

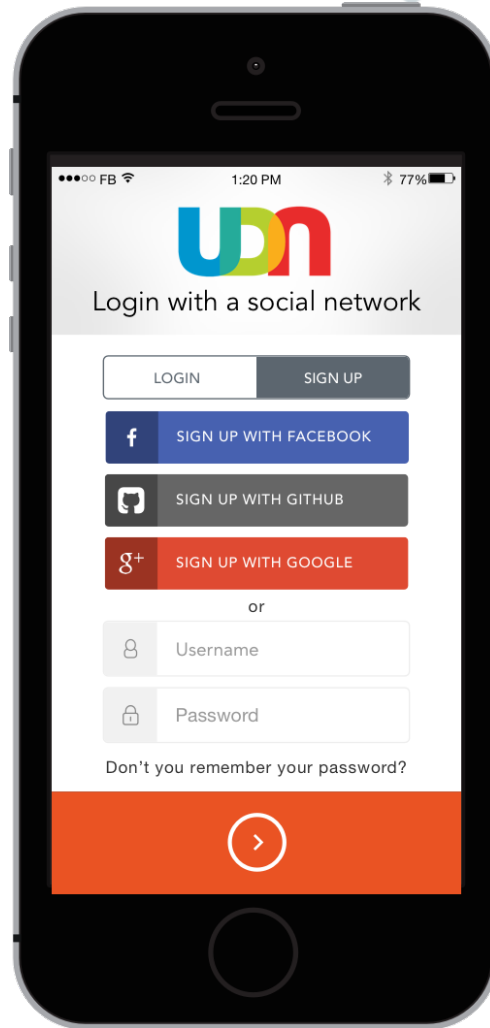
# Mobile Services

(aggiungere rapidamente servizi alla propria app)

<https://market.ionicframework.com/>



# Auth Service



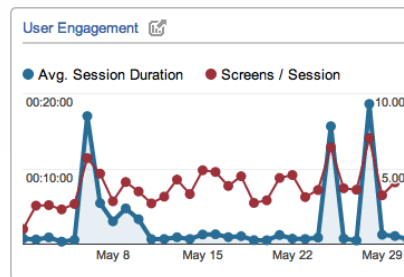
<https://auth0.com/blog/ionic-framework-how-to-get-started/>

<https://firebase.google.com/docs/auth/>

# Analytics Service



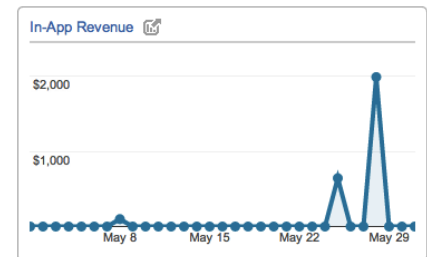
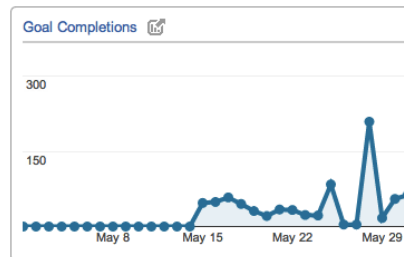
## Engagement



