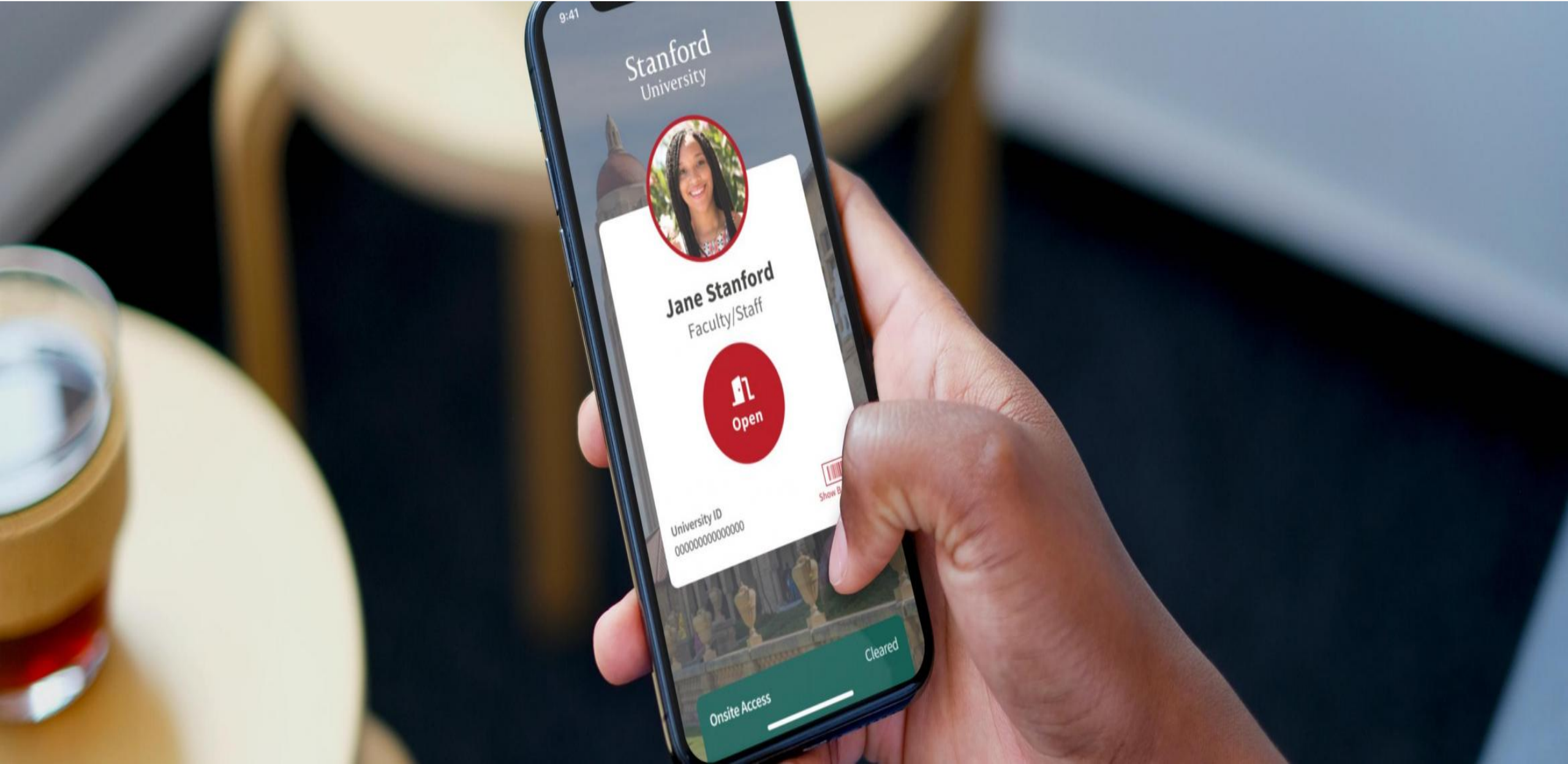


# Stanford University

The Journey to Mobile: Presented by Tracy Neil & Krystal Kelley



# The beginning - Overview

- Our pilot audience was limited to our UIT organization, small selection from clients and others involved in integration testing.

