How Should Java Developers Build Front-Ends for Web, Mobile, and Desktop Today?

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https://bpf.li/s

devoxx uk
the developer community conference

SLIDES & MORE

BPF.LI/PUB

JAVA DEVELOPER **WISH LIST** FOR FRONT-ENDS

WEB: NEW WEB APPLICATION

MOBILE: NEW NATIVE IOS & ANDROID APPS

DESKTOP: GOT WEB APPLICATION – WHAT NOW?

WHY LISTEN?

22 YEARS, 3 PROJECTS

INFOQ REPORTER

12 CRITERIA

NO SELLING/AFFILIATION

ANGULAR + FLUTTER

JAVA DEVELOPER **WISH LIST** FOR FRONT-ENDS

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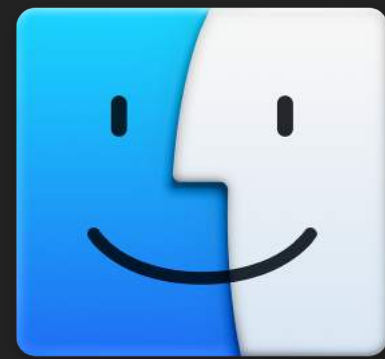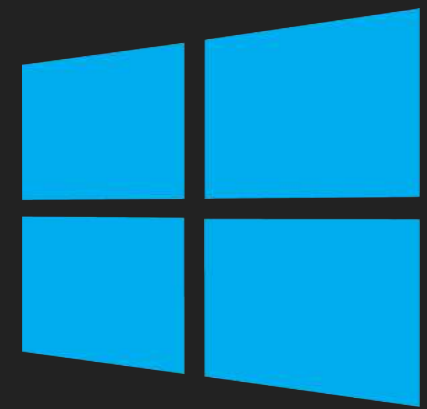
JAVA DEVELOPER
WISH LIST

ENTERPRISE APPLICATIONS

FORMS, DATA GRIDS, REPORTS

NO GAMES/MEDIA APPS

APPLICATIONS

PC

MOBILE

DEVICES

WHAT IS JAVA DEVELOPER WISH LIST?

JAVA	WEB	FAST
STATE OF THE ART	MOBILE	NATIVE FUNCTIONALITY
SAFE	DESKTOP	1 CODEBASE
POPULAR	LIBRARIES	FAST BUILD, DEPLOY & DEBUG

FRAMEWORK CHANGE EASIER

WHY STATE OF THE ART?

STATE OF THE ART:
DECLARATIVE

UI AS CODE

STATUS & EVENTS

FRAMEWORK DRIVES UPDATES

DECLARATIVE

JAVA	WEB	FAST
DECLARATIVE	MOBILE	NATIVE FUNCTIONALITY
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LEARN

CODE

ROLL-OUT

WHY POPULAR?

GOOGLE SEARCHES

UDEMY COURSE BUYERS

STACK OVERFLOW QUESTIONS

MENTIONS IN JOB ADS

HOW POPULAR?

JAVA	WEB	FAST
DECLARATIVE	MOBILE	NATIVE FUNCTIONALITY
SAFE	DESKTOP	1 CODEBASE
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ENTERPRISE APPLICATIONS FOR PC & MOBILE

WISH LIST: 12 CRITERIA FOR JAVA DEVS

STATE OF THE ART: DECLARATIVE FRONT-ENDS

MEASURE POPULARITY

SUM-UP: WISH LIST

~~JAVA DEVELOPER WISH LIST FOR FRONT-ENDS~~

WEB: NEW WEB APPLICATION

MOBILE: NEW NATIVE IOS & ANDROID APPS

DESKTOP: GOT WEB APPLICATION – WHAT NOW?

NEW WEB APPLICATION

ANGULAR (GOOGLE)

REACT (FACEBOOK)

VUE.JS

WEB FRAMEWORKS

JAVA	WEB	FAST
DECLARATIVE	MOBILE	NATIVE FUNCTIONALITY
SAFE	DESKTOP	1 CODEBASE
POPULAR	LIBRARIES	FAST BUILD, DEPLOY & DEBUG

JAVA **ANG** WEB – FAST **REA**

DECLARATIVE **REA**

SAFE **REA**

???

POPULAR **REA** LIBRARIES **???** FAST BUILD,
DEPLOY & DEBUG

1. REACT

2. ANGULAR

3. VUE.JS

WINNER: WEB

CURRENT PROJECT: KEEP REACT, ANGULAR, VUE.JS;
ELSE MIGRATE?