Screens

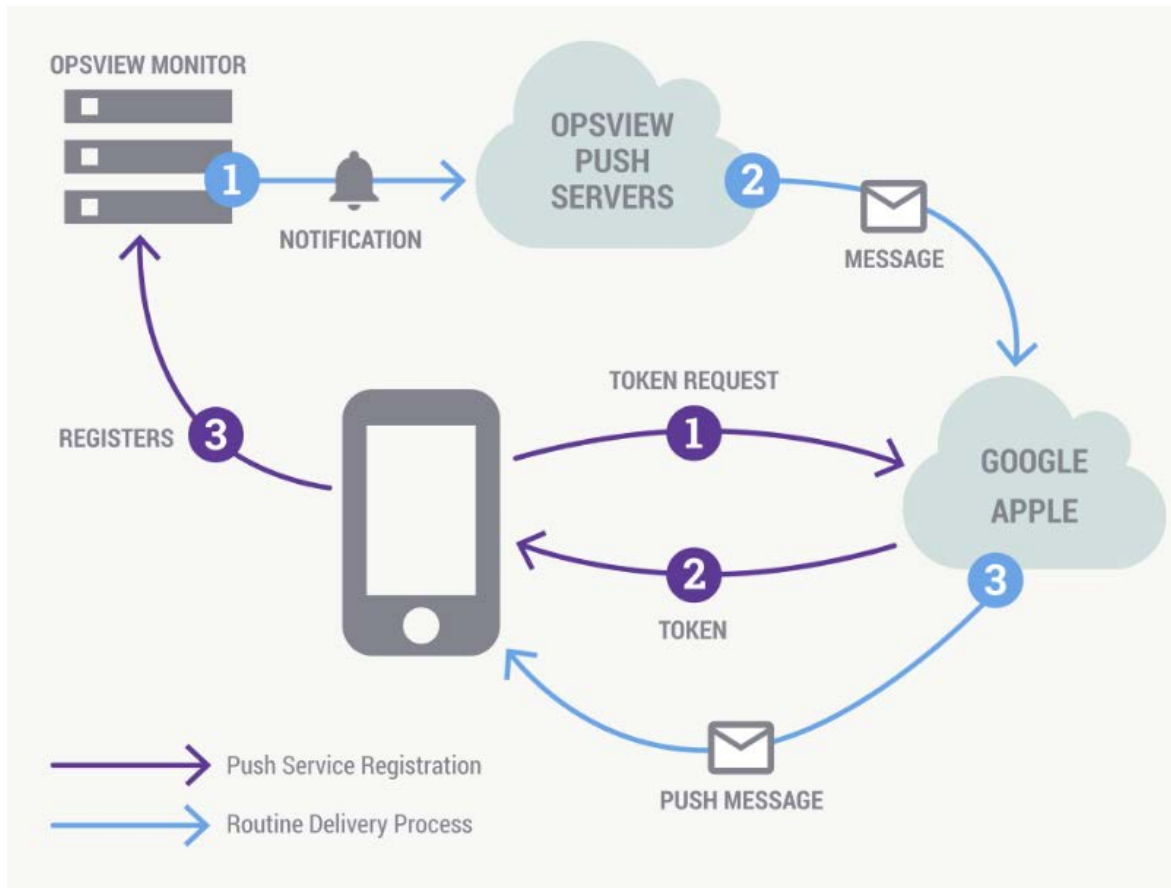
Screen Name	Screen Views
AnalyticsMainActivity	17,669
Profile Picker	12,299
Line Chart Settings	3,259
Alert Viewer	3,222
Login	1,891

## Outcomes



<https://ionicframework.com/docs/native/google-analytics/>

# Push Service

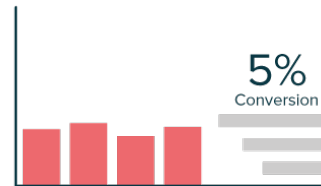
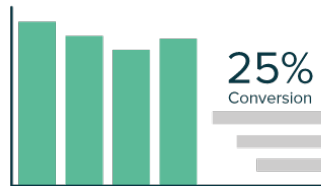


