ACM GREEKCHI-CYCHI SYMPOSIUM 2026

How to Save a Life with Good UX

User Experience Design for Volunteer Applications: The Case of LifePulse, a Blood Donation App

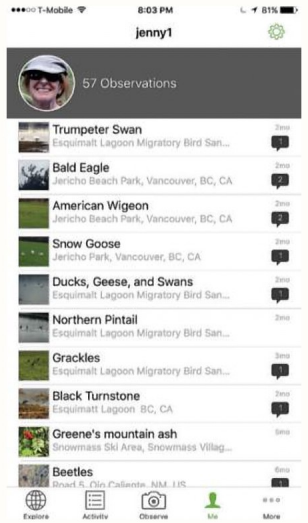
***Panagiotis Karadaglis**, UX Designer and Founder of LifePulse NGO*

***Dr. Christos Katsanos**, Associate Professor @AUTh*

OVERVIEW OF VOLUNTEER APPLICATIONS

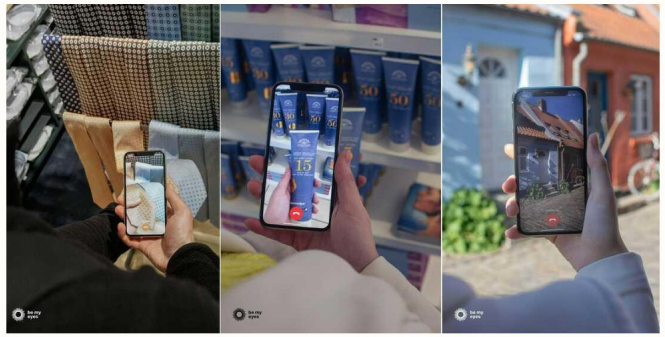
Impact across various sectors

ENVIRONMENT



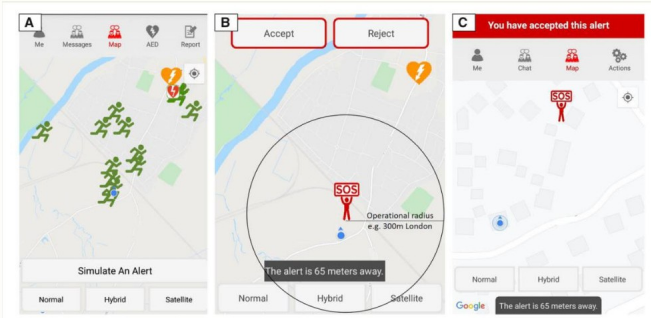
iNaturalist

EDUCATION



Be My Eyes

HUMANITARIAN



GoodSAM

RESEARCH QUESTION

Can UX keep volunteers engaged?

WHY VOLUNTEERS DROP OUT

Poor usability

Little personalizati on

Weak feedback on contributions

→ Users disengage

Amagai et al. (2022); Wald et al. (2016)

Case study: LifePulse

METHOD

From literature to design

Goal: empirically validated UX principles for volunteer apps

125
sources gathered

→

48
analyzed for UX principles

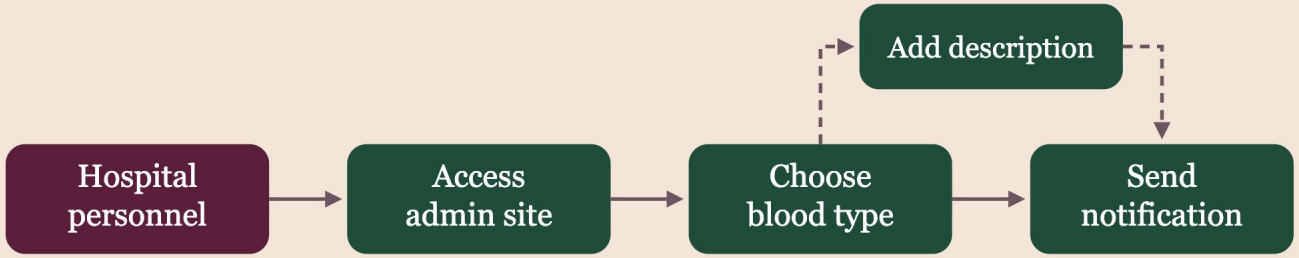
→

V2
redesigned LifePulse

FOUR PRINCIPLES Push notifications · Personalization · Gamification · Geolocation

CASE STUDY

LifePulse, in brief

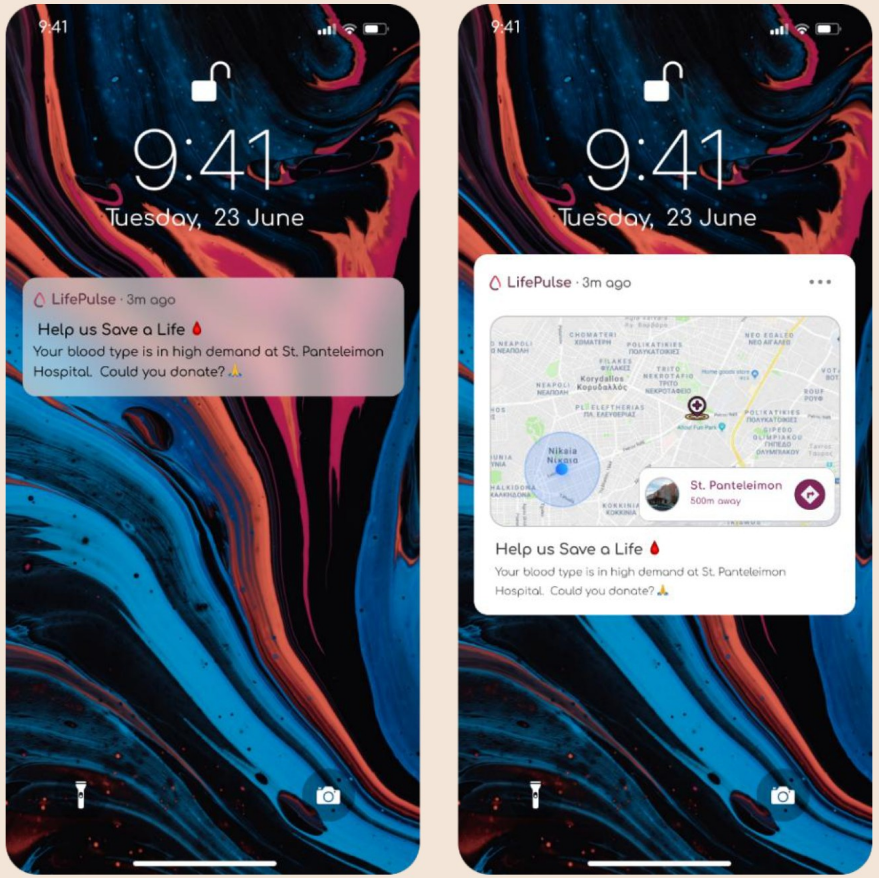


A hospital posts a need. Matching donors get a push notification.