## Overview

### READERS

With mobile as a future direction chose to deploy all Bluetooth ready readers

Open item: Wireless Readers

Use ILS and AD400 wireless readers. Working with HID, Lenel, and Allegion to get Seos compatible modules for existing readers

Working with ASSA Abloy on IN100 lock with Bluetooth

### MOBILE CREDENTIALS

Downside - Very manual process

Upside - **BIG HIT!!**

Lenel 7.3 has automation for mobile credential issuance doesn't work with the subscription model

Used HID SDK to deploy a Stanford labeled app

### MOBILE ID

Required by Public Safety and others to provide identification for those no longer carrying a card

Data elements were a big discussion; including barcode until Libraries can accommodate mobile

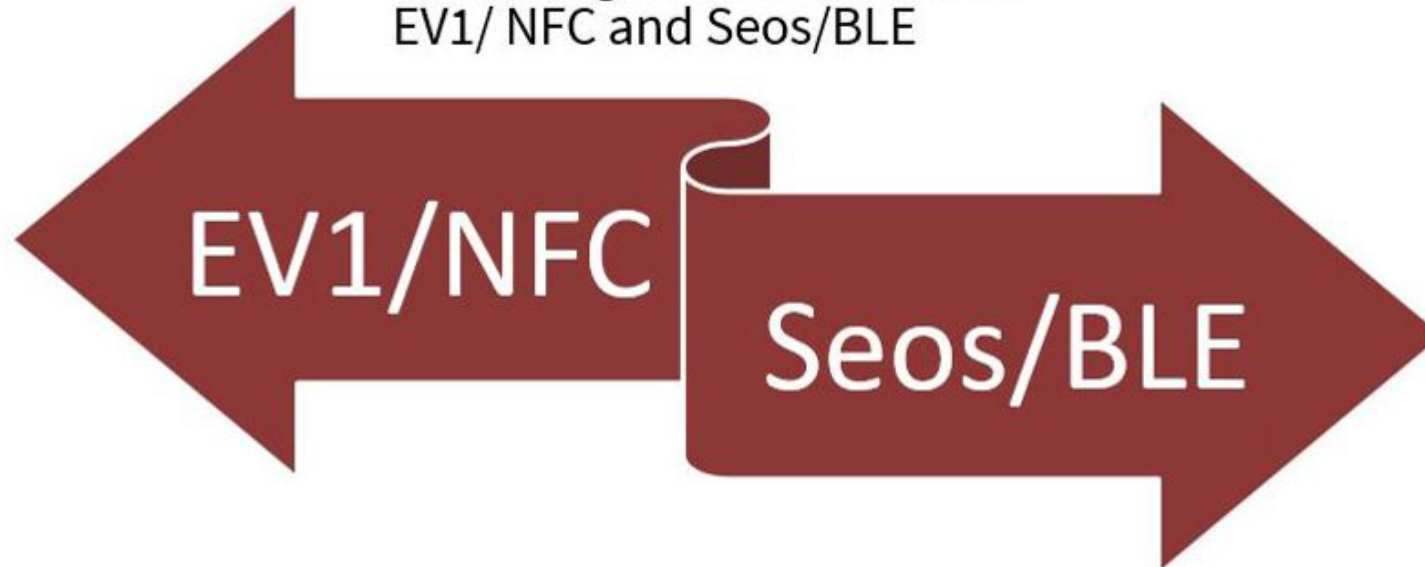
State required phone numbers and Stanford required phone numbers on back of card need to be incorporated

# The beginning –Technologies considered: Wireless

- We chose SEOS/BLE & installed readers that have NFC as well as BLE.

## ALTERNATIVES

There were two primary technologies we considered – EV1/ NFC and Seos/BLE



EV1/NFC – broadly available, works well with transaction systems, but has limitations relative to mobile on Apple

Seos/NFC/Bluetooth – available through HID, meets our requirement for mobile for both Android and Apple devices



# The beginning –Technologies considered: Point of Sale

Integration with transaction system needs to be supported for both card and mobile credential

- In order to get mobile working with point of sale devices on campus we worked with a single location putting an HID RP40 in front of an AERO to get feedback from students and staff on their user experience (need a 3 way splitter box with a card reader port).
- We chose an Omnikey 5427 CK reader to use in USB friendly locations.