<https://knowledge.opsview.com/docs/getting-started-with-push>

# A/B Test Service



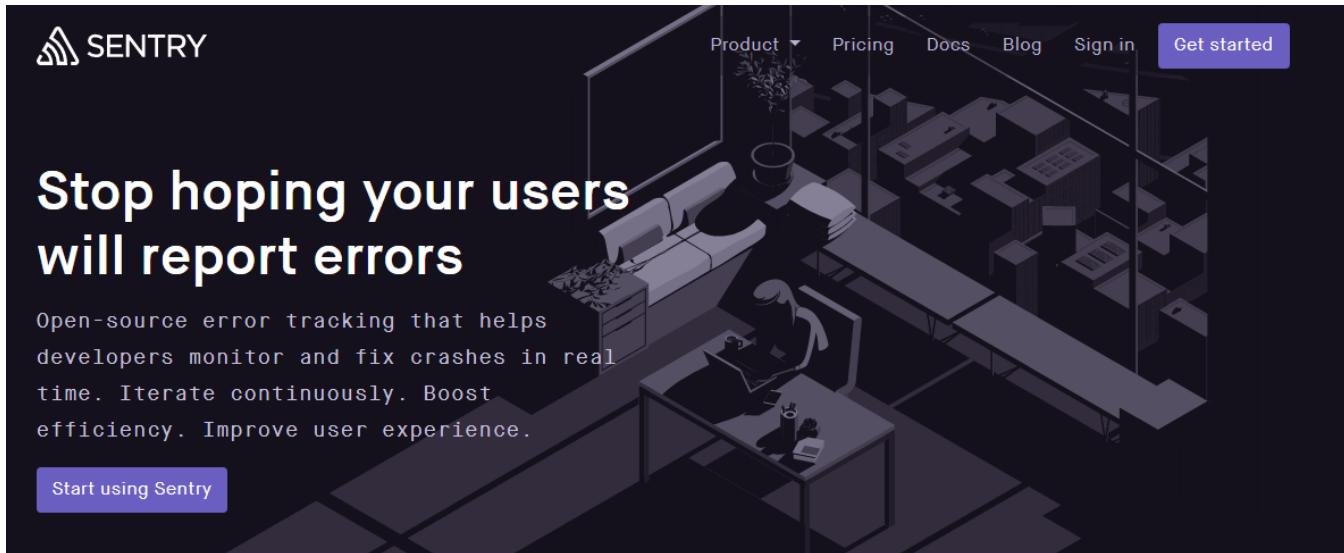
VS.



<https://github.com/optimizely/optimizely-cordova-plugin>

## Logger / Crash Service

La mia applicazione è installata su 10 mila device. Sono sicuro che tutto funzioni come avevo previsto?







**SENTRY**

Product Pricing Docs Blog Sign in [Get started](#)

# Stop hoping your users will report errors

Open-source error tracking that helps developers monitor and fix crashes in real time. Iterate continuously. Boost efficiency. Improve user experience.

[Start using Sentry](#)

 <p>Crashlytics ★★★★★ (63) <a href="#">GET A QUOTE</a> <input type="checkbox"/> Compare</p>	 <p>Instabug ★★★★★ (40) <a href="#">TRY FOR FREE</a> <input type="checkbox"/> Compare</p>	 <p>Bugsee ★★★★★ (12) <a href="#">GET A QUOTE</a> <input type="checkbox"/> Compare</p>	 <p>Sentry ★★★★★ (23) <a href="#">GET A QUOTE</a> <input type="checkbox"/> Compare</p>
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# Logger / Crash Service





**Captain Planet / Heart** ⌵

ISSUES   EVENTS   OVERVIEW   USER FEEDBACK   RELEASES

★ Star   📶 Subscribe   ⚙️ Settings

Unresolved Issues ⌵

Sort by: Last Seen ⌵   🔍 is:unresolved ⌵ ⌵

		GRAPH:	24H	14D	EVENTS	USERS
<b>Error</b> <input type="checkbox"/>	<b>TypeError</b> poll(.../sentry/scripts/views.js) Object [object Object] has no method 'updateFrom' HEART-1D   ⌚ 6 days ago — 4 months old   🗨️ 1	 <span>⌵</span>	-----	-----	26	1
<b>Error</b> <input type="checkbox"/> ★	<b>javax.servlet.ServletException</b> org.hsqldb.jdbc.Util in throwError Something bad happened HEART-1G   ⌚ 6 days ago — 4 months old	 <span>⌵</span>	-----	-----	26	1
<b>Error</b> <input type="checkbox"/>	<b>script-src</b> example.com Blocked 'script' from 'example.com' HEART-1K   ⌚ 6 days ago — 4 months old	 <span>⌵</span>	-----	-----	26	1
<b>Error</b> <input type="checkbox"/>	<b>ZeroDivisionError</b> bin/raven in <main> divided by 0 HEART-1H   ⌚ 6 days ago — 4 months old	 <span>⌵</span>	-----	-----	26	1