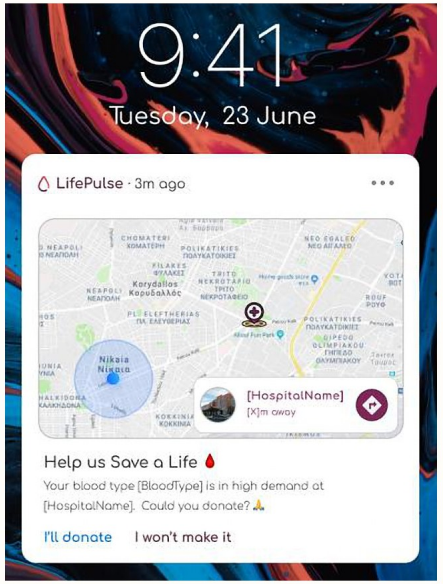
1 year in operation

~2,000 active users

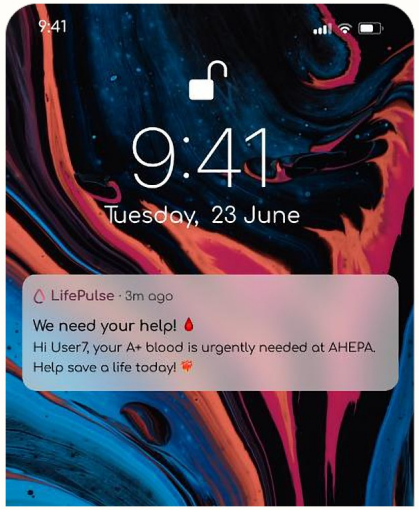
1 partner hospital



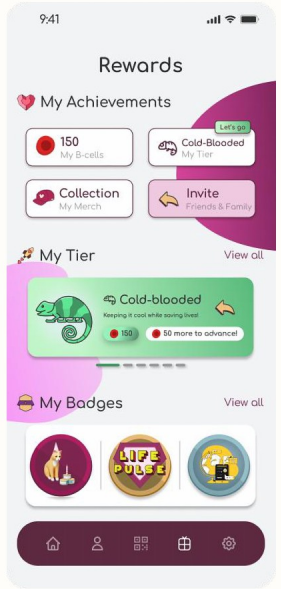
Principles in practice



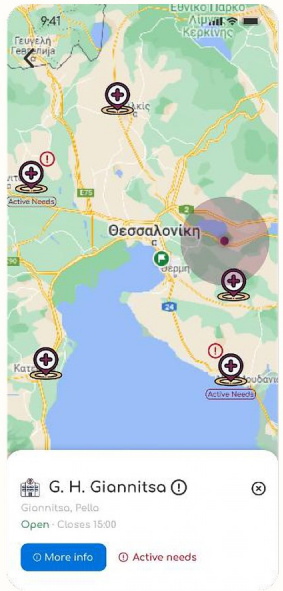
Push notifications



Personalization



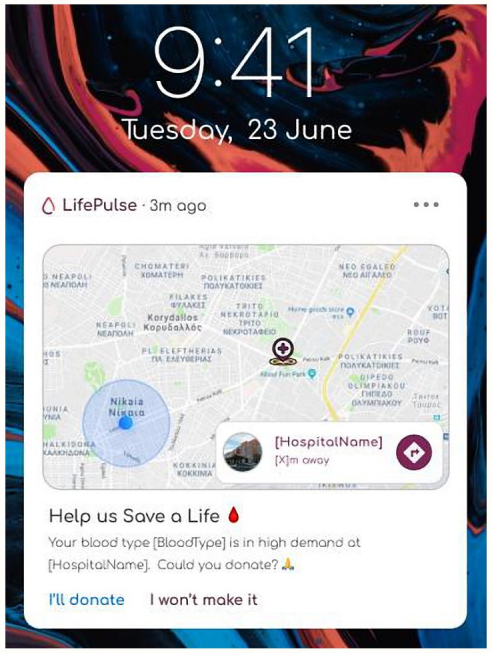
Gamification



Geolocation

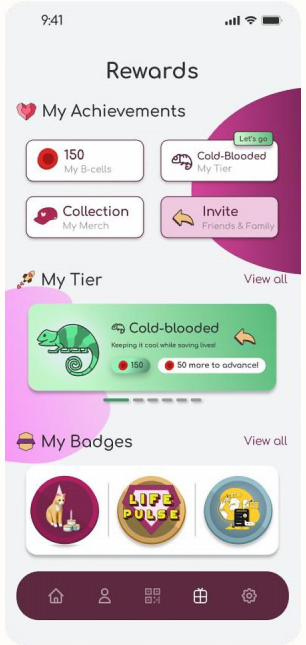
METHOD · 31 PARTICIPANTS · V1 VS. V2 · RANDOM ORDER