# The beginning – Stakeholder approval

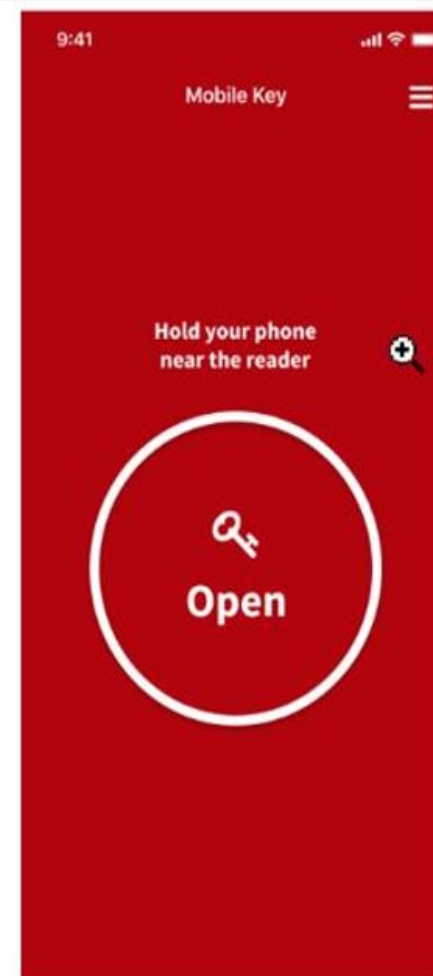
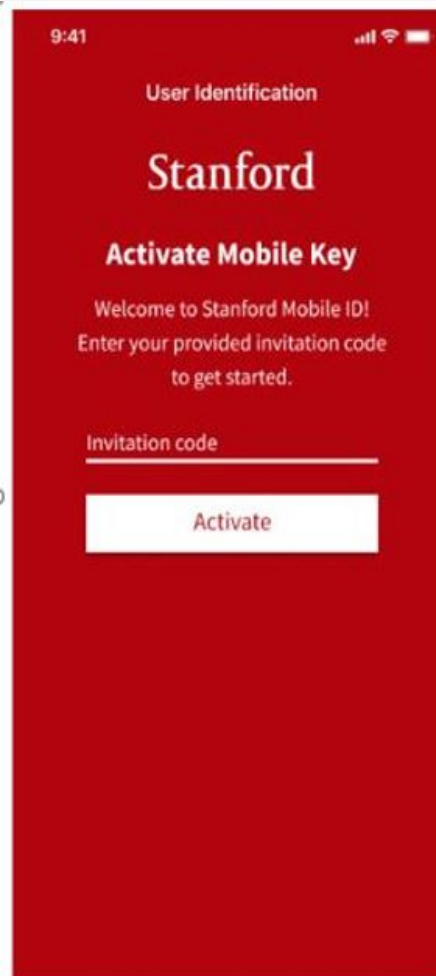
Residences want to restrict access to one credential per user to limit fraud temptation; limit access to mobile only (no residence access on card) for those using mobile access

- We got approval from the gyms and libraries that the card/mobile app can be used simultaneously.
- The only restriction is their housing access is only available on one badge or the other (mobile OR physical badge).



# The beginning – User Interface Design

- We went through various designs before working with communications to develop the most aesthetically pleasing.
- We decided to initially roll out with access only and develop the mobile ID design as a next release.



# Lenel Configuration Changes

Current limitation of one credential per person; with Mobile ID, two credentials are possible

General Cardholder Options   Badge ID Allocation   Visits   Logical Access   Card

Maximum active badges per cardholder

2   Active badges per cardholder

Cardholder   User Defined   RDE   Archive   Notes   Badge   Access Levels   Authorized Credential   Device Owner   ILS Authorization   Visits

Last name: Kohn   First name: Kernal   Middle name:

Cardholder ID: 100180000   Badge type: Mobile Student

Badge ID: 510258   Issue code: 2   Activate:  6/ 5/2020   Deactivate:  12/31/2025

Status: Active

Embossed:

Use extended strike/held times    APB exempt    Destination exempt

Issue code (all):

Last changed:

Last printed:

Badge ID: 26221   Reg until date:   Activate: 6/5/2020   Deactivate: 12/31/2025   Alert:

OK   Cancel   Clear   Clear All   Capture   Import

Person type: Cardholder

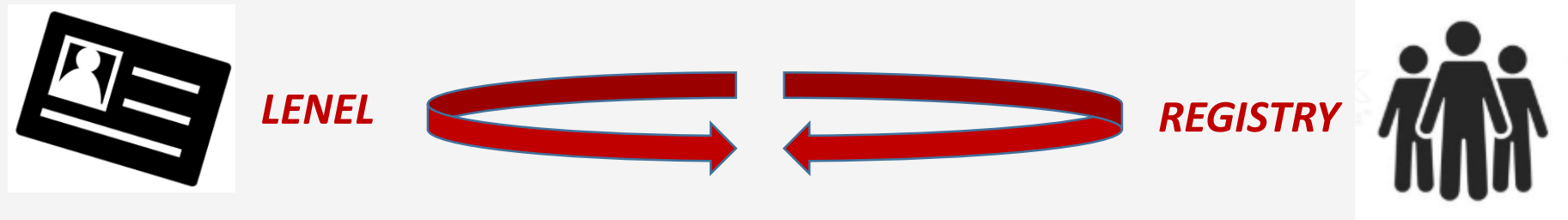
- Maximum active badges per cardholder in Lenel changed from 1 to 2.
- Created New Badge Types:
  - Mobile Student
  - Mobile Faculty/Staff
  - Mobile Postdoctoral

To Issue a Mobile Badge:

- Set Badge type to appropriate Mobile value
- Enter the Badge ID as the mobile ID generated in the HID portal
- Set Issue Code to '2'

# Integrations changes and testing

We have a bi-directional integration with our Campus Registry whereby certain changes to people data in the Registry updates Lenel cardholder and badge data, while changes to badge and photo information in Lenel updates the Registry record.

