

Stakeholder involvement in the development of a Modular and Open Research (MORE) Platform for Digital Health

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[Having a clickable prototype] would considerably improve [one's] impression and probably also feedback.

... I feel valued and can influence the [Delphi] process...

[It] would be great if members of my team [...] could test / interact with a prototype.

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Introduction

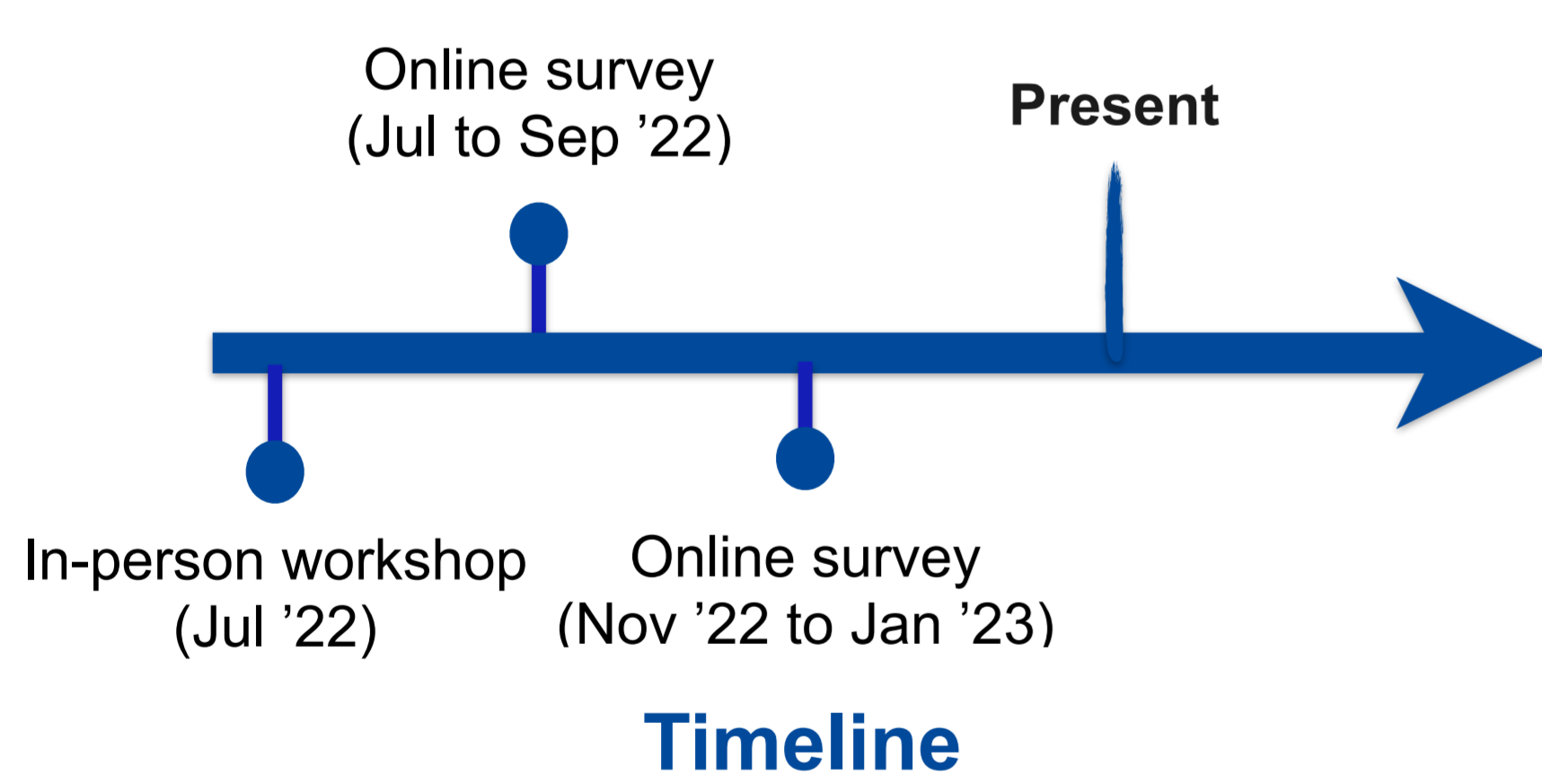
The MORE platform is being developed as an open-source platform for long-term situated digital health research, remote tele-health monitoring and evaluation of digital health interventions [1,2,4]. To ensure the long-term success of the platform, we engage with a multi-disciplinary group of stakeholders in our design process.