Study design



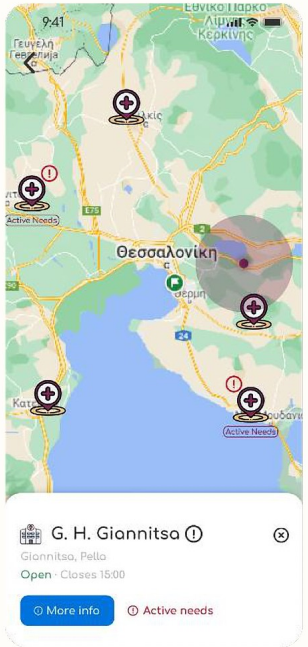
S1

Respond to a request



S2

Post-donation features

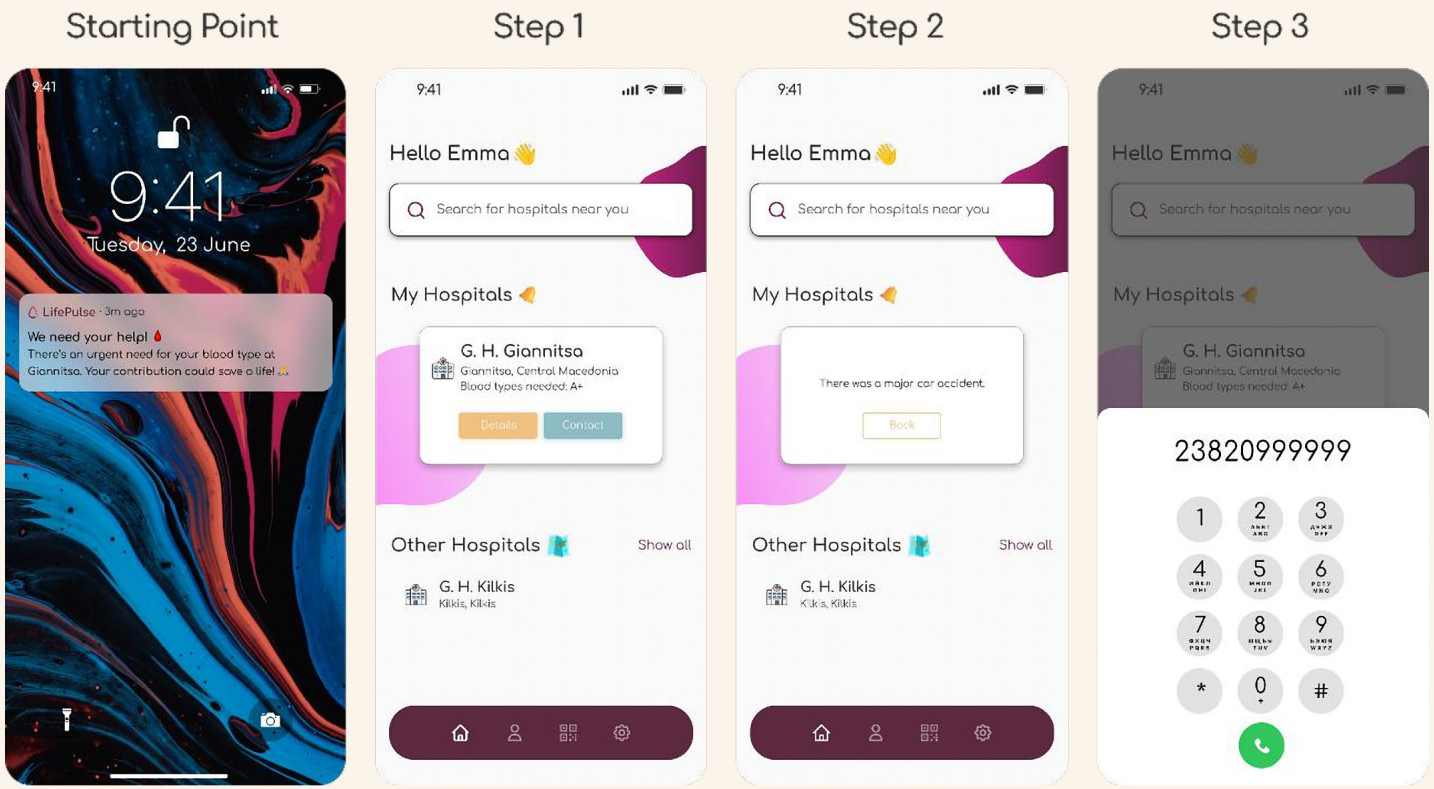


S3

Locate nearby needs

SCENARIO 1 · RESPOND TO A NOTIFICATION

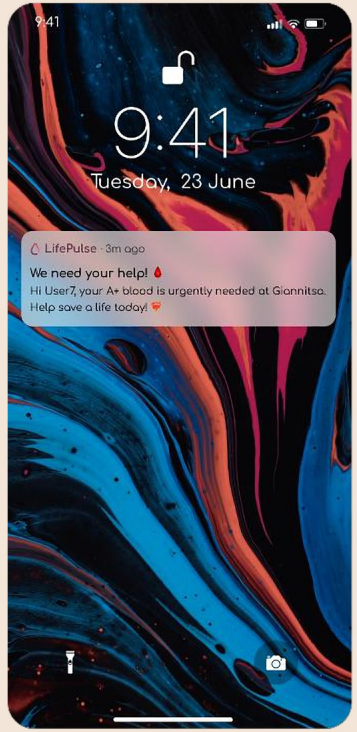
V1 flow: 3 steps



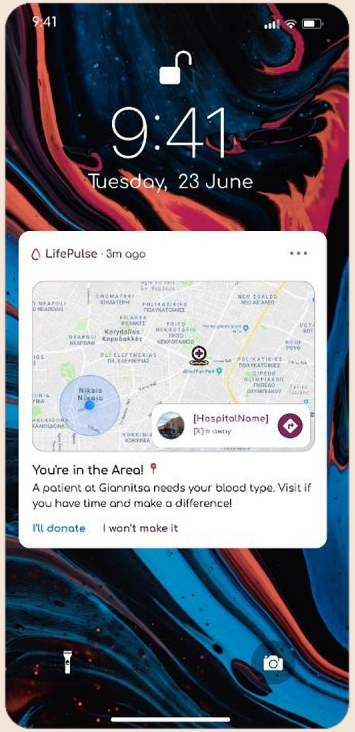
SCENARIO 1 · RESPOND TO A NOTIFICATION

V2 flow: 6 steps

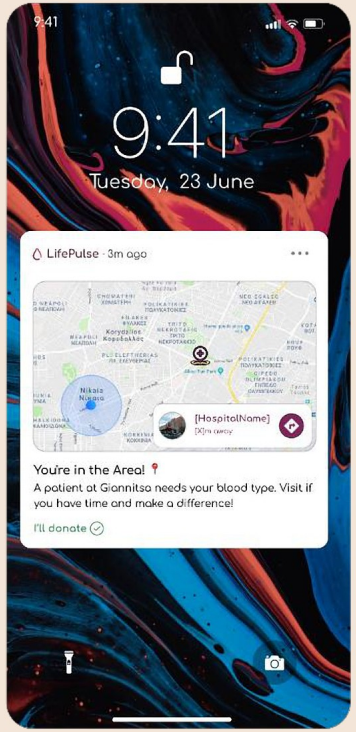
Starting Point



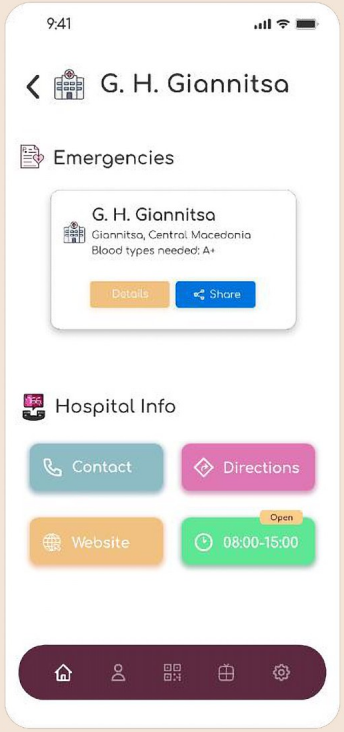
Step 1 & Step 2



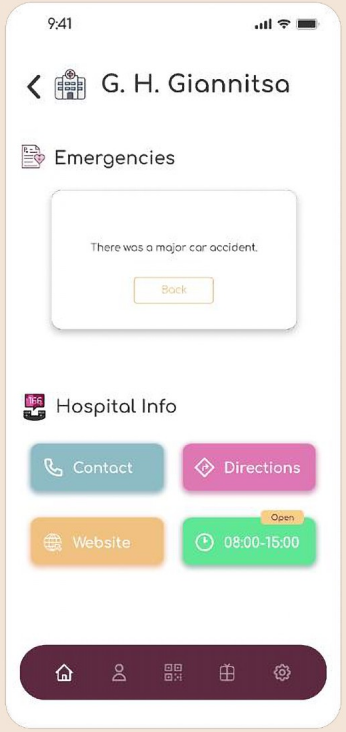
Step 3



Step 4



Step 5

