

Movesense Data Collector

The Journey from an
Internal to an
Essential Tool

History

How it Started

Challenge

- Need algorithms to evaluate data
- Have no idea about the data

Solution

- Create internal tool to collect data

Setup

Please select oar #1 >

Please select seat #1 >

Please select oar #2 >

Please select seat #2 >

Connect

Setup

oar #1 (175030000524) >

Please select seat #1 >

Please select oar #2 >

Please select seat #2 >

Connect

Please synchronize two devices.

Please synchronize a synced device with an unsynced one.

Synced:

oar #1 (175030000524)

oar #2 (175130001042)

Unsynced:

seat #1 (182430001527)

seat #2 (182120000384)

oar #1 (175030000524):
Acc: (-0.1, -0.3, -9.6)
Gyro: (-0.9, 1.2, -0.2)

seat #1 (182430001527):
Acc: (-0.1, -0.2, -9.5)
Gyro: (-1.0, 1.3, -0.4)

oar #2 (175130001042):
Acc: (-0.1, 0.3, -9.7)
Gyro: (-0.9, -1.2, -0.2)

seat #2 (182120000384):
Acc: (0.2, -0.3, -9.5)
Gyro: (0.6, 0.8, -0.2)

Please synchronize two devices.


Warning: One or more of the
Movesense devices are out of date.
This could affect the measurements.

Surprise!

Other people have the same challenges.

Setup

Accuracy: High

 Please select device #1 >


— +

Connect

Setup

Accuracy: High

Measure HR

 Please select device #1 >

— +

Connect

device #1 (175030000524):

Acc: (-0.1, -0.3, -9.6)

Gyro: (-0.9, 1.2, -0.2)

BPM: 108

device #2 (182430001527):

Acc: (-0.1, -0.2, -9.5)

Gyro: (-1.0, 1.3, -0.4)

BPM: 81

device #3 (175130001042):

Acc: (-0.1, 0.3, -9.7)

Gyro: (-0.9, -1.2, -0.2)

BPM: 89

device #4 (182120000384):

Acc: (0.2, -0.3, -9.5)

Gyro: (0.6, 0.8, -0.2)

BPM: 96

Please wait for the completion of the automated synchronization.

3 of 4 synced

device #1 (175030000524):
Connection status: **OK**
Acc: (-0.1, -0.3, -9.6)
Gyro: (-0.9, 1.2, -0.2)
BPM: 108

device #2 (182430001527):
Connection status: **Unstable**
Acc: (-0.1, -0.2, -9.5)
Gyro: (-1.0, 1.3, -0.4)
BPM: 81

device #3 (175130001042):
Connection status: **OK**
Acc: (-0.1, 0.3, -9.7)
Gyro: (-0.9, -1.2, -0.2)
BPM: 89


device #4 (182120000384):
Connection status: **Broken**
Acc: (0.2, -0.3, -9.5)
Gyro: (0.6, 0.8, -0.2)
BPM: 96

Setup

Accuracy: High

Measure HR

Measure ECG

 Please select device #1 >

— +

Connect

device #1 (175030000524):

Connection status: OK

Acc: (-0.1, -0.3, -9.6)

Gyro: (-0.9, 1.2, -0.2)

BPM: 108

ECG: 317

device #2 (182430001527):

Connection status: Unstable

Acc: (-0.1, -0.2, -9.5)

Gyro: (-1.0, 1.3, -0.4)

BPM: 81

ECG: -29

device #3 (175130001042):

Connection status: OK

Acc: (-0.1, 0.3, -9.7)

Gyro: (-0.9, -1.2, -0.2)

BPM: 89

ECG: 157

device #4 (182120000384):

Connection status: Broken

Acc: (0.2, -0.3, -9.5)

Gyro: (0.6, 0.8, -0.2)

BPM: 96

ECG: 185

device #1 (175030000524):

Connection status: **OK**

Acc: (-0.1, -0.3, -9.6)

Gyro: (-0.9, 1.2, -0.2)

BPM: 108

ECG: 317

device #2 (182430001527):