Research Question

How can we develop a participatory and iterative design process that allows us to capture the voices, abilities and needs of **researchers**, **developers** and **healthcare professionals** and enable them to contribute to a unified vision of the MORE platform? [3]

Design Process

We adopt a Delphi-inspired [5], iterative and participatory design process through a series of workshops and surveys.



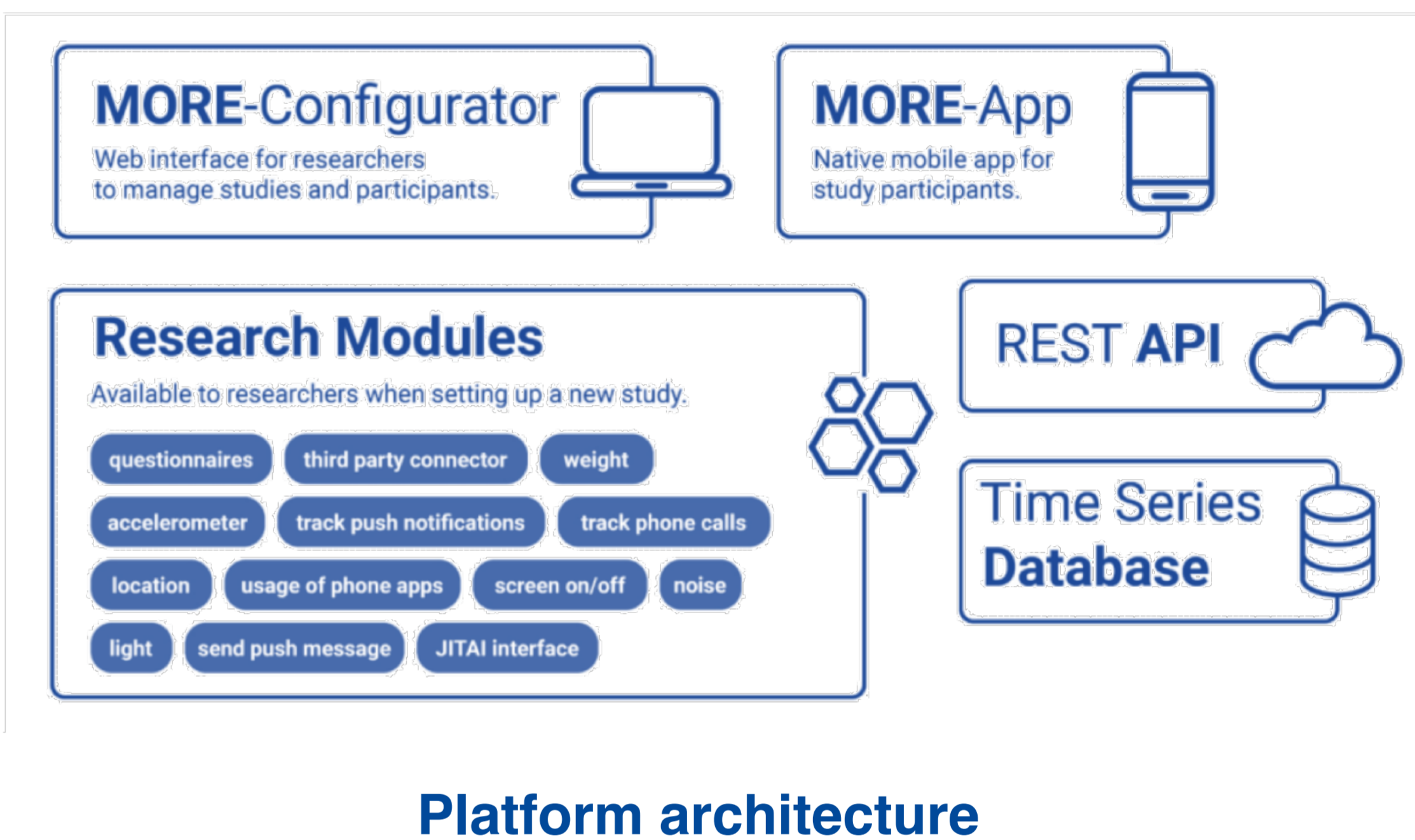
Activity during in-person workshop

References

- [1] D. Kumar, S. Jeuris, J. E. Bardram, and N. Dragoni, "Mobile and Wearable Sensing Frameworks for mHealth Studies and Applications: A Systematic Review," *ACM Trans. Comput. Healthc.*, vol. 2, no. 1, p. 8:1-8:28, Dec. 2021, doi: 10.1145/3422158.
- [2] R. J. Widmer, N. M. Collins, C. S. Collins, C. P. West, L. O. Lerman, and A. Lerman, "Digital Health Interventions for the Prevention of Cardiovascular Disease: A Systematic Review and Meta-analysis," *Mayo Clin. Proc.*, vol. 90, no. 4, pp. 469-480, Apr. 2015, doi: 10.1016/j.mayocp.2014.12.026.
- [3] S. Beck et al., "The Open Innovation in Science research field: a collaborative conceptualisation approach," *Ind. Innov.*, vol. 29, no. 2, pp. 136-185, 2022.
- [4] I. Nahum-Shani et al., "Just-in-Time Adaptive Interventions (JITAs) in Mobile Health: Key Components and Design Principles for Ongoing Health Behavior Support," *Ann. Behav. Med.*, vol. 52, no. 6, pp. 446-462, May 2018, doi: 10.1007/s12160-016-9830-8.
- [5] D. Barrett and R. Heale, "What are Delphi studies?," *Evid. Based Nurs.*, vol. 23, no. 3, pp. 68-69, Jul. 2020, doi: 10.1136/ebnurs-2020-103303.