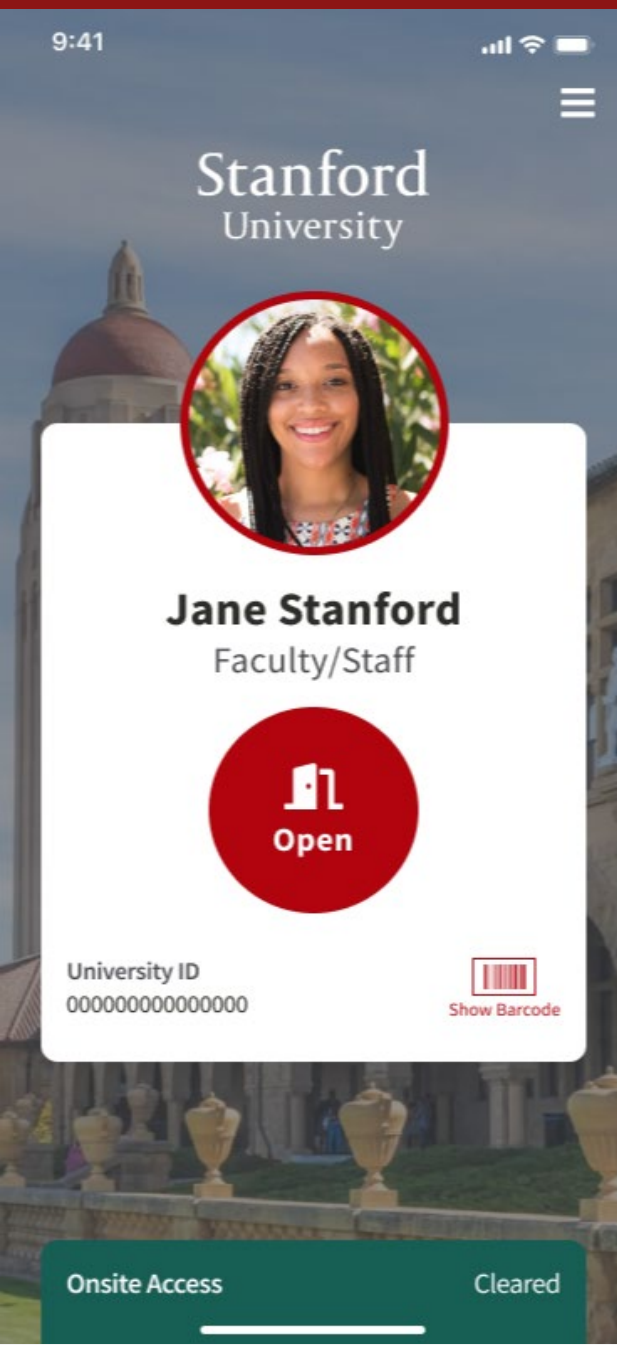


To support the mobile integration, we:

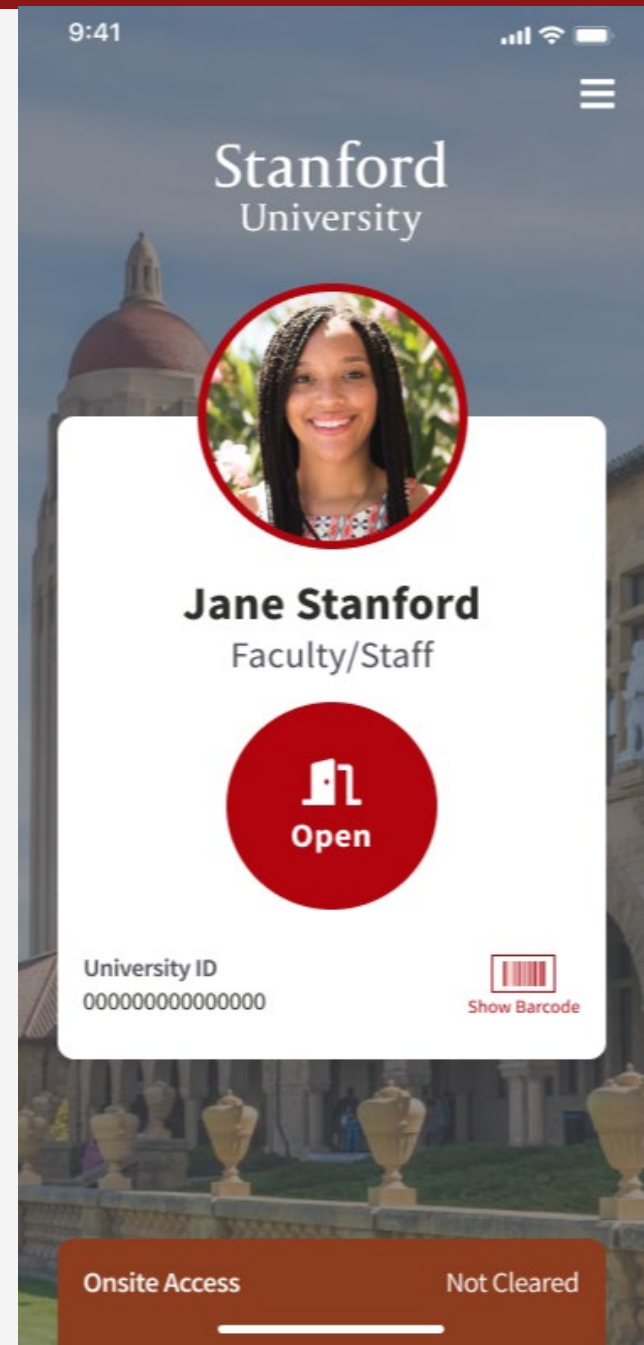
- Worked with our Registry group to create a new attribute in our campuscard XML, and a new attribute in LDAP.
- Validated that when a new mobile badge is created on a Lenel cardholder record, that the campuscard XML & LDAP record is updated with the correct XML and LDAP attributes.
- Validated that the existing proximity value (badge ID) and card value (magstripe) in the Registry XML and LDAP record remain unchanged.
- Tested mobile badge functionality against all access readers.
- Validated mobile badge ID changes and activities existing in alarms and audit reports.