# Signature

Componente standard Angular:

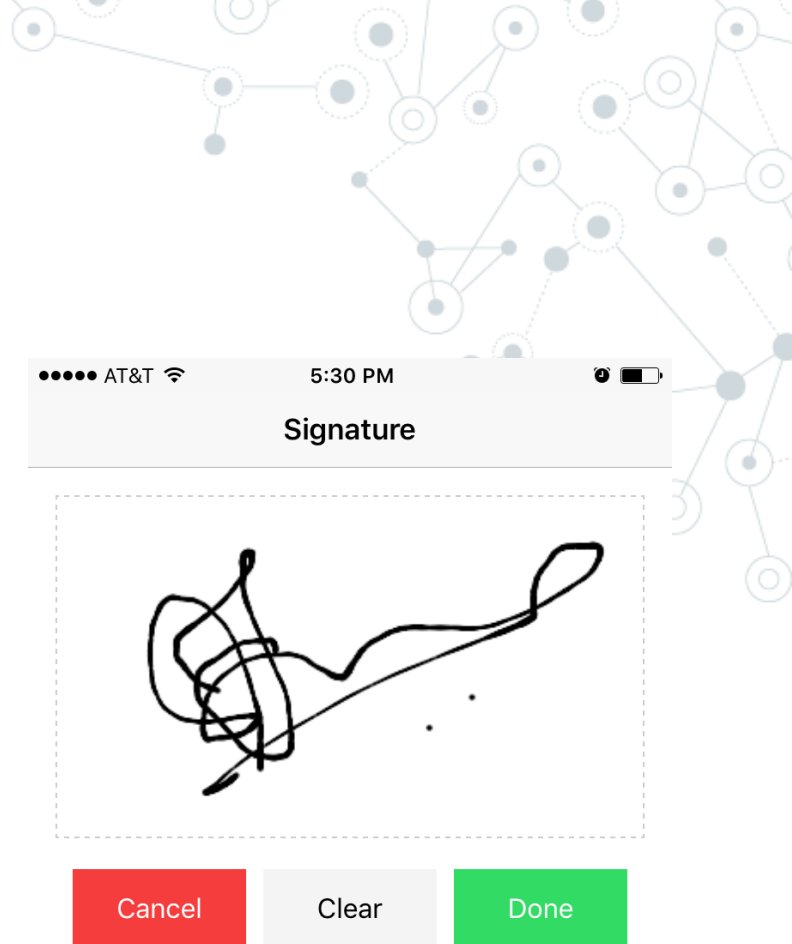
[https://www.npmjs.com/package/signature\\_pad](https://www.npmjs.com/package/signature_pad)

<https://github.com/wulfsocket/angular2-signaturepad>

Basato su HTML5 Canvas

Integrato in Ionic 3:

<https://github.com/srinivastamada/ionic3-angular4-signaturepad>



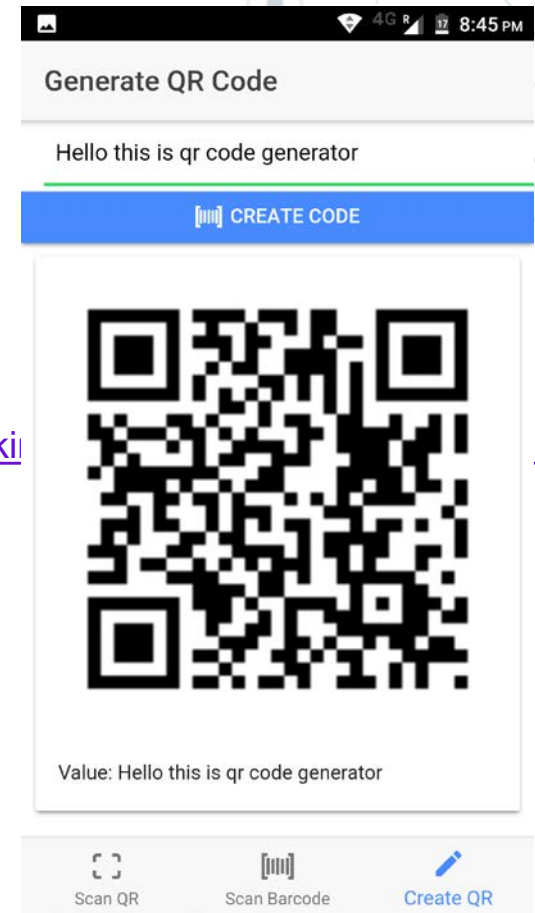


# Barcode / QR Code

<https://ionicframework.com/docs/native/barcode-scanner/>

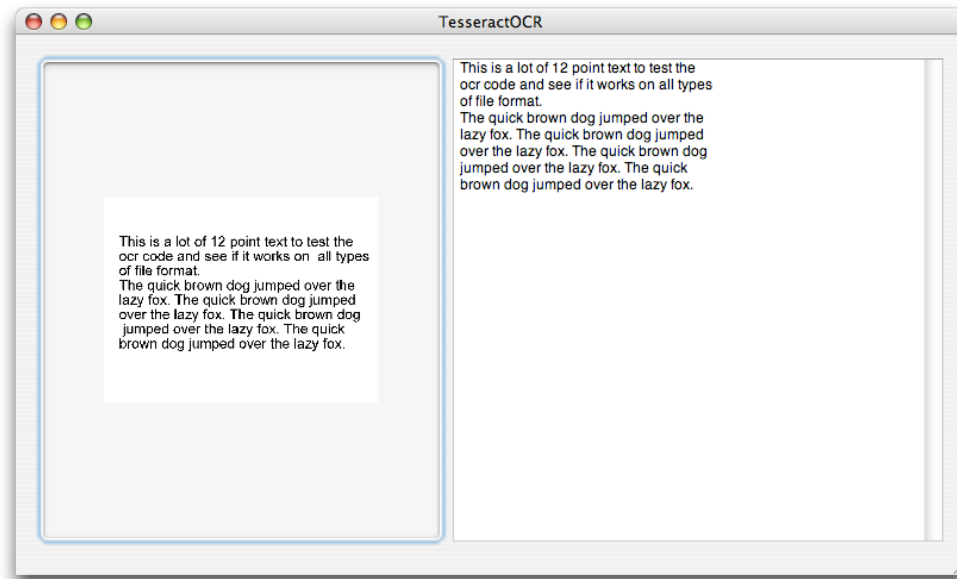
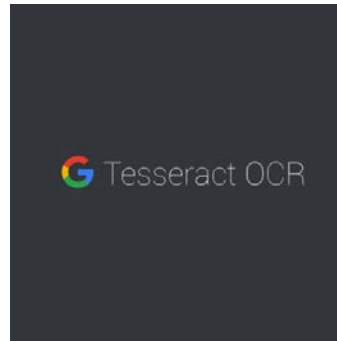
<https://www.scandit.com/>

<https://www.scandit.com/scandit-launches-matrixscan-a-first-of-its-kind>



pabilit

# OCR



<https://github.com/gustavomazzoni/cordova-plugin-tesseract>  
[https://www.youtube.com/watch?v=NF\\_nnoA0aXM](https://www.youtube.com/watch?v=NF_nnoA0aXM)

