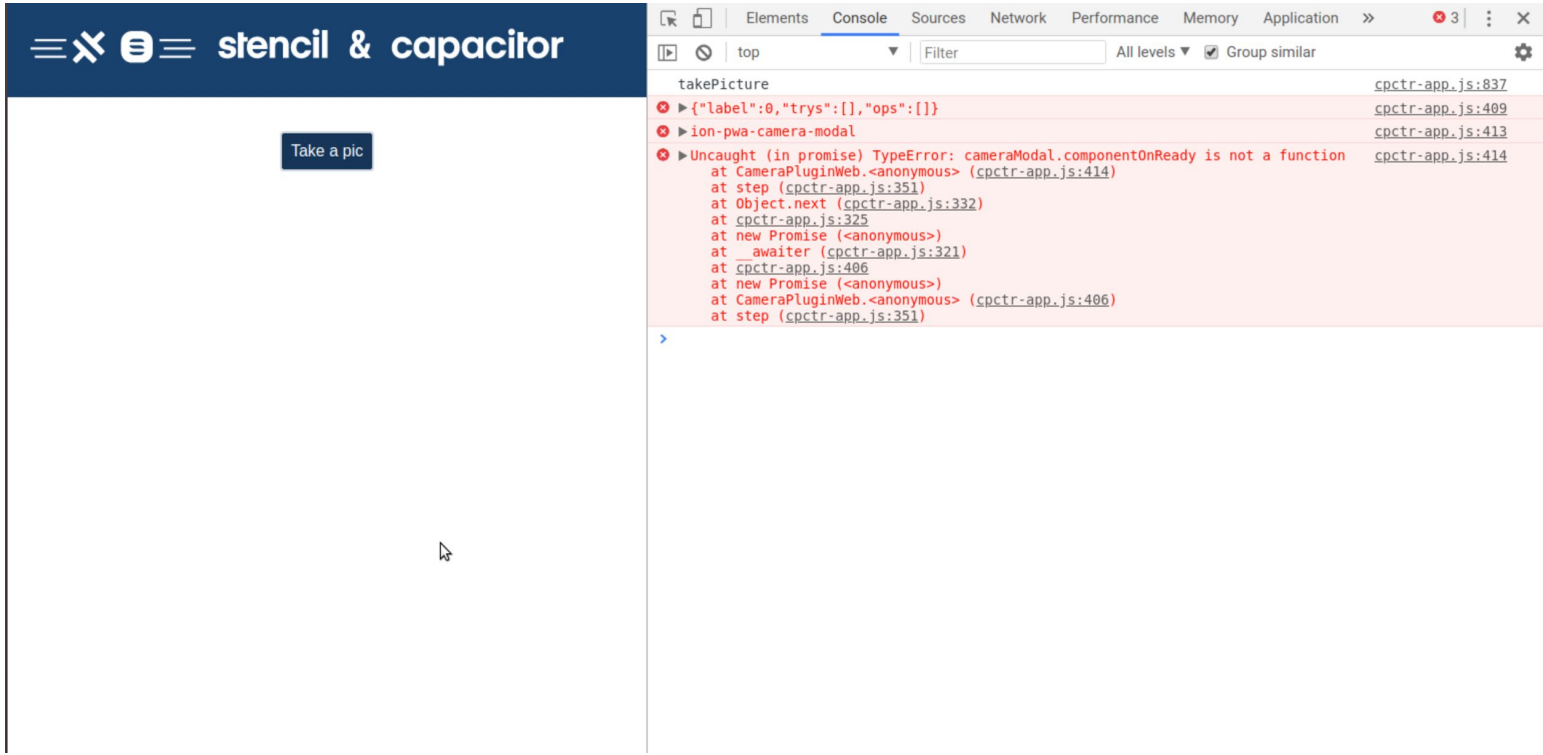
- Run `npm install my-name --save`
- Add `{ name: 'my-name' }` to your collections
- Then you can use the element anywhere in your template, JSX, html etc

But when trying to do that:

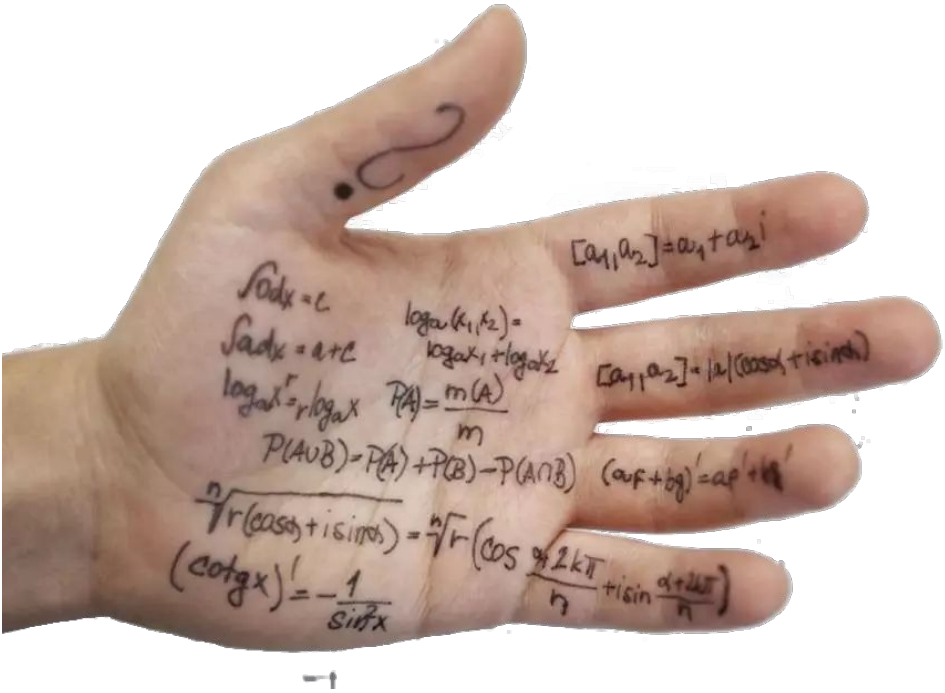
```
[ WARN  ]  As of v0.6.0, "config.collections" has been deprecated in favor of standard ES module imports. Instead of
           listing collections within the stencil config, collections should now be imported by the app's root
           component or module. The benefit of this is to not only simplify the config by using a standards approach
           for imports, but to also automatically import the collection's types to improve development. Please remove
           "config.collections" from the "stencil.config.js" file, and add this import to your root component or root
           module: import '@ionic/pwa-elements';
```


Adding @ionic/pwa-elements

But when importing it in the main element



Let's cheat!



Manually adding a

`<ion-pwa-camera-modal>`

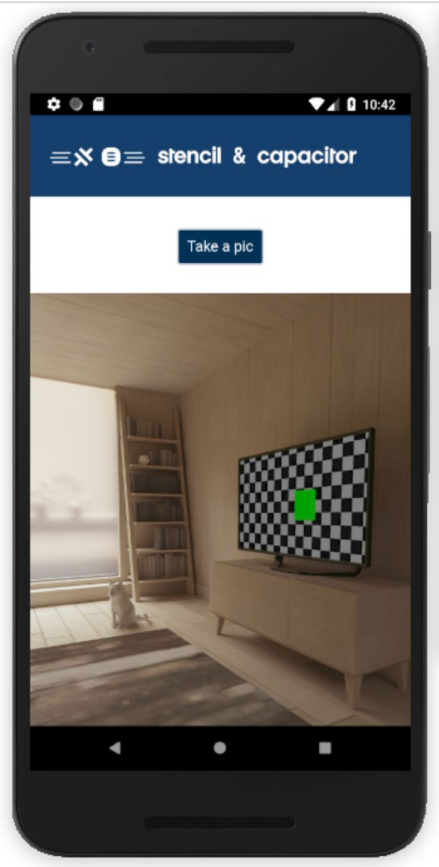
element

Only to force it to be recognized...

And then...

It's a kind of magic!

On Android and Web



stencil & capacitor

Take a pic

Second test: successful!

Capacitor 2 - Scepticism 0

And now?