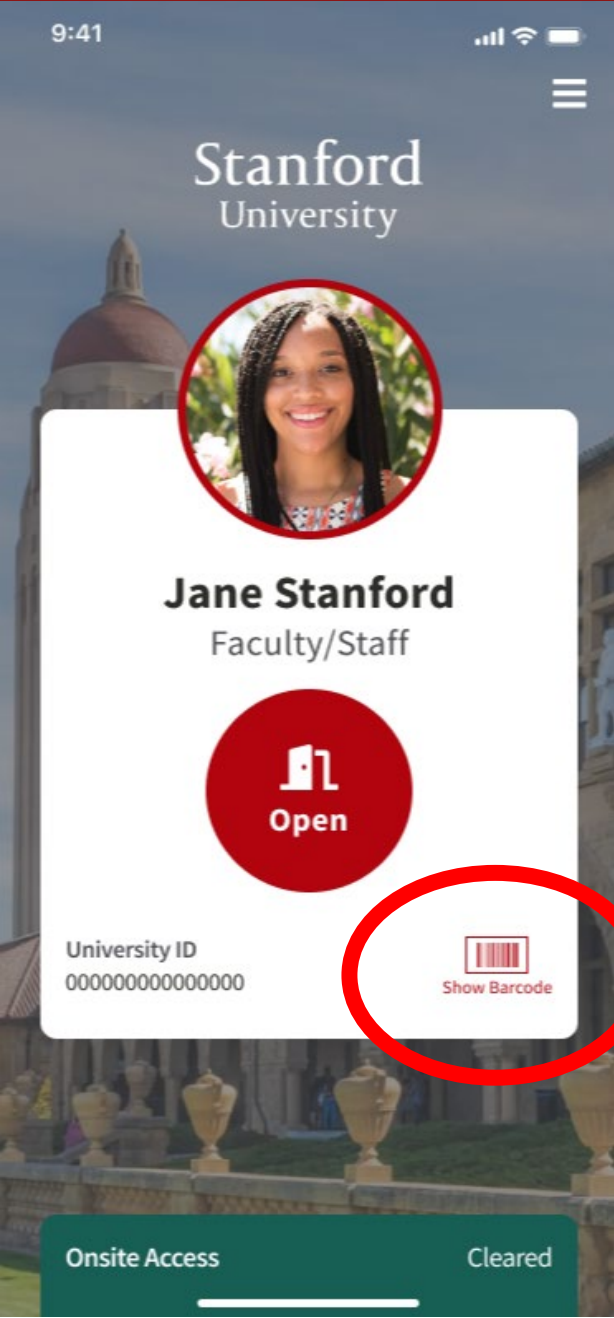
# We arrived: Stanford Mobile ID 2.0



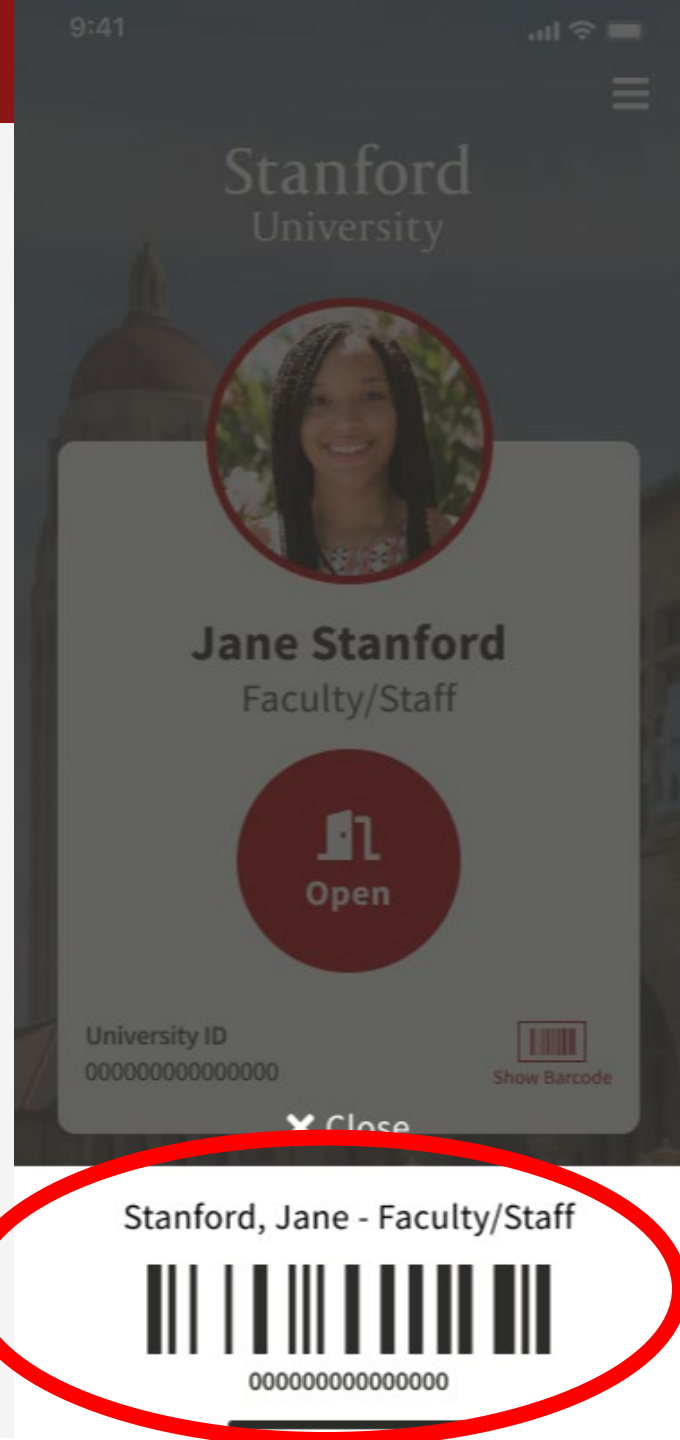
- Individual user data, making user image, name, affiliation, university ID, and barcode visible.
- Health status integration, delivering clear confirmation of onsite access clearance based on user's self-report.
- Redesigned user interface that is inline with mobile identity standards and provides a better overall user experience.