# AR

- **Marker Based Augmented Reality:** si utilizzano marker visuali e la camera per attivare la realtà aumentata. Da alcuni anni si possono utilizzare marker complessi come immagini.
- **Markerless Augmented Reality:** si utilizzano sensori come GPS, Bussola, Accelerometro per comprendere lo spazio
- **Projection Based Augmented Reality:** si proiettano informazioni su una superficie e in alcuni casi si interagisce con l'utente
- **Superimposition Based Augmented Reality:** l'immagine sintetica sostituisce o integra l'immagine reale



AR



# SmartGlasses



<b>MOVERIO BT-300</b> <b>849,00 €</b>	<b>Panoramica</b>	<b>Specifiche tecniche</b>	<b>Accessori</b>	<b>Assistenza</b>	<b>Recensioni</b>
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Piattaforma Android

Sistema operativo	Android 5.1
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<https://www.wikitudo.com/products/eyewear/epson-augmented-reality-sdk/>

<https://www.vuforia.com/devices.html>

SmartGlasses

UP  SKILL

<https://www.youtube.com/watch?v=qTbIKJjTadQ>

# Posizionamento Indoor

## Trasmissione broadcast

- Beacon: trasmissione Bluetooth Low-Energy «del solo» UDDI
- Eddystone: trasmissione Bluetooth Low-Energy di UDDI e URL



# Posizionamento Indoor

Fine Timing Measurement (FTM) protocol from [IEEE 802.11-2016](https://www.ieee802.org/11/IEEE_802_11-2016.html).

The Wi-Fi Alliance's system functions when mobile devices and access points share data. Radio waves travel through the air at a predictable speed—the speed of light

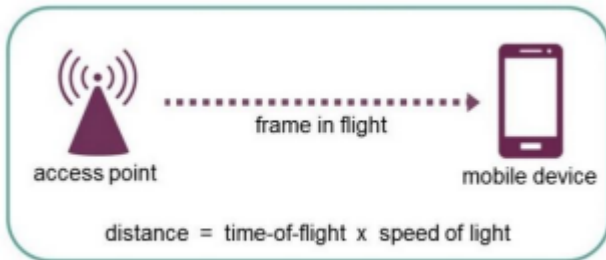


Figure 1. Basic transmission time calculation

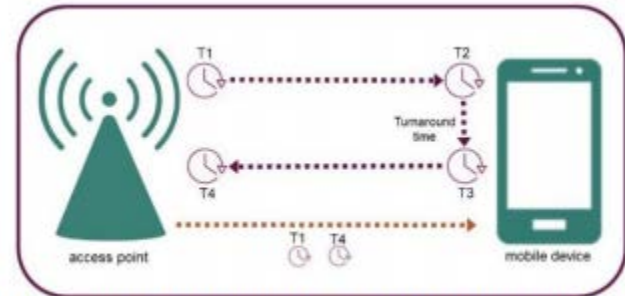


Figure 2. Round-trip timestamps synchronize to same clock

- Client can request an AP share its location (e.g. in latitude / longitude or as a civic address). The program is designed to cover situations whereby such information can be shared pre-association or post association (so an AP may have the ability to share its location to Clients that are not connected to that AP).



# Animation



## **Lottie**

Easily add high-quality animation to any native app.

Lottie is an iOS, Android, and React Native library that renders After Effects animations in real time, allowing apps to use animations as easily as they use static images.

<https://github.com/yannbf/ionic-lottie>

# Game Engine

Si basano su due tecnologie:

Canvas: una estensione dell'HTML standard che permette il rendering dinamico di immagini bitmap gestibili attraverso un linguaggio di scripting.

WebGL: abilita l'utilizzo delle librerie OpenGL all'interno di un Canvas

<http://madebyevan.com/webgl-water/>

<http://www.larsberg.net/#/hexanemone>

## Game Engine



<http://phaser.io/examples/v2/animation/group-creation>

<http://phaser.io/examples/v2/box2d/car-on-terrain>

<https://github.com/photonstorm/phaser-ce/tree/master/resources/Project%20Templates/ionic-example>

## Ionic Survey

Impariamo dalla community

<https://ionicframework.com/survey/2017#>