NEW PROJECT/MIGRATE: REACT, ANGULAR, VUE.JS
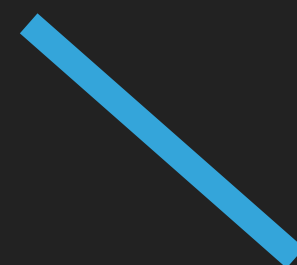
ADVICE: WEB

~~JAVA DEVELOPER WISH LIST FOR FRONT-ENDS~~

~~WEB: NEW WEB APPLICATION~~

MOBILE: NEW NATIVE IOS & ANDROID APPS

DESKTOP: GOT WEB APPLICATION – WHAT NOW?

HOW NEW
IOS & ANDROID APPS?

iOS

WEB

Android

NATIVE iOS

NATIVE Android

⊕ 1 CODEBASE

⊕ FAST

⊕ ALL FEATURES

⊕ EASY DEBUGGING

WEB VS. NATIVE

- ➕ 1 CODEBASE
- ➕ FAST
- ➕ ALL FEATURES
- ➕ EASY DEBUGGING

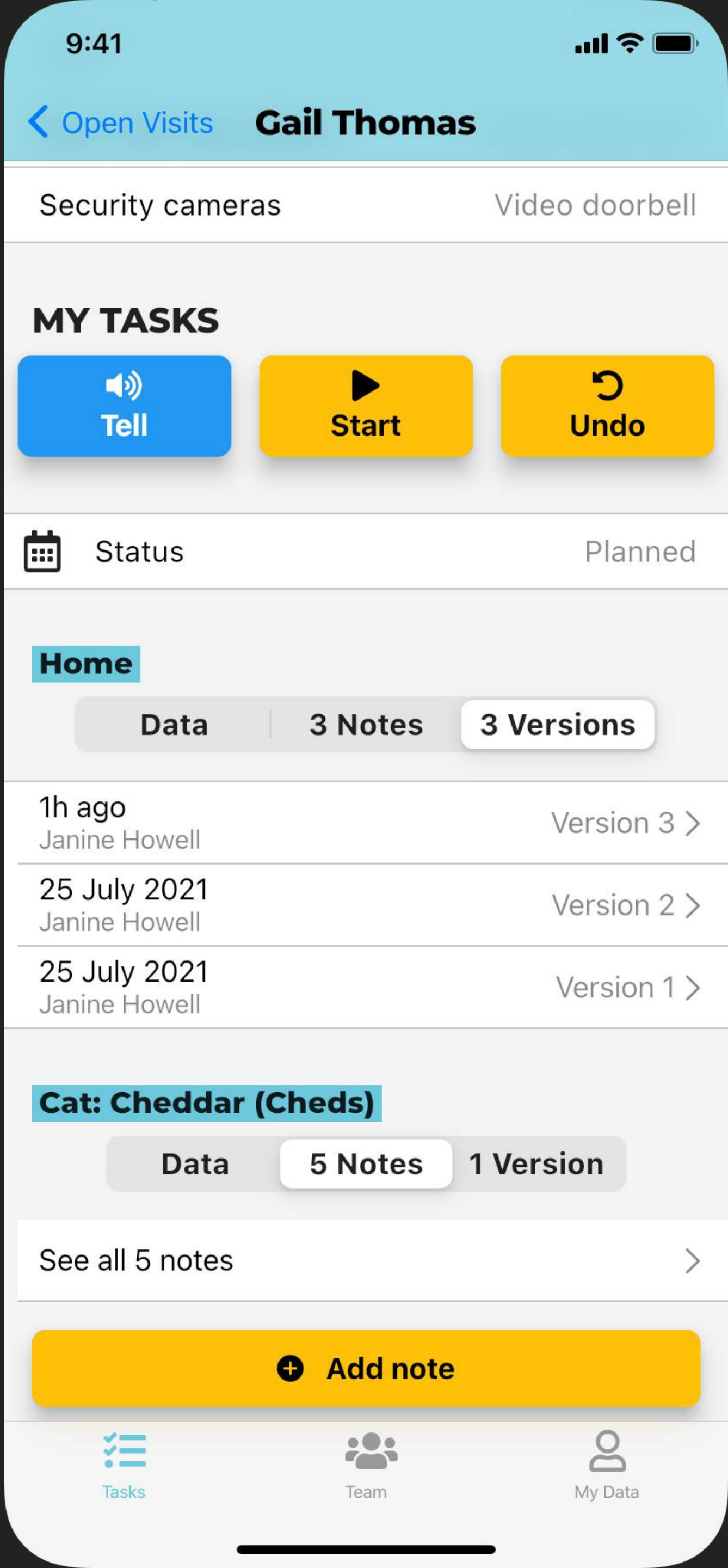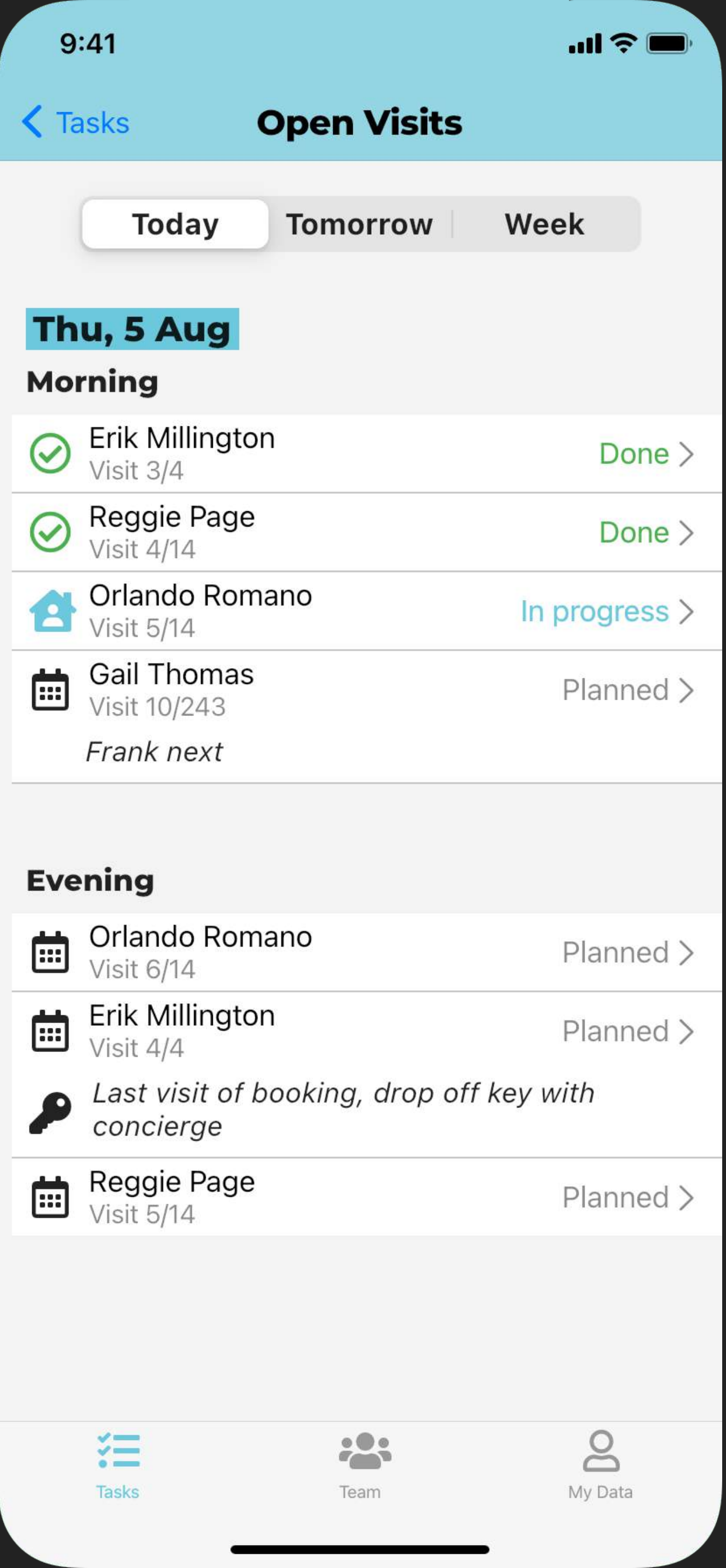# CROSS-PLATFORM!

FLUTTER (GOOGLE)

REACT NATIVE (FACEBOOK)

CROSS-PLATFORM FRAMEWORKS

WHAT'S FLUTTER?

"GOOGLE'S UI TOOLKIT FOR BUILDING BEAUTIFUL, NATIVELY COMPILED APPLICATIONS FOR MOBILE, WEB, AND DESKTOP FROM A SINGLE CODEBASE."