Connection status: **Unstable**

Acc: (-0.1, -0.2, -9.5)

Gyro: (-1.0, 1.3, -0.4)

BPM: 81

ECG: -29

device #3 (175130001042):

Connection status: **OK**

Acc: (-0.1, 0.3, -9.7)

Gyro: (-0.9, -1.2, -0.2)

BPM: 89

ECG: 157

device #4 (182120000384):

Connection status: **Broken**

Acc: (0.2, -0.3, -9.5)

Gyro: (0.6, 0.8, -0.2)

BPM: 96

ECG: 185

Stop


Setup

Accuracy: High

Measure HR

Measure ECG

Record on Start

 Please select device #1 >

— +

Connect

device #1 (175030000524):

Connection status: OK

Acc: (-0.1, -0.3, -9.6)

Gyro: (-0.9, 1.2, -0.2)

BPM: 108

ECG: 317

device #2 (182430001527):

Connection status: Unstable

Acc: (-0.1, -0.2, -9.5)

Gyro: (-1.0, 1.3, -0.4)

BPM: 81

ECG: -29

device #3 (175130001042):

Connection status: OK

Acc: (-0.1, 0.3, -9.7)

Gyro: (-0.9, -1.2, -0.2)

BPM: 89

ECG: 157

device #4 (182120000384):

Connection status: Broken

Acc: (0.2, -0.3, -9.5)

Gyro: (0.6, 0.8, -0.2)

BPM: 96

ECG: 185

Pause

Recording...

Stop

Filling up lost data with device caches. This may take a while.

1 of 2 caches received

Paused

Record

Stop


Setup

Accuracy: High IMU: 6

Measure HR 6

Measure ECG 9

Record on Start

 Please select device #1 >

— +

Connect

device #1 (175030000524):
Connection status: **OK**
Acc: (-0.1, -0.3, -9.6)
Gyro: (-0.9, 1.2, -0.2)
Magn: (31.2, -94.3, -235.9)
BPM: 108
ECG: 317

device #2 (182430001527):
Connection status: **Unstable**
Acc: (-0.1, -0.2, -9.5)
Gyro: (-1.0, 1.3, -0.4)
Magn: (3.5, -58.1, -103.4)
BPM: 81
ECG: -29

device #3 (175130001042):
Connection status: **OK**
Acc: (-0.1, 0.3, -9.7)
Gyro: (-0.9, -1.2, -0.2)
Magn: (-7.6, -85.3, -34.8)
BPM: 89
ECG: 157

device #4 (182120000384):
Connection status: **Broken**
Acc: (0.2, -0.3, -9.5)
Gyro: (0.6, 0.8, -0.2)
Magn: (-1.9, -61.9, -49.5)
BPM: 96
ECG: 185

Pause

Recording...

Stop

Gyro: (0.6, 0.8, -0.2)

Magn: (-1.9, -61.9, -49.5)

BPM: 96

ECG: 185

Pause

Recording...

Stop

Stop

NEVER UNDERESTIMATE

Stop

YOUR OPPONENTS

Version 2.0

Back to the Drawing Board

MOVESENSE PLUG-IN

caching?

Extra Screen Einstellung

DEK 6 mit Frequenz
+ Bewegung mit
→ Temperatur
→ Datensatz

Idee - Feinune
verbleib.

- Lokalisierung → Export?
- Dropbox / Drive
- A neuen Sensor
- Kommentare einfügen
- Text
- Bild / Video?

Projekt
D-Name
Name / No 4
Was ist
die ECG
Name Hif
Adress

+ Pische
+ Aktion
+ Verzeichnis
→
Hif
Zeit



2012 → Milano
→ Zeit

Groß ECG Zeit vs. Signalstärke

zu einem Screen
Sies Science Journal
→ Logo





Automatisieren Sie Ihr Business



Mehr Europa für Ihr Business

Die Europa-Flat ist jetzt in allen Red Business+ Tarifen inklusive.