What's next

Work in progress

Working on an app, needs to be ready for next Warp 10 Meetup on April 17th

Over a Stencil+Polymer hybrid

Stencil and Polymer mix already worked on

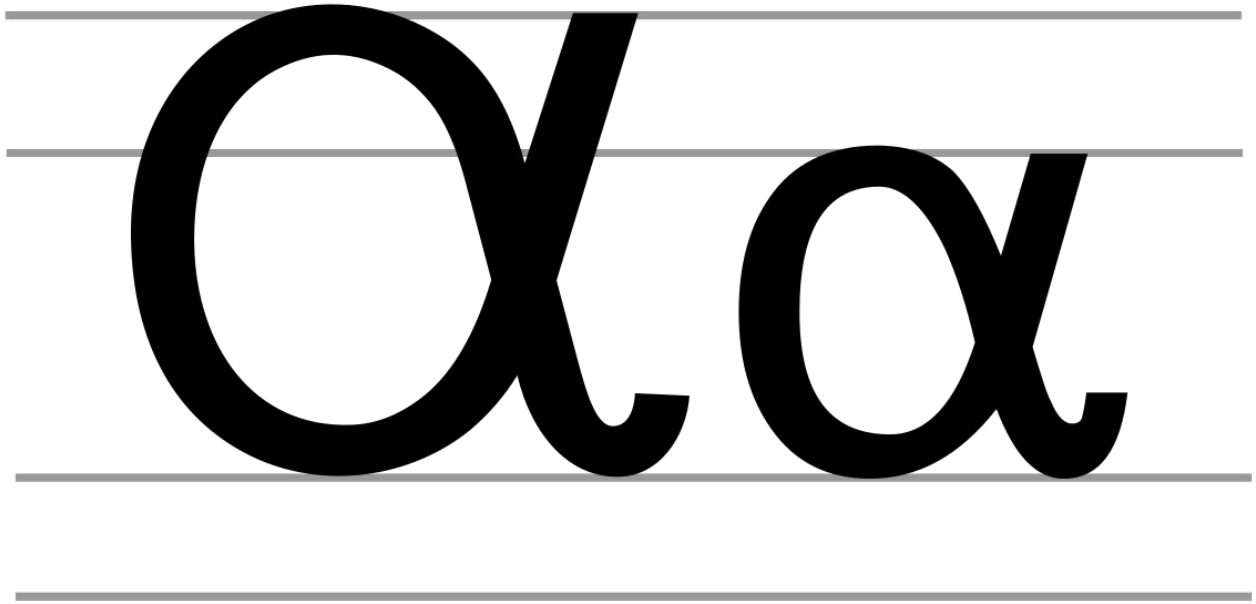
And Capacitor already works

A true winner

Conclusions

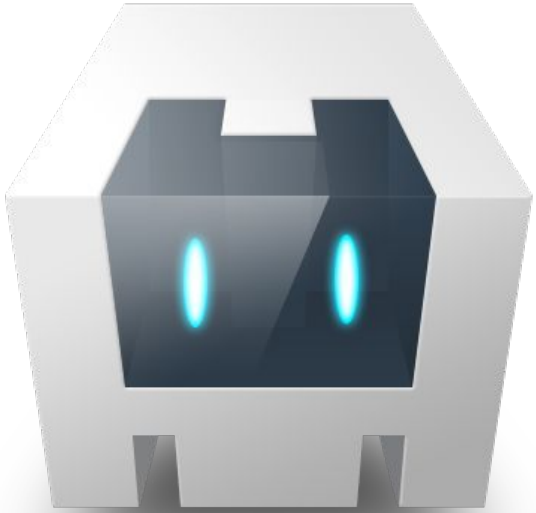
Capacitor or not?