MY FLUTTER EXPERIENCE: CAT-SITTER APP

Screen 1: Open Visits

| Today | Tomorrow | Week |

Thu, 5 Aug

Morning

✓ Erik Millington
Visit 3/4   Done ›

✓ Reggie Page
Visit 4/14   Done ›

🏠 Orlando Romano
Visit 5/14   In progress ›

📅 Gail Thomas
Visit 10/243   Planned ›
Frank next

Evening

📅 Orlando Romano
Visit 6/14   Planned ›

📅 Erik Millington
Visit 4/4   Planned ›
🔑 *Last visit of booking, drop off key with concierge*

📅 Reggie Page
Visit 5/14   Planned ›

Tasks   Team   My Data

Screen 2: Gail Thomas

Security cameras   Video doorbell

MY TASKS

| 🔊 Tell | ▶ Start | ↺ Undo |

📅 Status   Planned

Home

| Data | 3 Notes | **3 Versions** |

1h ago
Janine Howell   Version 3 ›

25 July 2021
Janine Howell   Version 2 ›

25 July 2021
Janine Howell   Version 1 ›

Cat: Cheddar (Cheds)

| Data | **5 Notes** | 1 Version |

See all 5 notes   ›

⊕ **Add note**

Tasks   Team   My Data

Screen 3

DART = "SIMPLIFIED JAVA FOR UI"

SIMPLE NATIVE INTEGRATION

FAST CODE, BUILD & DEPLOY

PLUGINS SAVE TIME

GOOD FLUTTER

WILL GOOGLE KILL FLUTTER?

NOT ALL WITH 1 CODEBASE

RESPONSIVE DESIGN?

MOBILE NATIVE DESIGN TIME-CONSUMING

BAD FLUTTER

WISH LIST: MOBILE

JAVA	WEB	FAST
DECLARATIVE	MOBILE	NATIVE FUNCTIONALITY
SAFE	DESKTOP	1 CODEBASE
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JAVA **FLU**

FAST **FLU**

DECLARATIVE – MOBILE –

NATIVE FUNCTIONALITY **FLU**

SAFE **REA**

1 CODEBASE –

POPULAR **REA** LIBRARIES **???**

???

FAST BUILD, DEPLOY & DEBUG

1. FLUTTER

2. REACT NATIVE

WINNER: MOBIL

REACT NATIVE

MORE JOBS

YOUR WINNER?

CURRENT PROJECT: KEEP FLUTTER, REACT NATIVE; ELSE MIGRATE?

NEW PROJECT/MIGRATE & USED REACT: REACT NATIVE, FLUTTER

NEW PROJECT/MIGRATE ELSE: FLUTTER, REACT NATIVE

ADVICE: MOBILE

~~JAVA DEVELOPER WISH LIST FOR FRONT-ENDS~~

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DESKTOP: GOT WEB APPLICATION – WHAT NOW?

NO GOOD OPTION

CHANGE

WEB GOOD ENOUGH

DESKTOP: WEB APPLICATION

KEEP **WEB** APPLICATION

FLUTTER UI CONSTRAINTS OK:
EVALUATE FLUTTER FOR DESKTOP

ADVICE: DESKTOP

JAVA DEVELOPER WISH LIST FOR FRONT-ENDS

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DESKTOP: GOT WEB APPLICATION – WHAT NOW?

SUMMARY

CURRENT PROJECT: KEEP REACT, ANGULAR, VUE.JS; ELSE MIGRATE?

NEW PROJECT/MIGRATE: REACT, ANGULAR, VUE.JS

ADVICE: WEB

CURRENT PROJECT: KEEP FLUTTER, REACT NATIVE; ELSE MIGRATE?

NEW PROJECT/MIGRATE & USED REACT: REACT NATIVE, FLUTTER

NEW PROJECT/MIGRATE ELSE: FLUTTER, REACT NATIVE

ADVICE: MOBILE

KEEP **WEB** APPLICATION

FLUTTER UI CONSTRAINTS OK:
EVALUATE FLUTTER FOR DESKTOP

ADVICE: DESKTOP

MAY 2022

FULL-STACK JAVA: SPRING BOOT, ANGULAR, FLUTTER

CONTRACTOR/FIXED-TERM EMPLOYEE

MILTON KEYNES, LONDON, OR REMOTE

LOOKING FOR PROJECT

The End

SLIDES & VIDEOS

EXTRA INFORMATION

FEEDBACK

GET STARTED!

NEWSLETTER

BPF.LI/PUB