Mehr erfahren



Unternehmen & Behörden

Unternehmen & Behörden / Lösungen / Internet of Things

Internet of Things

Schöpfen Sie Ihr Potenzial voll aus - mit Machine-to-Machine von Vodafone. Optimieren Sie Prozesse, erweitern Sie Geschäftsmodelle und sparen Sie wichtige Ressourcen durch automatisierte Datenübertragung. M2M bietet vielseitige Einsatzmöglichkeiten in allen Branchen - mit Vodafone als zuverlässigen Partner.

Teilen

“

Gartner bestätigt Vodafone als weltweit führendes Unternehmen im Magic Quadrant für Managed Machine-to-Machine Services.

Gartner Research, 2015

GEERS ist bereit für mehr Kundenservice

GEERS bietet hochwertige Produktion und Dienstleistungen rund um Hörschutz, mit...
Liefert Kommunikation von Vodafone gesichert GEERS eine optimale Einzelbetreuung...
Kunden erfüllt werden ermöglicht zwischen der angrenzenden...
Anmeldung über Call-Center und andere Kanäle verbale.

Mehr erfahren



Gewinnen Sie Einblicke in die Praxis digitaler Unternehmen

...und Lösungen, Agieren und Erfahrungen - unsere Blog Beiträge berichten direkt aus der Praxis.

Vodafone M2M Barometer 2015

Das Internet der Dinge wächst rasant. Die Funkkommunikation ist die M2M-Grundlage. M2M-Motoren für...