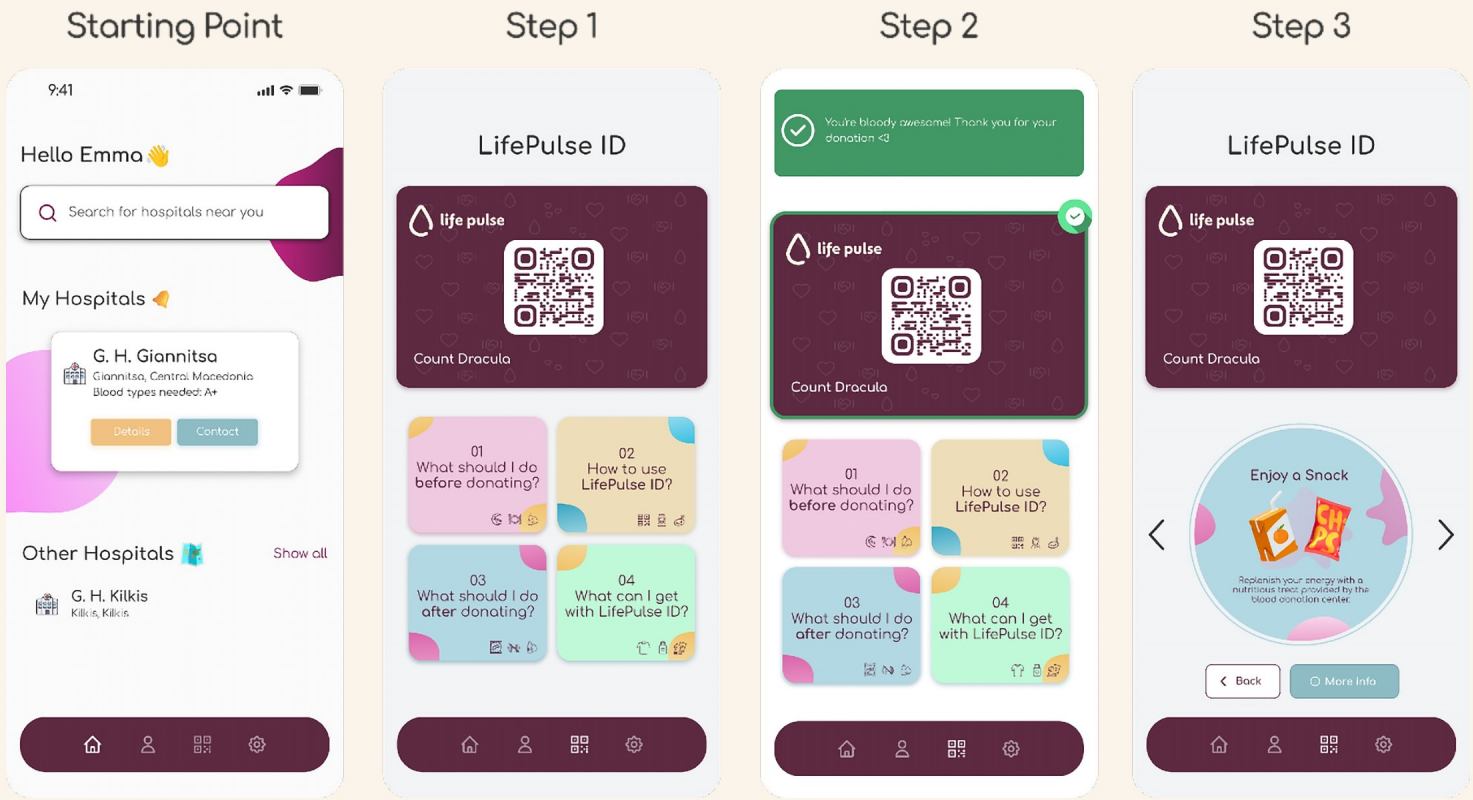


Step 6



SCENARIO 2 · POST-DONATION INTERACTION

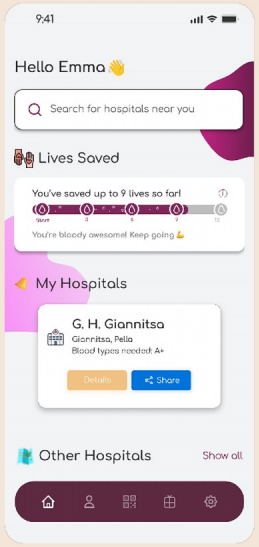
V1 flow: 4 steps



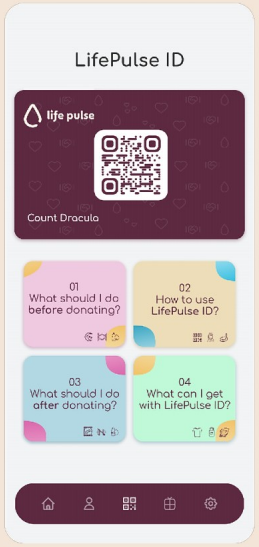
SCENARIO 2 · POST-DONATION INTERACTION

V2 flow: 6 steps

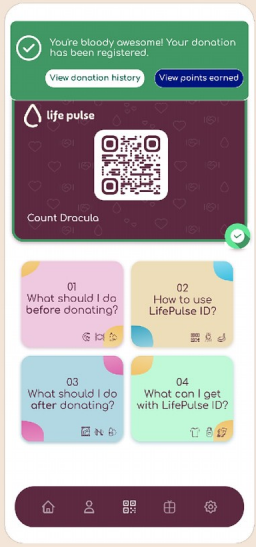
Starting Point



Step 1



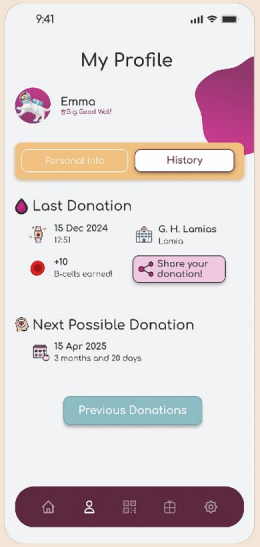
Step 2



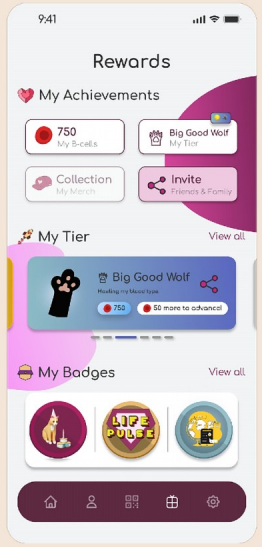
Step 3a



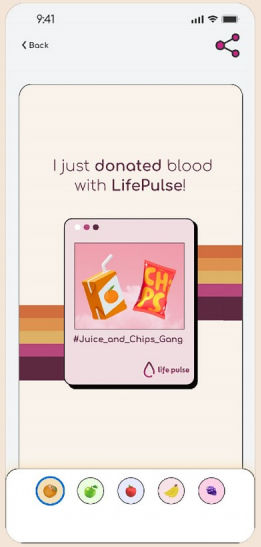
Step 3b



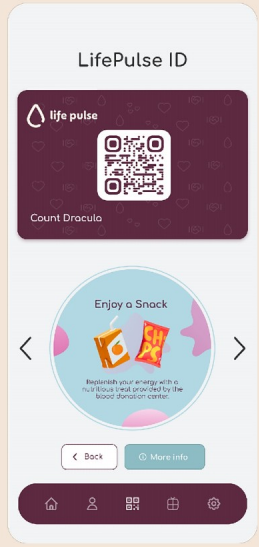
Step 3c



Step 4

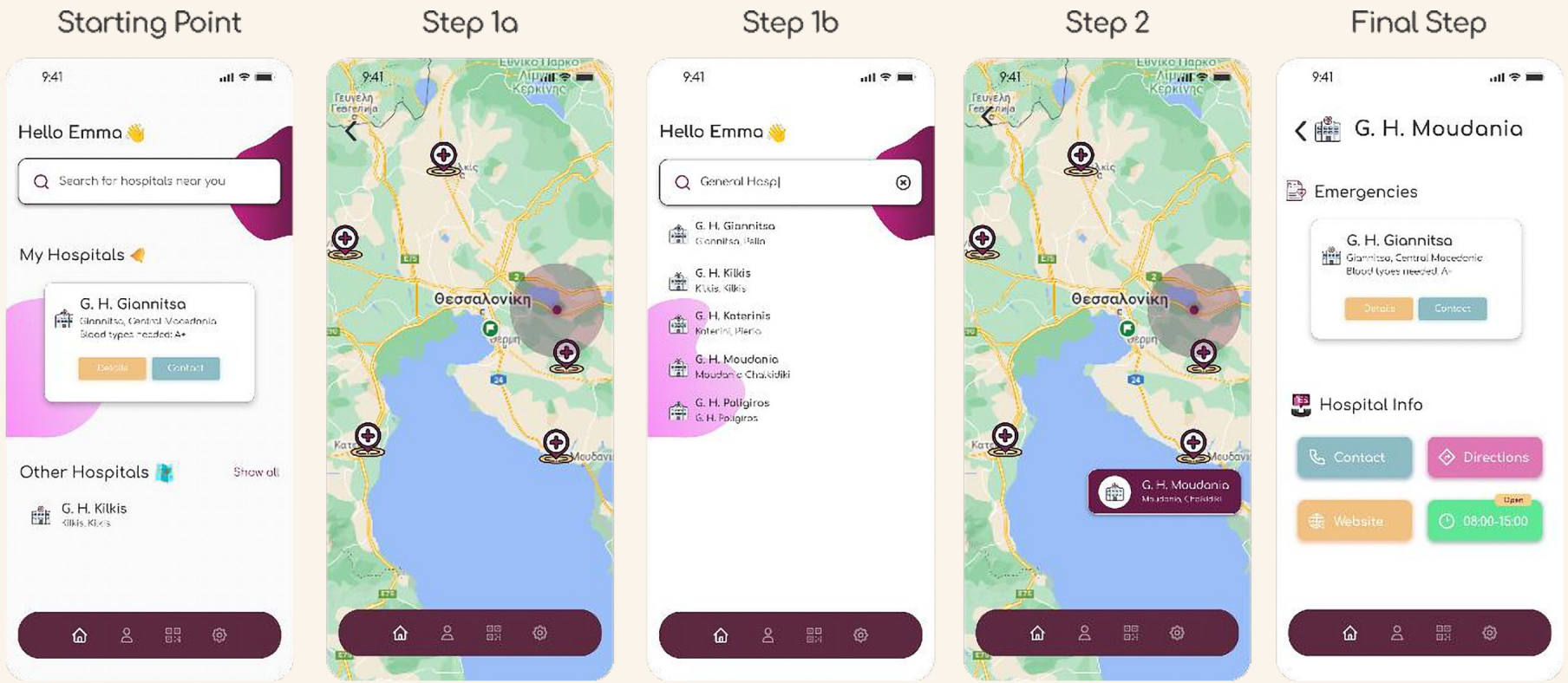


Step 5