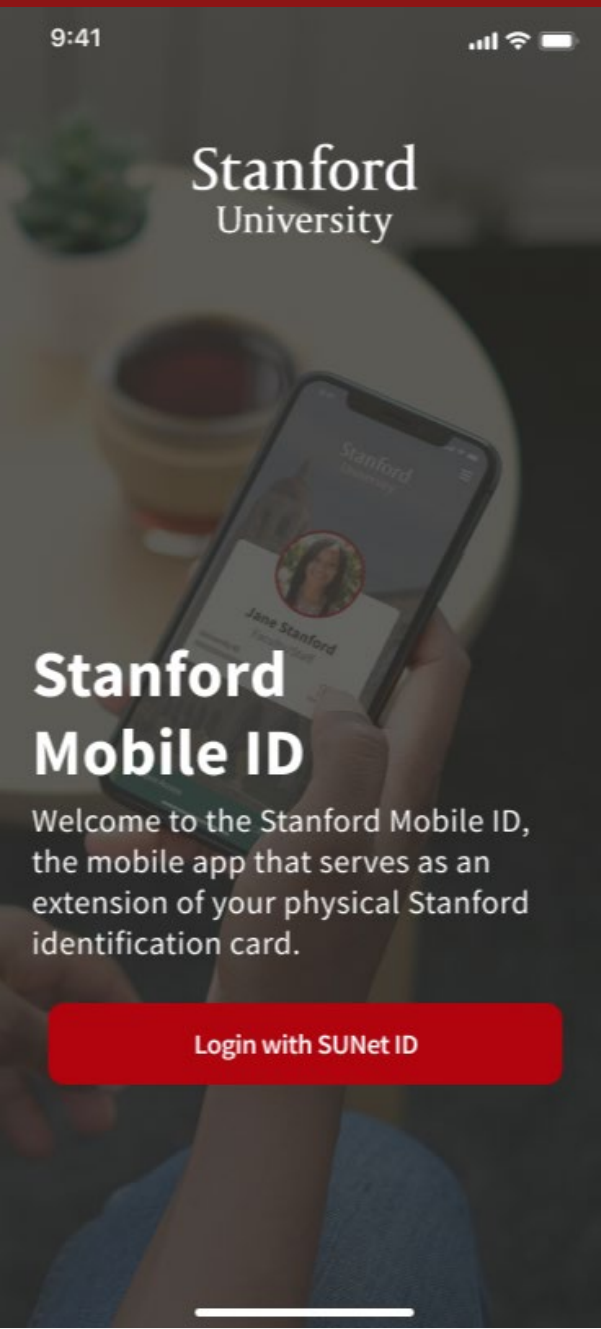
# We arrived : Stanford Mobile ID 2.0



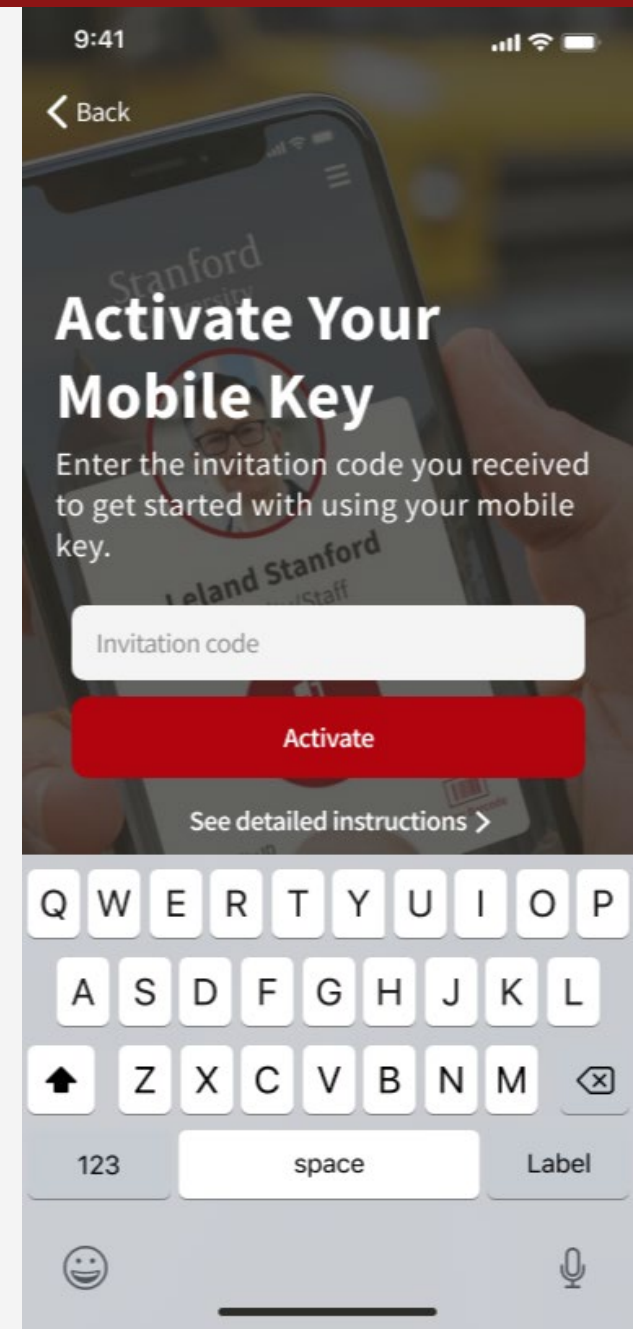
- Scannable barcode, making scanning easy by clicking the Show Barcode button it enlarges the cardholders scannable barcode.



# We arrived: Stanford Mobile ID 2.0



- User single sign on with two step authentication, providing a vital layer of security.
- Twist & Go mode, allowing for door and building access with a simple twist of the wrist when within range of a card reader.