9:41



Welcome back

Project 01

Go for it >

Project 02

Go for it >

Project 03

Go for it >

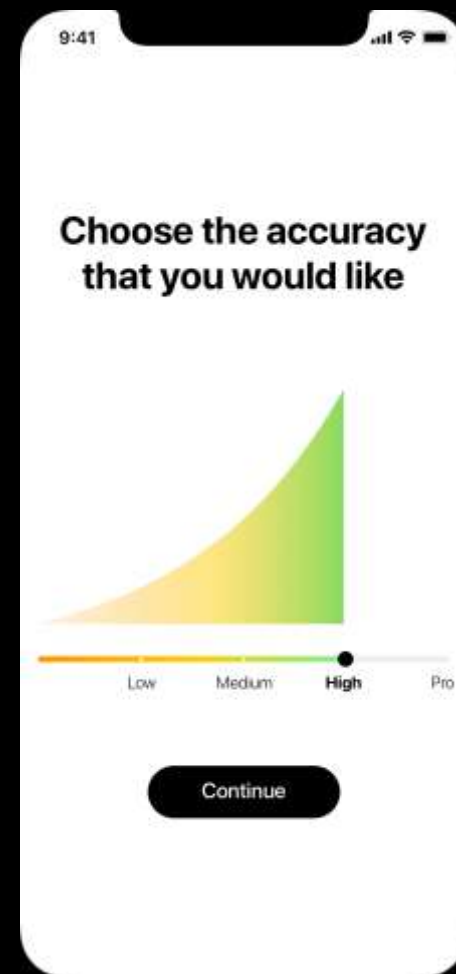
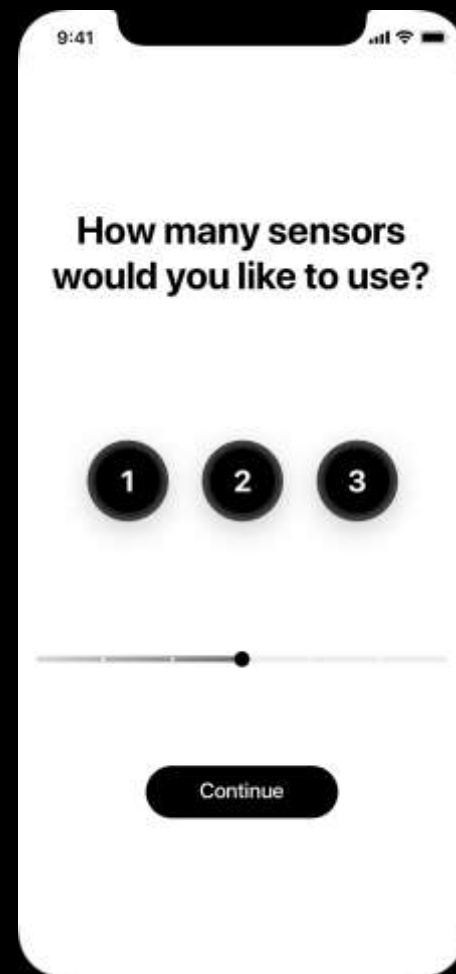
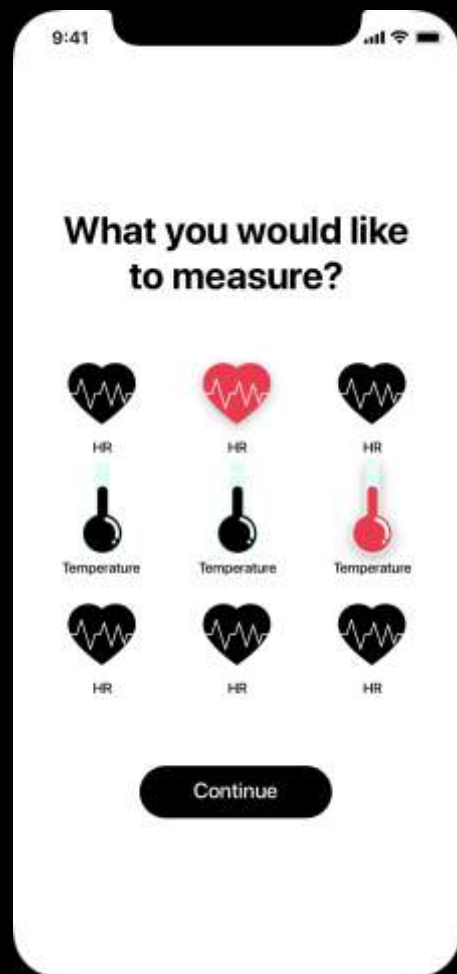
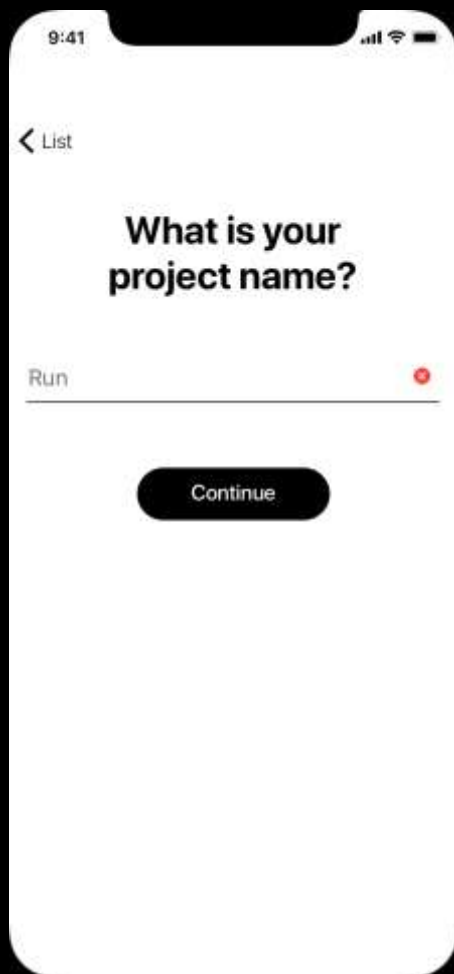
Project 04

Go for it >

Project 05

Go for it >





9:41



< Accuracy

PRO

ECG with frequency

This allows you...



Movement data with frequency

This allows you...



Temperature

This allows you...