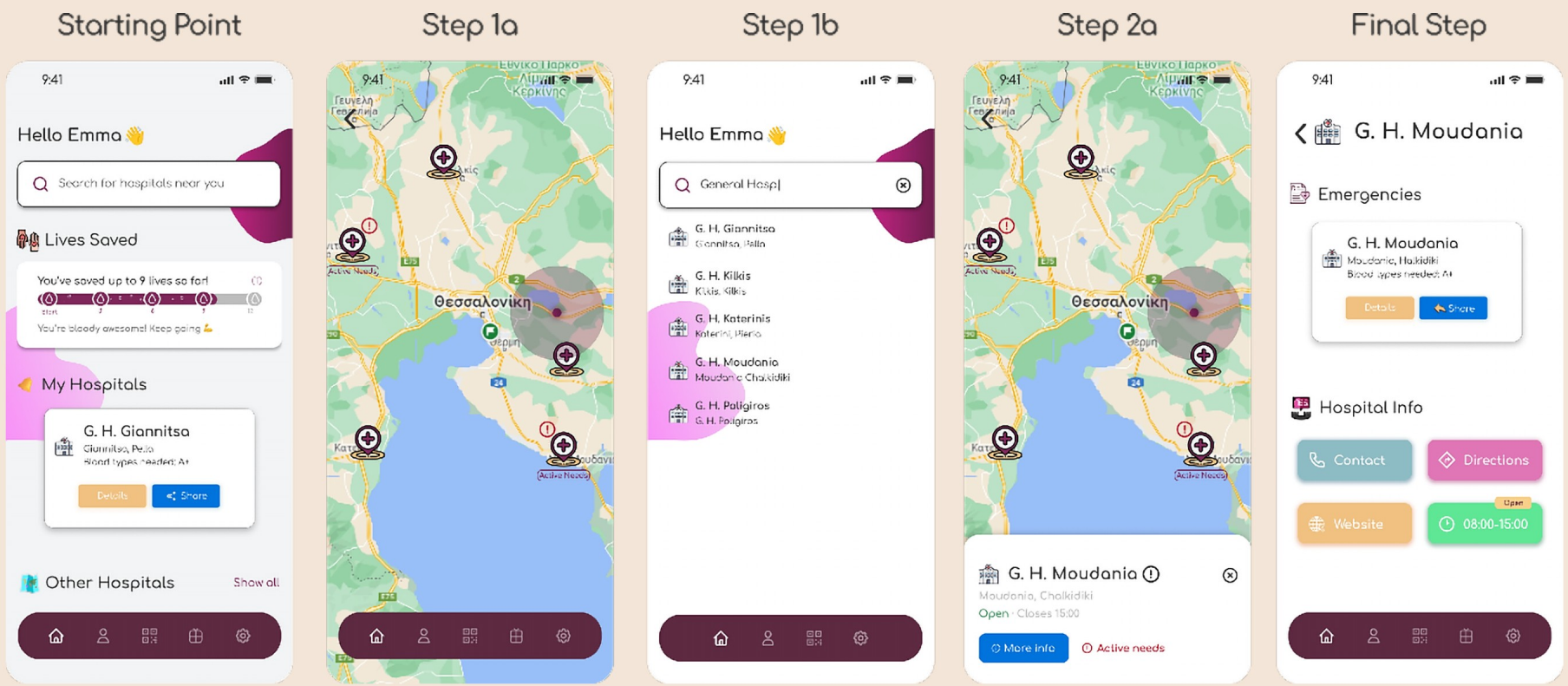
SCENARIO 3 · EXPLORE DONATION NEEDS

V1 flow: 2 steps



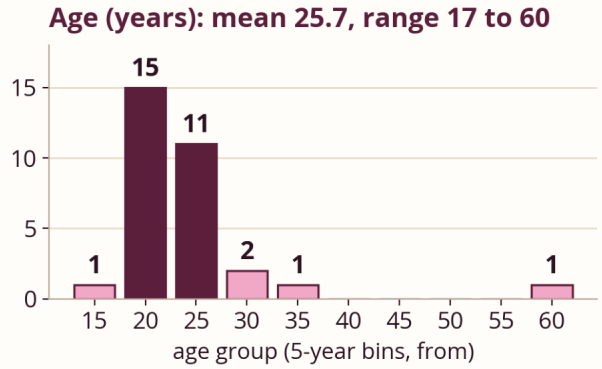
SCENARIO 3 · EXPLORE DONATION NEEDS

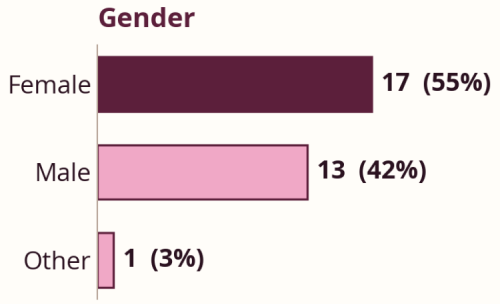
V2 flow: 3 steps

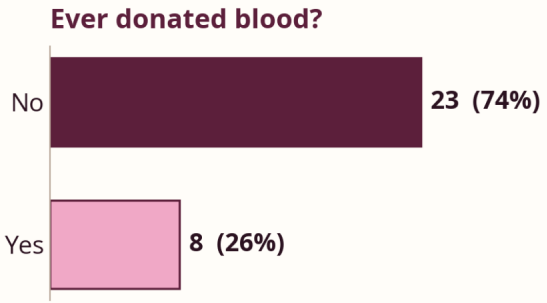


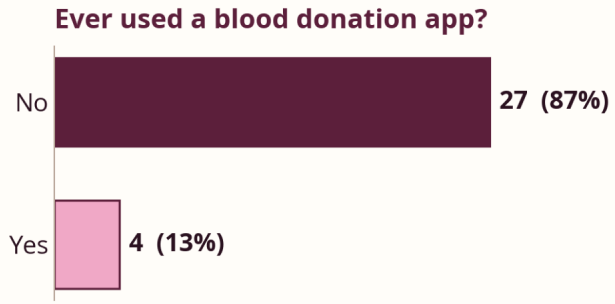
METHOD

Participants









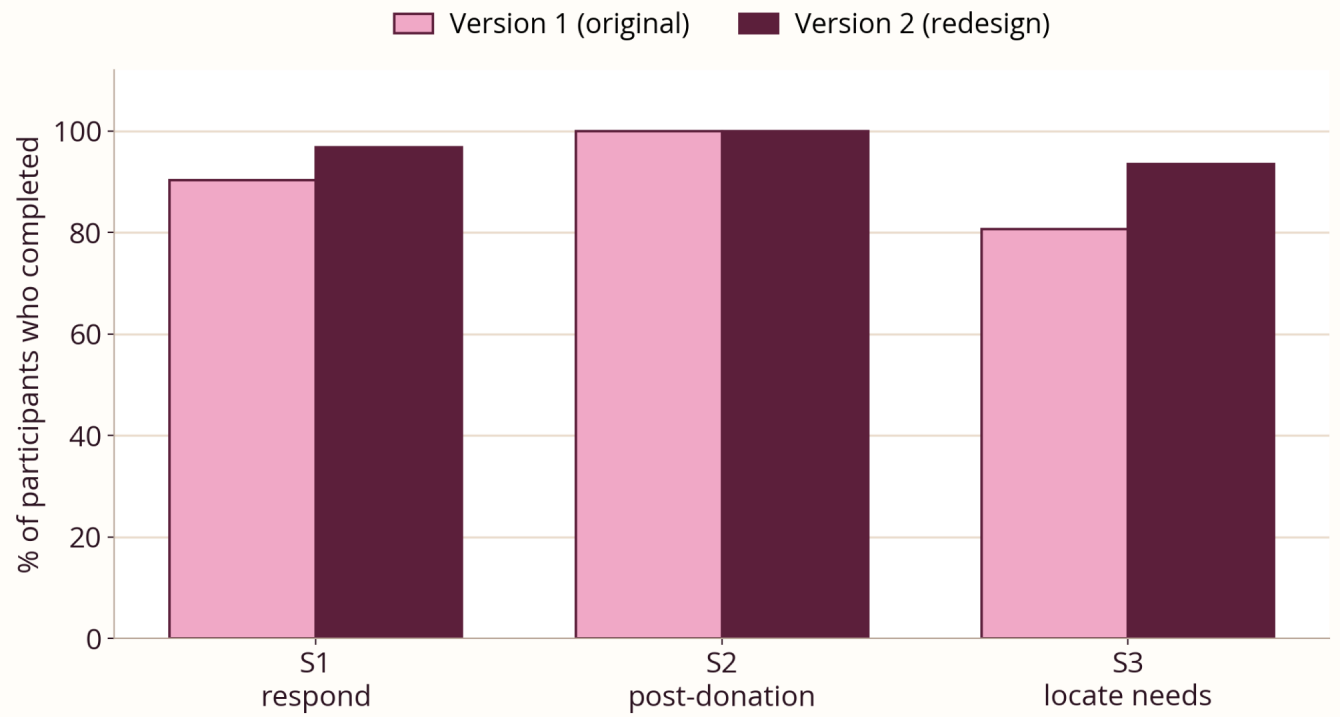
31

participants

Convenience sample

RESULTS

Task success



S3 · VERSION 2

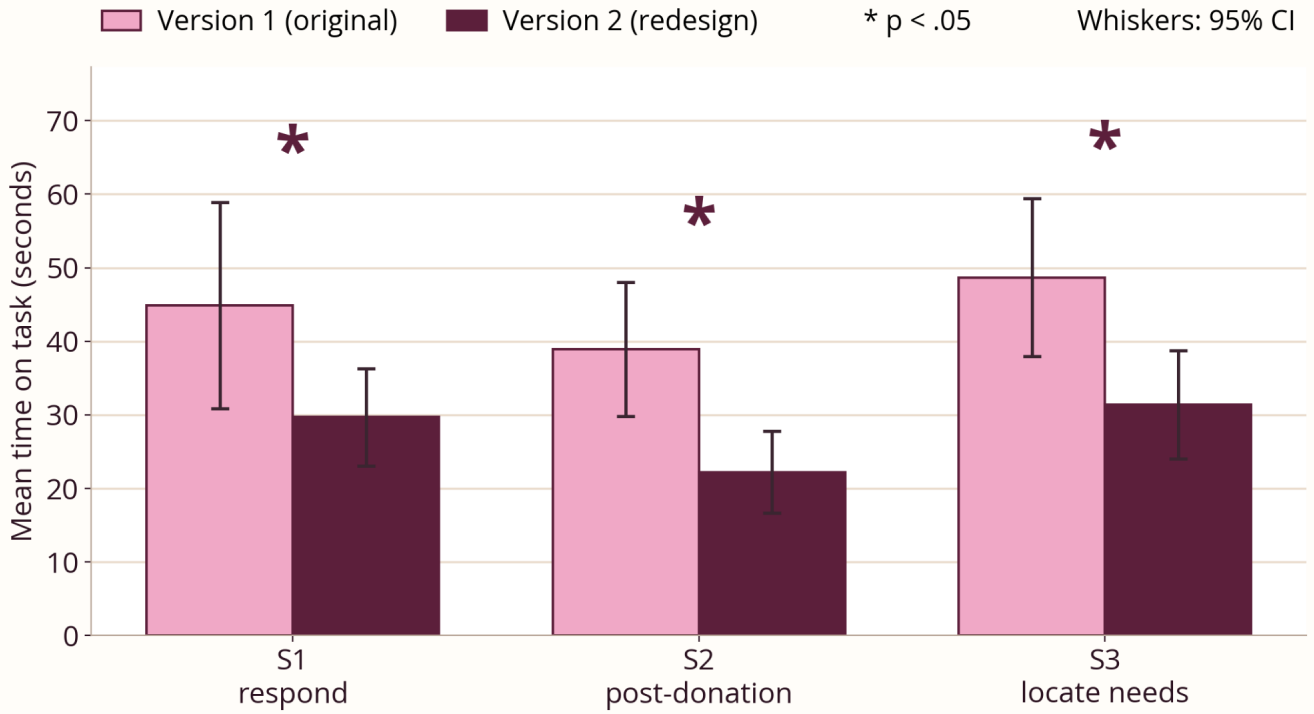
93.5%

completed, up from 80.6%

High in all scenarios

RESULTS

Time on task