Paint is still wet



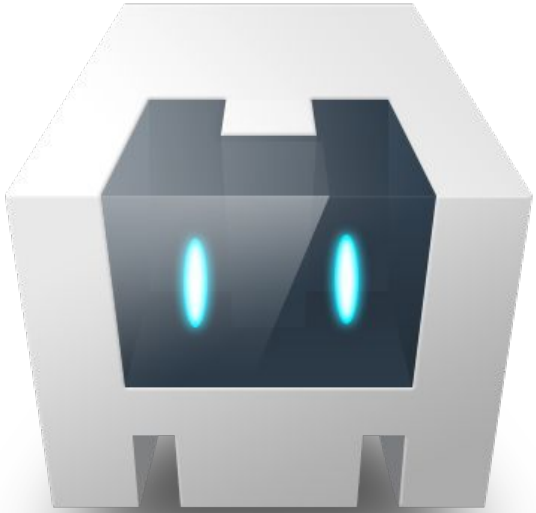
Some things are broken
Some things will change

Easy to use



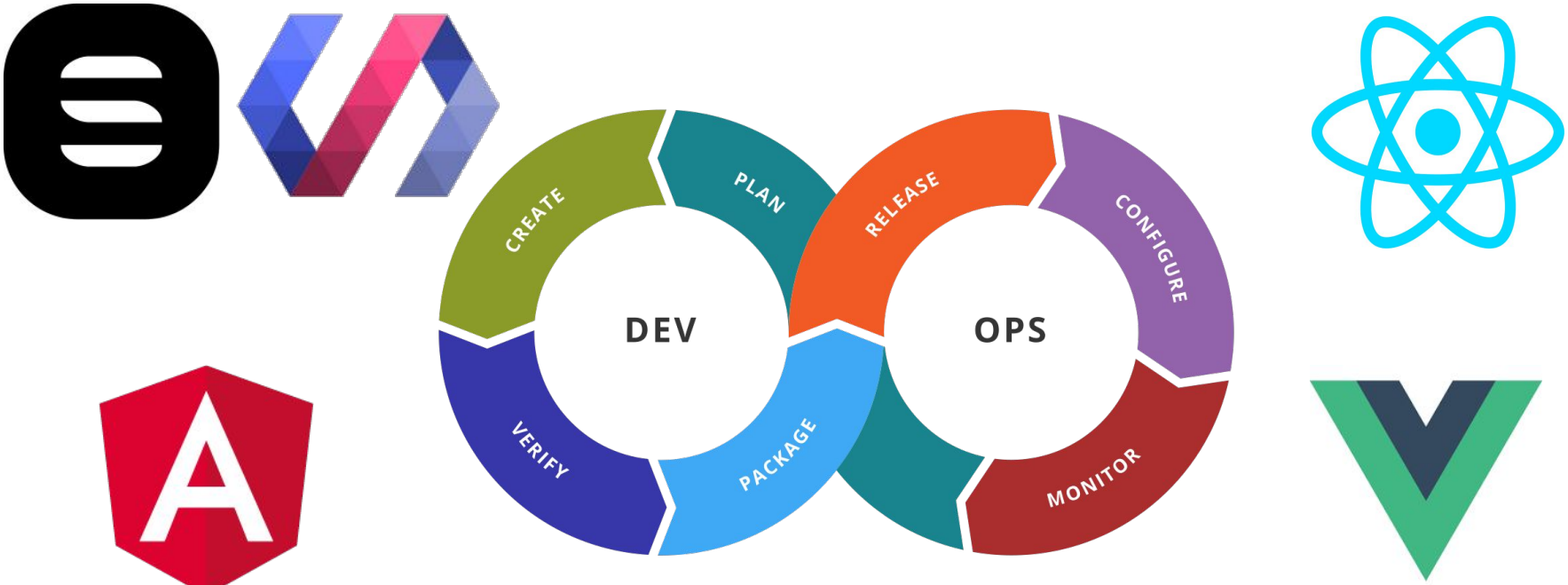
Friendlier than Cordova

Yet extensible



You can use existing Cordova plugins

Not opinionated



Easy to use in any framework

Easy to integrate in any dev toolchain

Thank you!


thank you
danke
謝謝
ngiyabonga
شكراً جزيلاً
рахмат
teşekkür ederim
спасибо
gracias
dank je
merci
obrigado
dziękuję
bedankt
hvala
mauruuru
sukriya
kop khun krap
go raibh maith agat
mochchakkeram
tapadh leat
arigatô
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спасибі
misaotra
matondo
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감사합니다
তোমাকে ধন্যবাদ