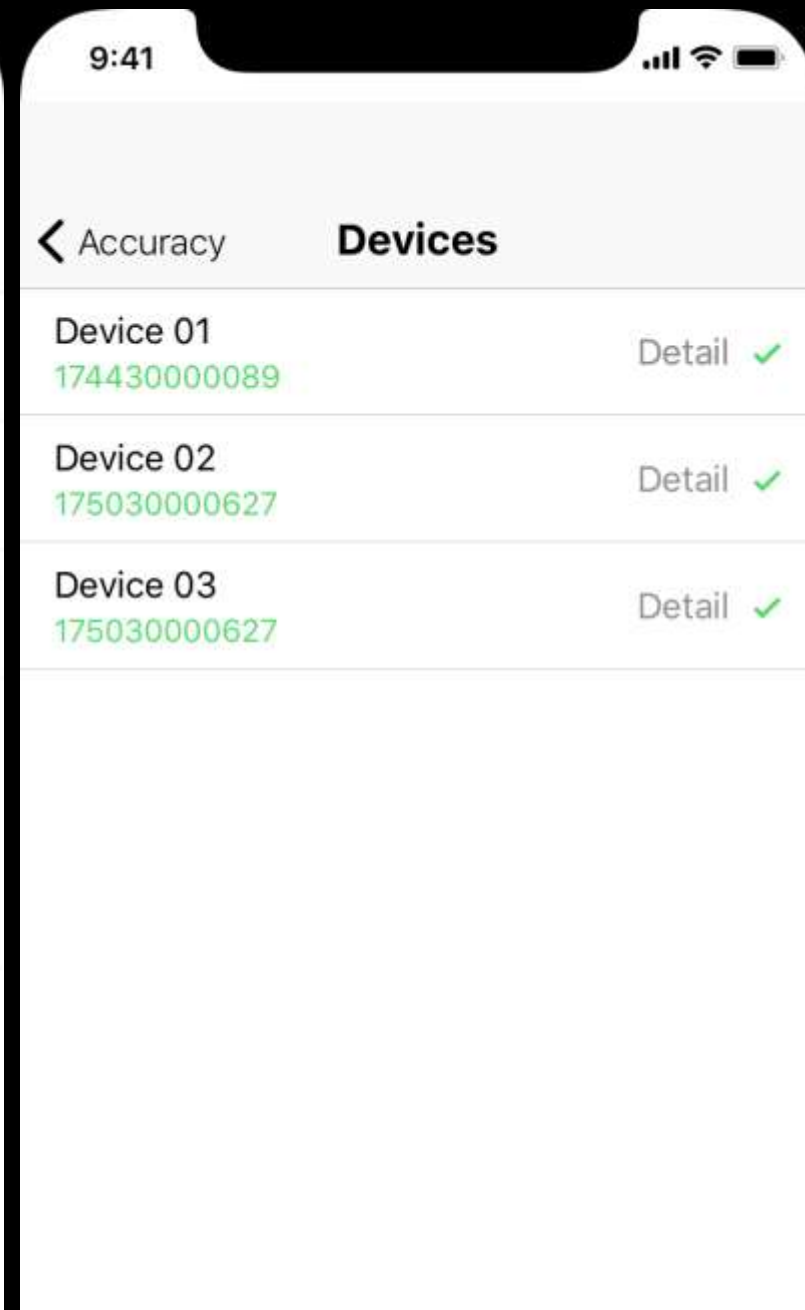
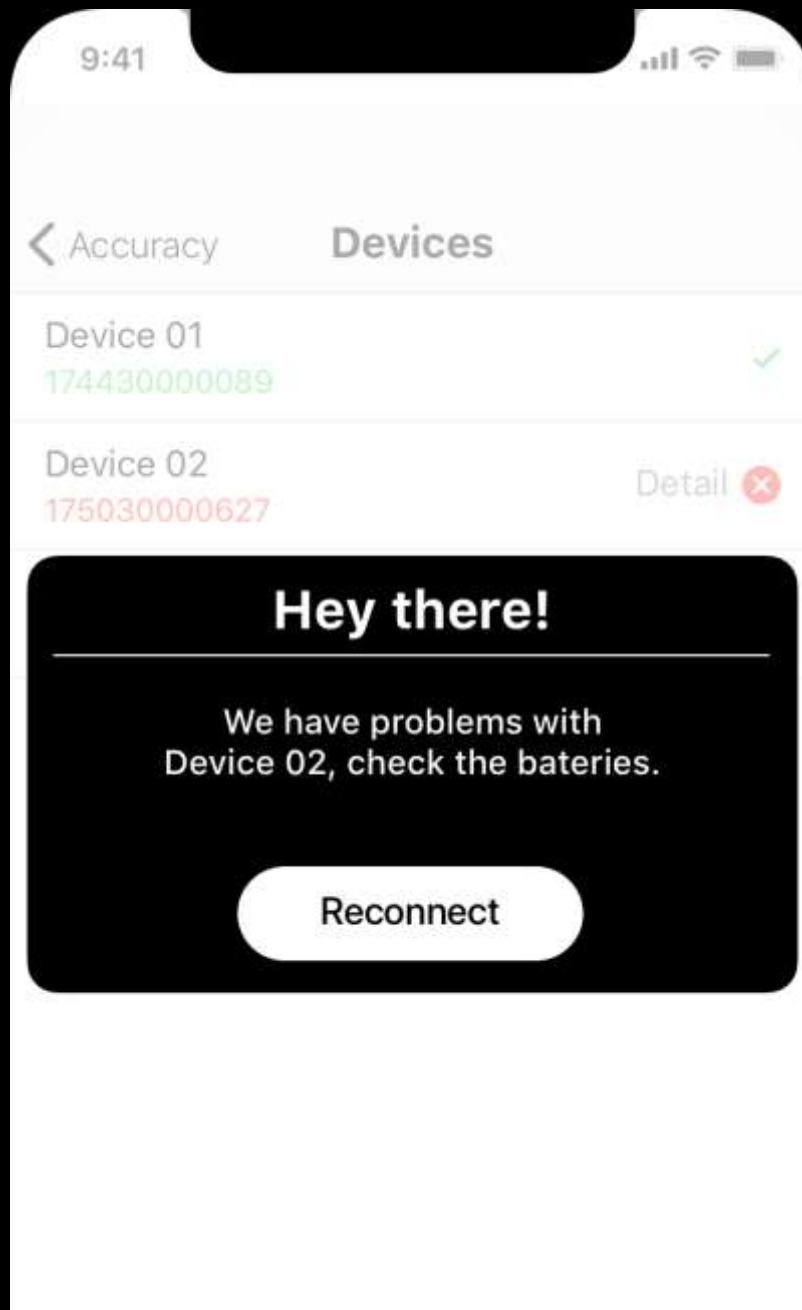