S3 · VERSION 2

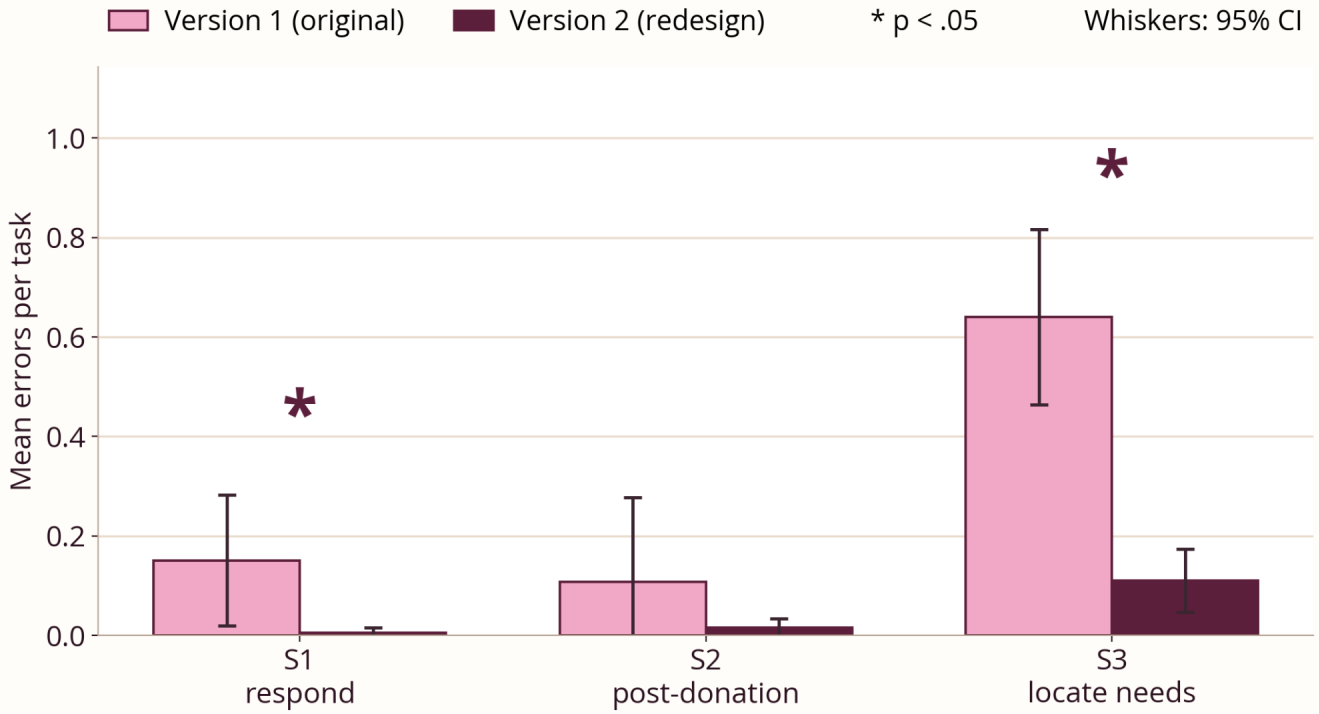
31.4 s

mean time, down from 48.7 s

Significant in S1, S2, S3

RESULTS

Errors



S3 · VERSION 2

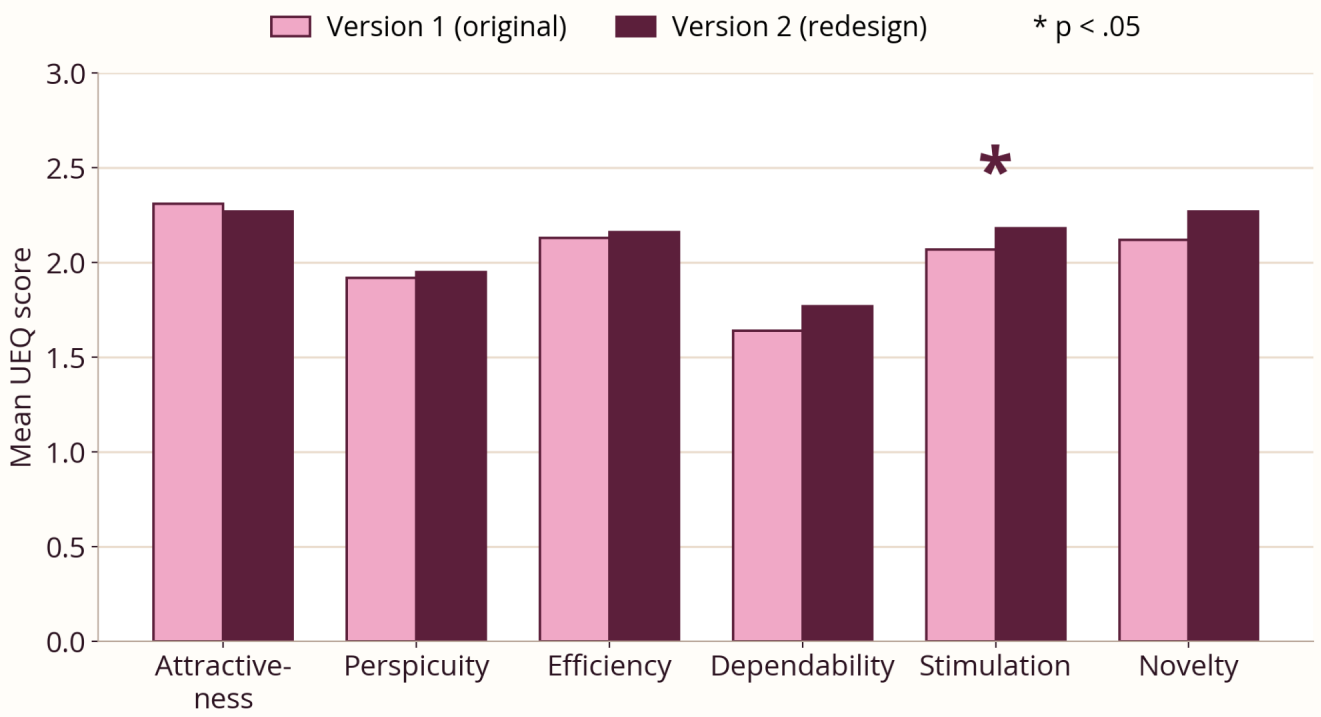
0.11

errors per task, down from 0.64

Significant in S1 and S3

RESULTS

User experience



STIMULATION

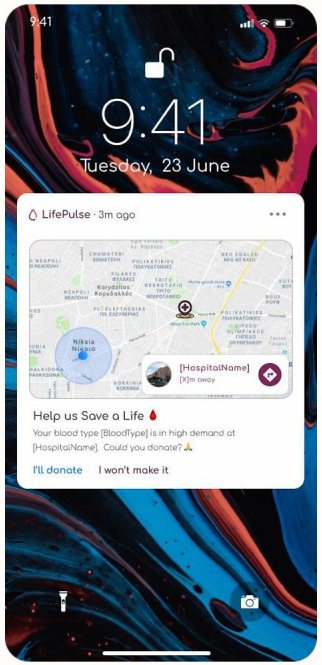
p = 0.005

the one significant scale

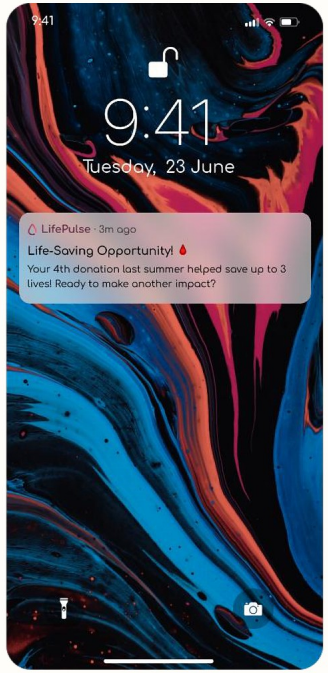
Overall UX: d = 0.96

TAKE-AWAYS

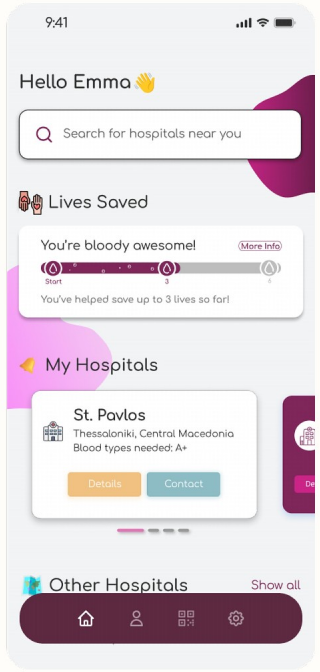
Design principles



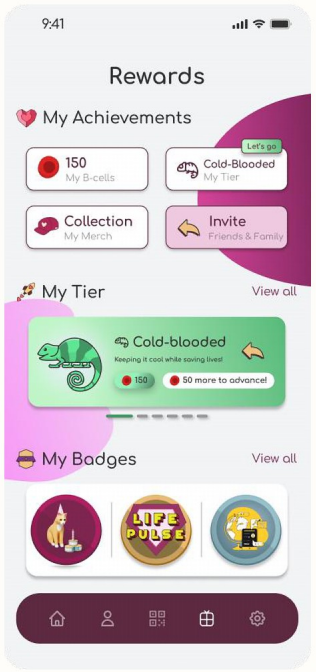
Interactive notifications