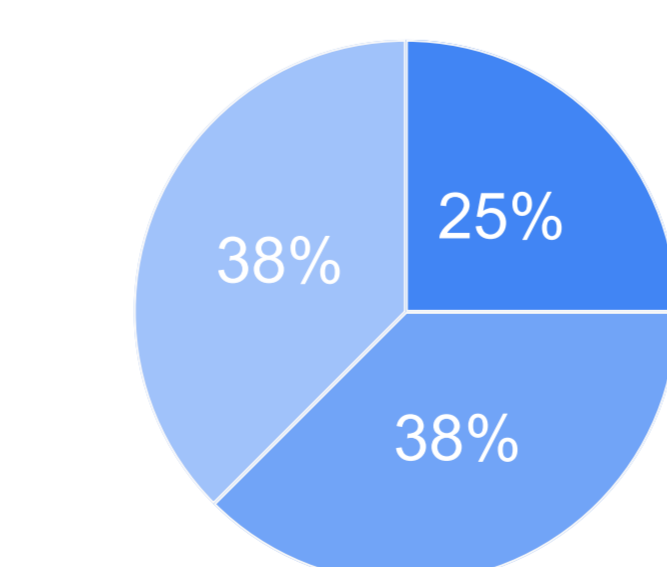
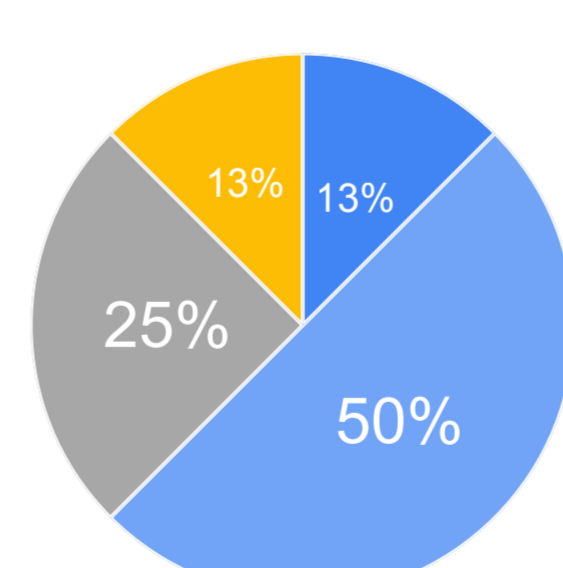
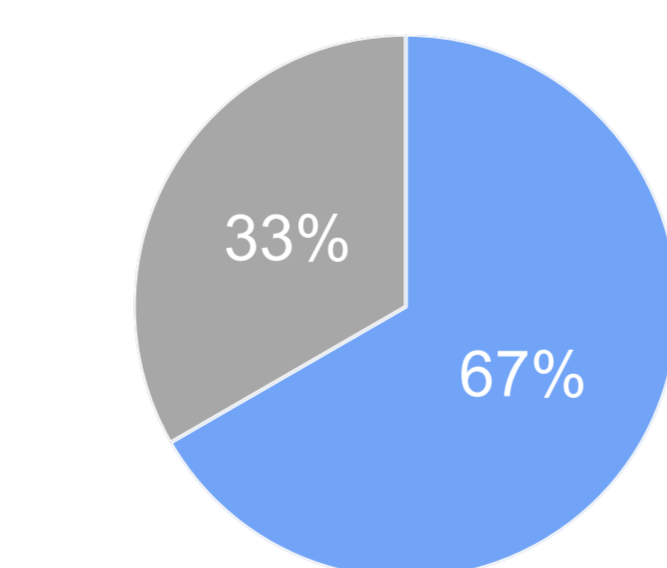