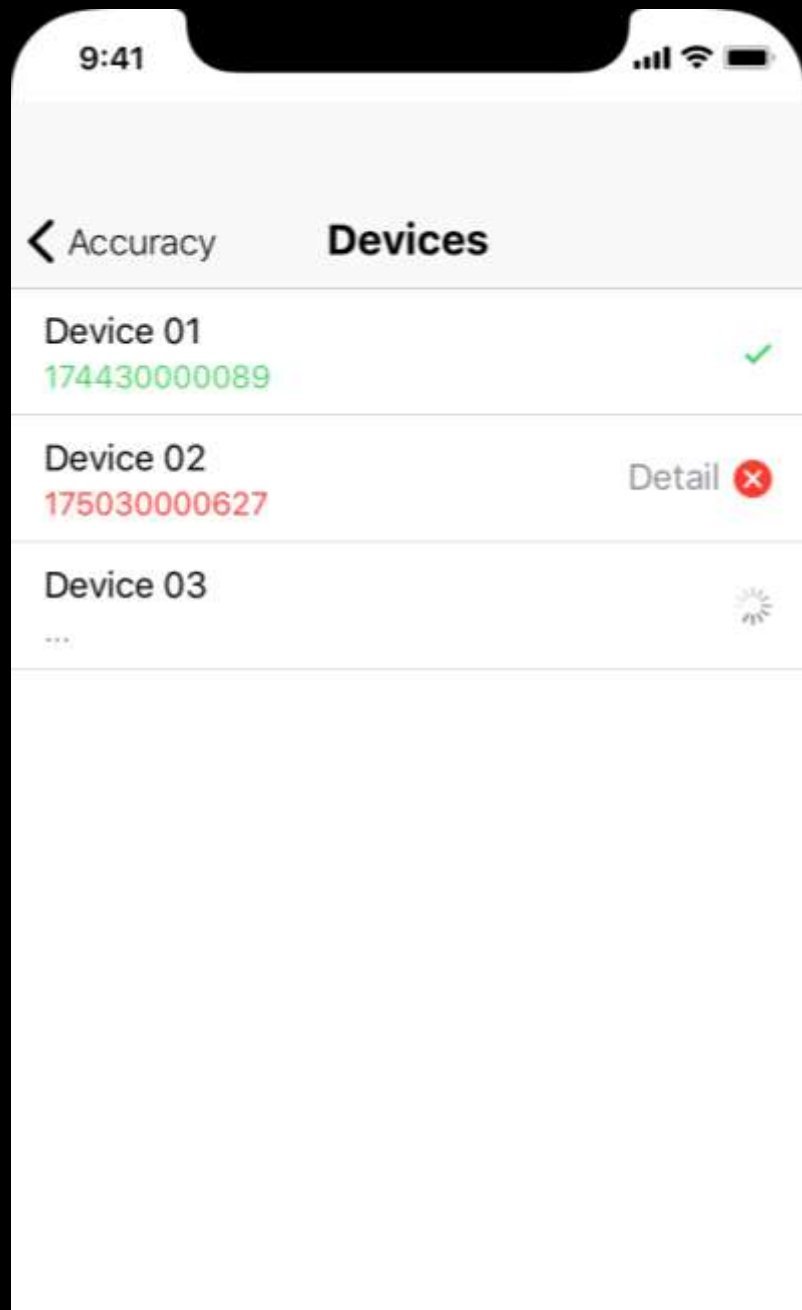