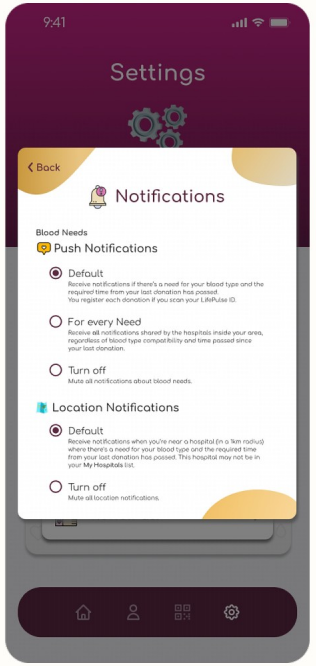
Personalization



Intuitive navigation



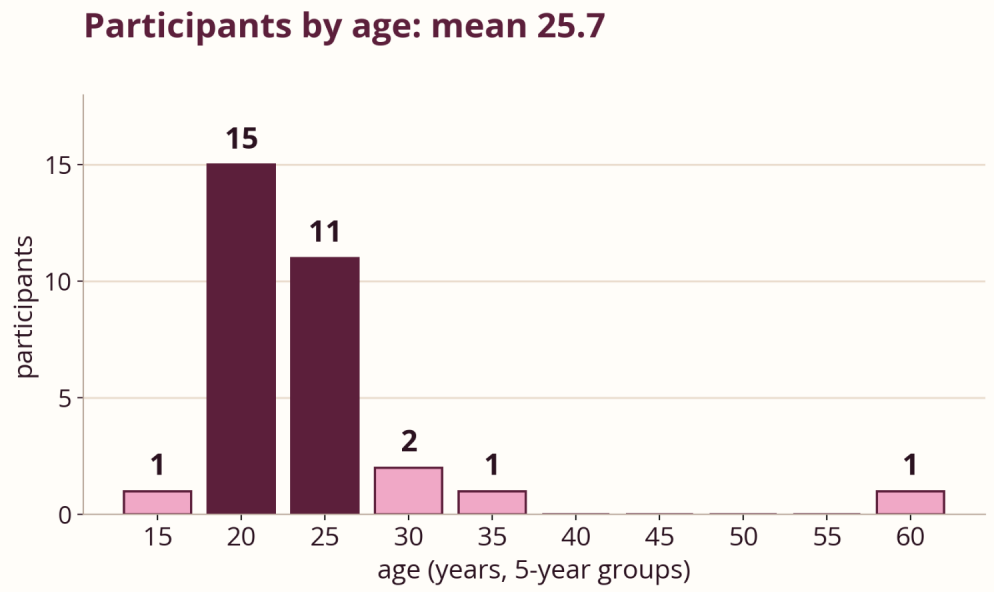
Subtle gamification



User-controlled geofencing

OUTLOOK

Next steps



Older, diverse donors

More donations?

Long-term engagement

LIMITATIONS: Young sample · Short-term testing

Let’s save lives together

Test the live version yourself

***Panagiotis Karadaglis**, UX Designer and Founder of LifePulse NGO*

***Dr. Christos Katsanos**, Associate Professor @AUTh*

ACM GreekCHI-CYCHI Symposium 2026 · Questions and discussion

Scan to try LifePulse

SOURCES

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BACKUP SLIDES

Why only Stimulation?

UEQ scale	V1 mean	V2 mean	p-value	
Attractiveness	2.31	2.27	0.422	ns
Perspicuity	1.92	1.95	0.855	ns
Efficiency	2.13	2.16	0.874	ns
Dependability	1.64	1.77	0.575	ns
Stimulation	**2.07**	**2.18**	**0.005**	*
Novelty	2.12	2.27	0.635	ns

Mean scores on a -3 to +3 scale. * p < .05; ns = not significant.

POSSIBLE ANSWER

V1 was already rated well on every scale

1.6 to 2.3

BACKUP SLIDES

Does it lead to more donations?

39
documented donations

~2,000
active users

Not measured in this study