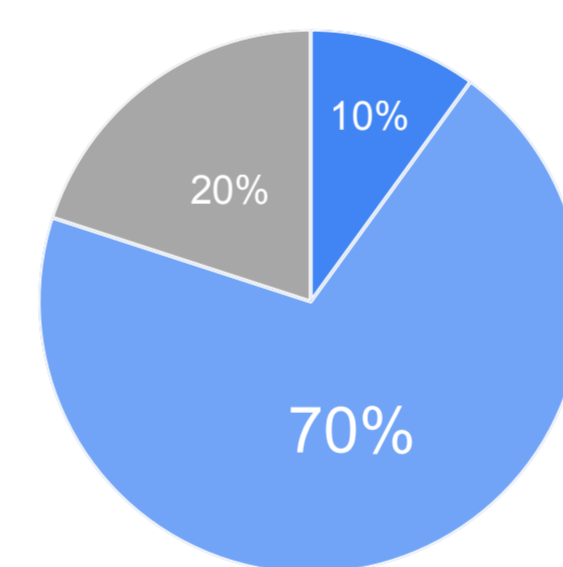
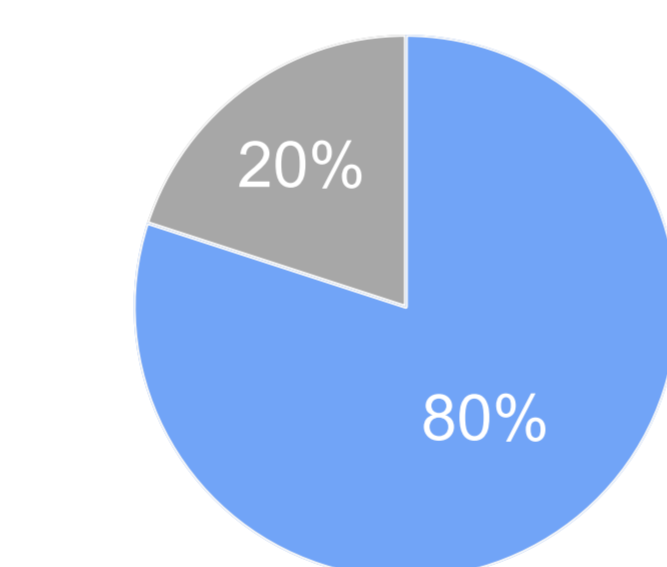