Others...

This allows you...



Continue




Device 02
175030000627

Detail ✓


Device 03
175030000627

Detail ✓

Record

Device 02
175030000627 


Detail ✓

Device 03
175030000627 


Detail ✓

Pause

🎤 📹 🗑️ 🗣️ ⬇️

Device 02
175030000627 

Detail ✓

Device 03
175030000627 

Detail ✓

Pause



🎤 📹 🗑️ 🗣️ ⬇️

9:41



< Accuracy

Devices

Device 01

174430000089



Detail



Device 02

1750300000627



Detail



Device 03

1756300000456



Detail



Device 01



174430000089



Acc: -0.1 +0.4 +9.6

Gyro: -1.1 -0.8 +0.1



Conclusion

- If you have a challenge, someone else might have that, too.
- If you have a solution, someone else might need that, too.
- Sometimes you must move back to go forward.
- Beware of Stop buttons!

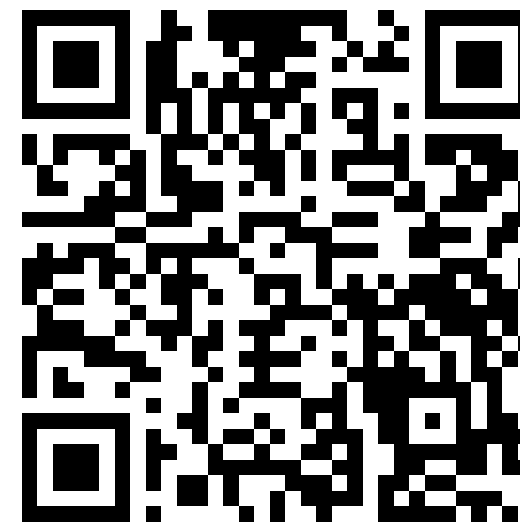
**Thank
You!**



**Thank
You!**



**Thank
You!**



**Thank
You!**



https://1drv.ms/p/s!AnkWjV6OE_7EjX7NpfanwzuEJc5z