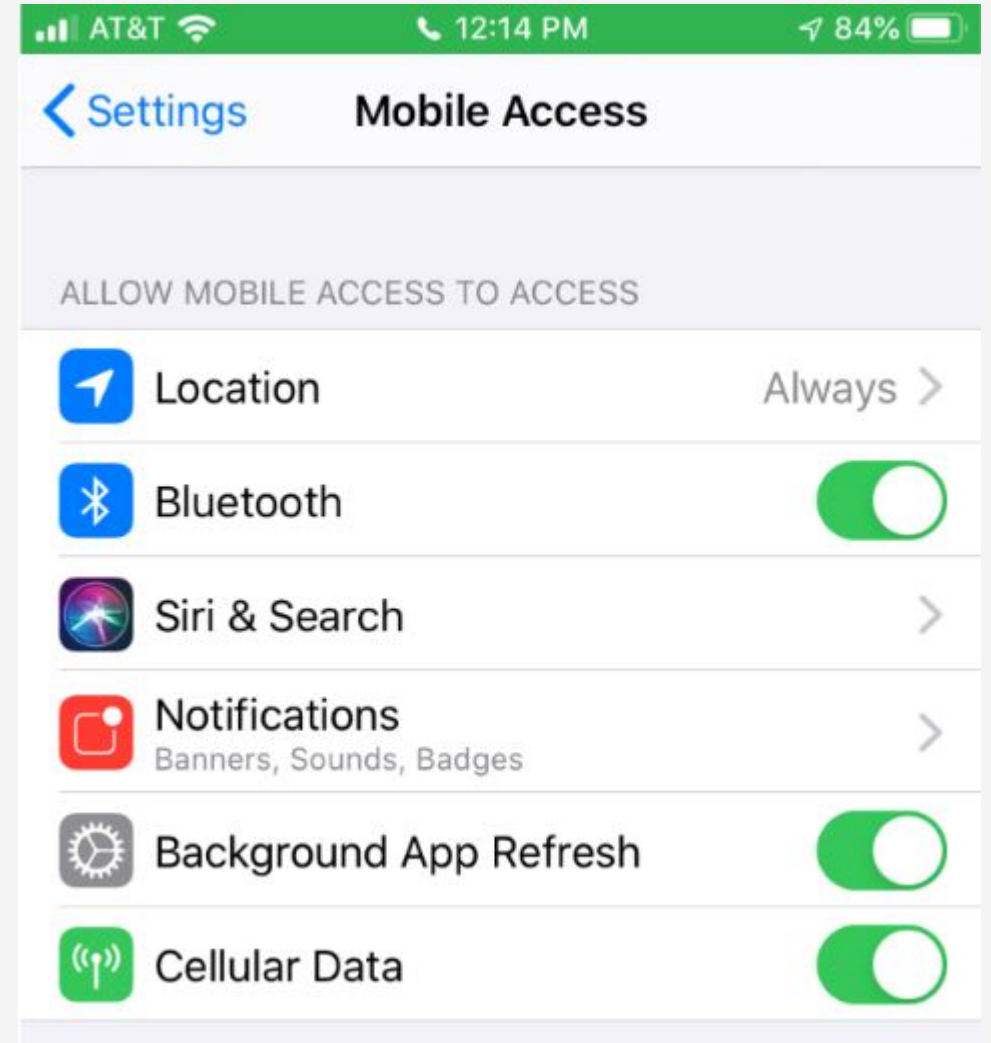
# Continually improving: Stanford Mobile ID 2.0

## Known issues

- Apple Wallet layers over app's screen when accessing a card reader, for those who have Apple Wallet configured.
- Access confirmation indicator appears even when door access is not granted.
- Menu subheads are not appropriately spaced.

## Troubleshooting

- User needs to enable Bluetooth in their device Settings.
- While app is in Beta testing in TestFlight, user needs to have Notifications enabled.





# Looking ahead

- Before we release to students we need to have each of the phone numbers and verbiage below that exists on the physical card included in the mobile app.

This card is the property of the Board of Trustees of the Leland Stanford Junior University and is not transferable. Any alteration or unauthorized use of this card, or fabrication of a like card, will subject the holder to applicable Faculty/Staff/Student disciplinary policies. Possession of this card indicates a present or past affiliation with Stanford University. Current affiliation status can be determined by calling Stanford University during normal business hours.

**Need Help? For a complete list of resources, visit [wellness.stanford.edu](https://wellness.stanford.edu).**

1 (650) 725 - 2800 - **Undergraduate Residence Dean 24x7**

1 (650) 736 - 7078 - **Graduate Life Dean 24x7**

1 (650) 723 - 3785 - **Counseling & Psychological Services 24x7**

1 (650) 725 - 9955 - **Confidential Sexual Assault Counseling 24x7**

1 (650) 329 - 2413 - **Stanford Police (non-emergency) 24x7**

1 (800) 273 - 8255 - **National Suicide Prevention Hotline**

- We would also like to automate the end to end experience when a new user requests mobile.
- We're currently at approximately 25% of campus usage, we need to be able to get to 100%.

# The End

Please submit questions via the Zoom chat