Technology

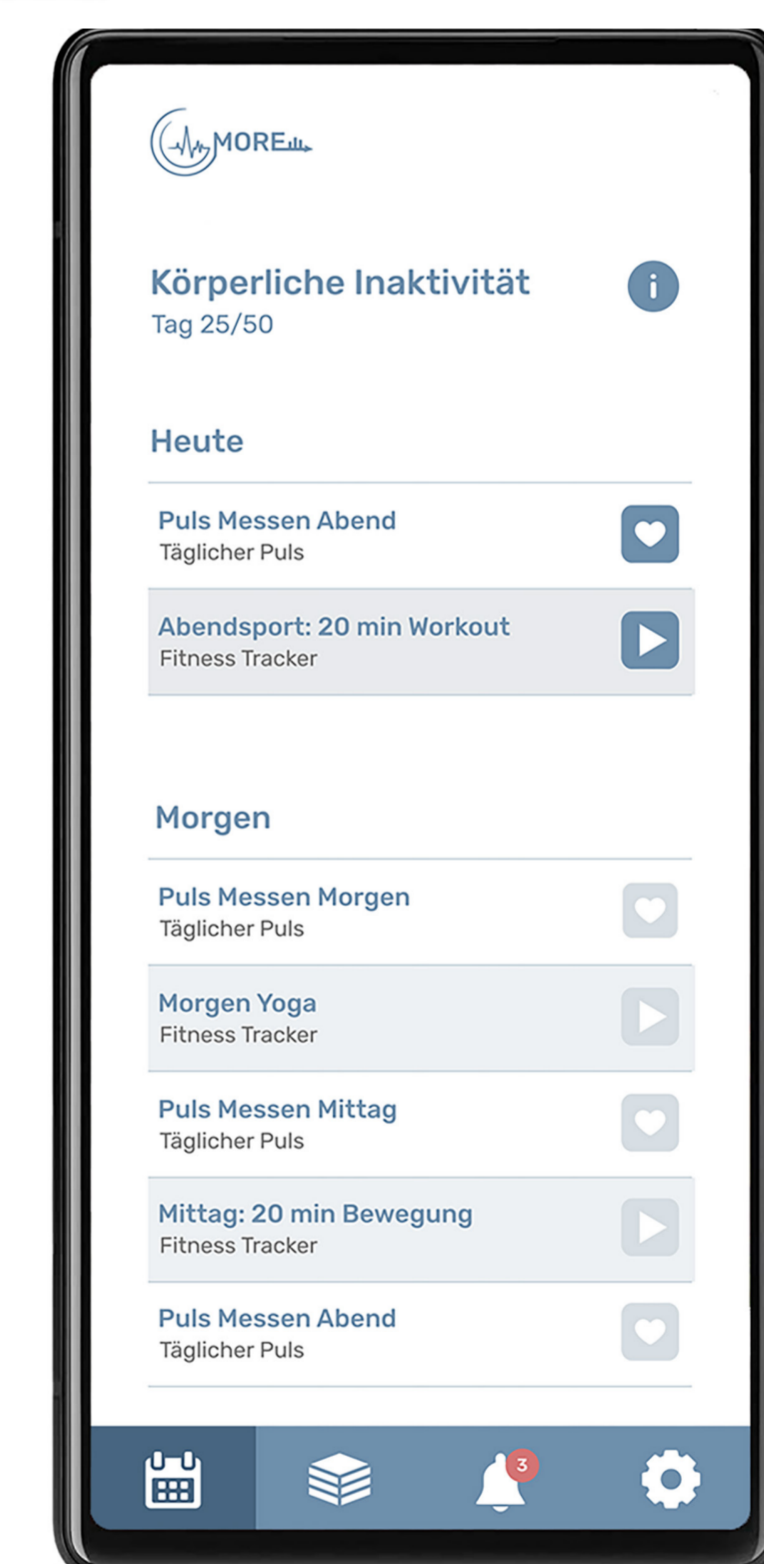


Experts' perceptions about the Design Process

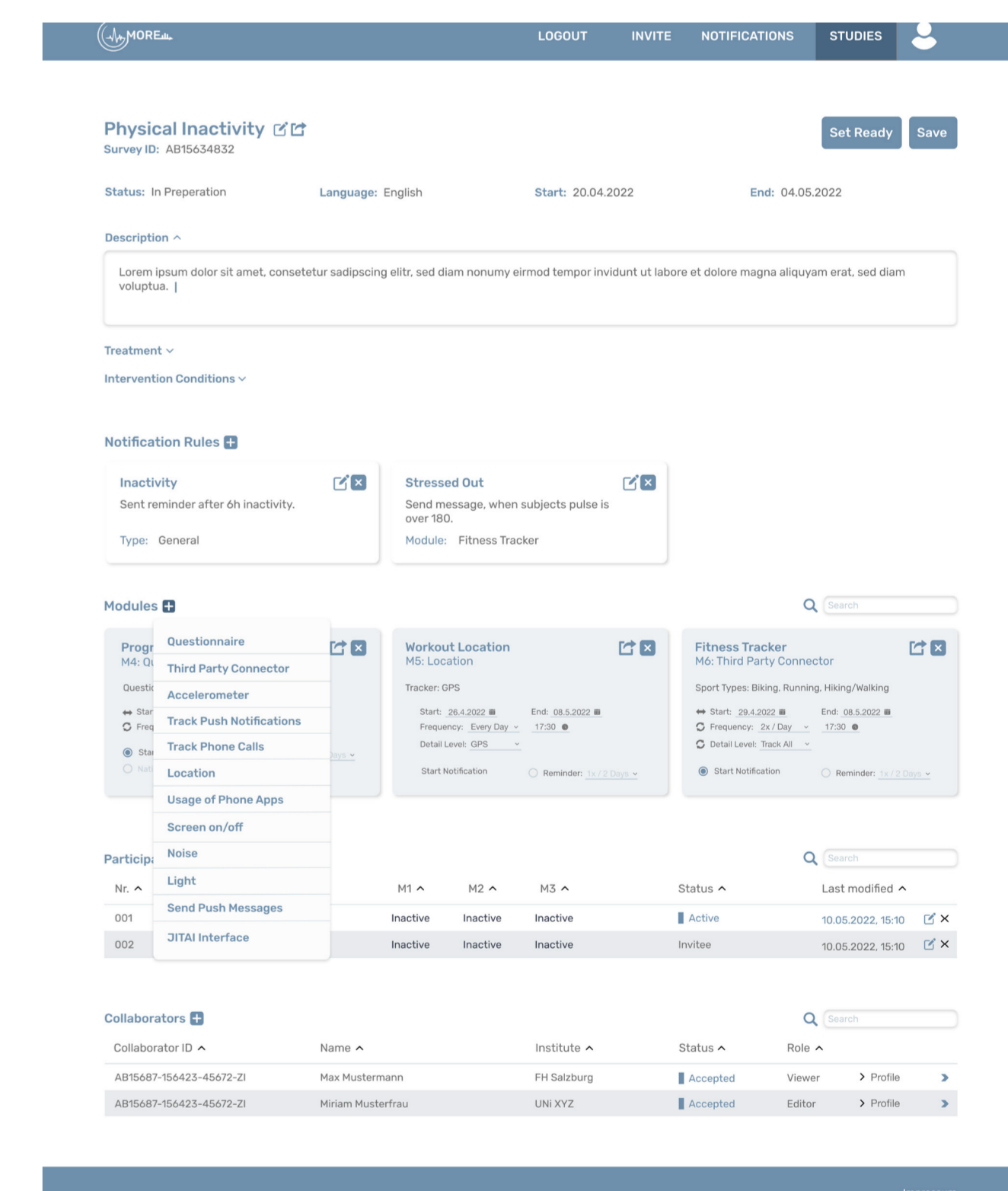
Strongly Disagree Disagree Slightly Disagree Neither Disagree nor Agree Slightly Agree Agree Strongly Agree



In general, the participants conveyed that they felt valued throughout the Delphi process and deemed the amount of effort needed to be reasonable.



Mobile application



Dashboard



Video Walkthrough



e-Poster



Contact Author