

Optimising Goldsmiths Students' RHB Navigation Experience

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ABSTRACT

This project aims to assess the impact navigating RHB has on students' stress and anxiety and investigate how technology could potentially be leveraged to reduce these emotions and improve students' experience. To accomplish this, primary research with 14 Goldsmiths students was conducted. Navigation tasks provided insight into the usability of existing digital navigation tools, whilst interviews offered a closer look at user needs. Participants were grouped based on spatial anxiety level to determine whether a natural apprehension towards navigation influenced task results. A state-of-the-art review of mapping technologies was completed to evaluate possible updates. Findings from this research indicated that navigating RHB is a stressful and anxiety-inducing experience that requires intervention. To reduce negative emotions associated with this experience, key pain points and solutions were identified.

Research Questions

How does using the RHB Room Finder affect students' stress and anxiety levels while navigating campus?

How does using the RHB Room Finder impact students with high spatial anxiety levels compared to students with average to low levels?

What are the most significant pain points experienced by students while navigating RHB, and how can technology and design updates be used to address them?

What is the RHB Room Finder?
A custom digital map provided by Goldsmiths. The Room Finder includes a room search function and single-floor static maps.

What is spatial anxiety (SA)?
A sub-type of anxiety associated with performing spatial tasks such as navigation (Alvarez-Vargas et al., 2020).

Research Methods

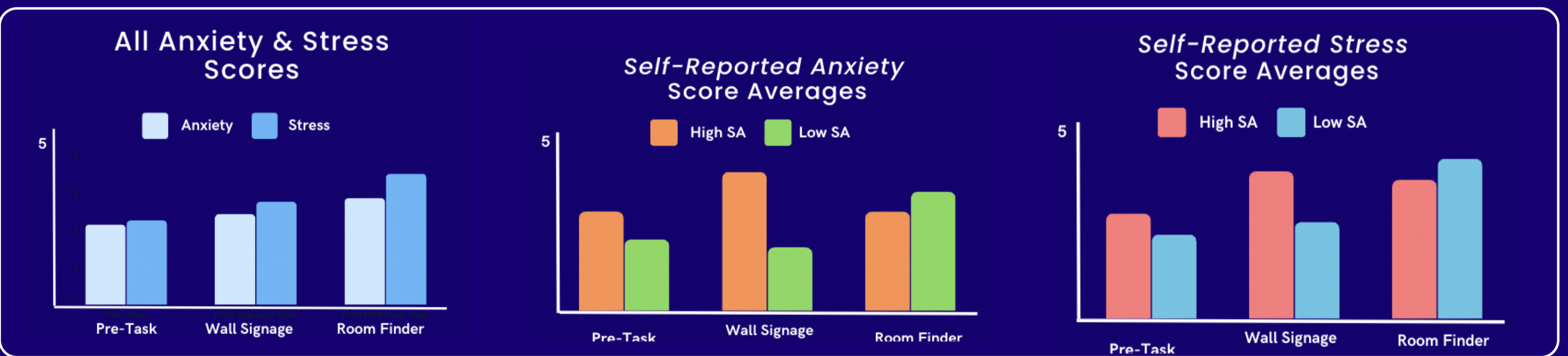
Navigation Tasks
Conducted to gather quantitative data on RHB navigation experience and assess its impact on stress and anxiety.

Interviews
Conducted to gather qualitative data on RHB navigation experience and pain points.

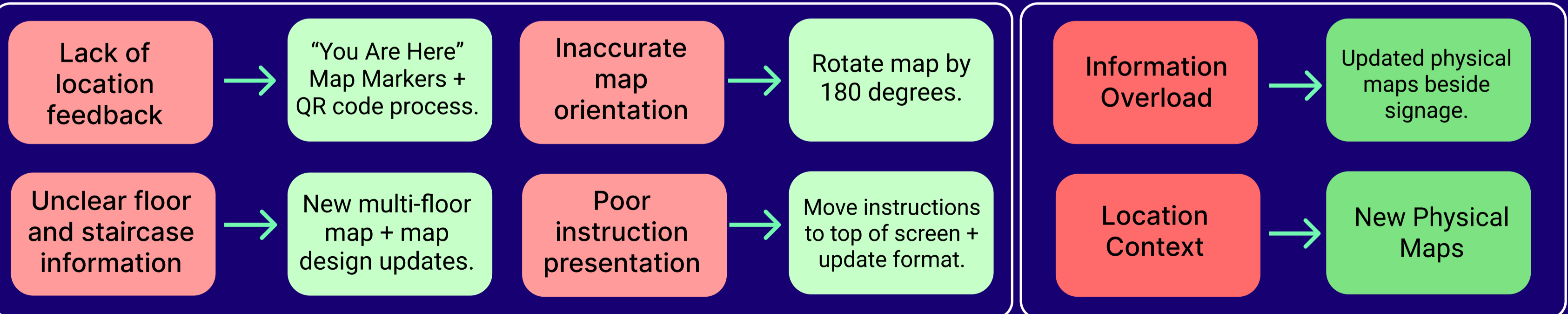
State-of-the-Art
A review of existing map technologies and implementation logistics to assess whether interactive maps are a valid solution.

Results

Both navigation methods (RHB Room Finder and Wall Signage) resulted in increased stress and anxiety for at least one user group, indicating a need for intervention. Interviews helped to identify specific pain points and unmet needs.



Common Pain Points → Solutions



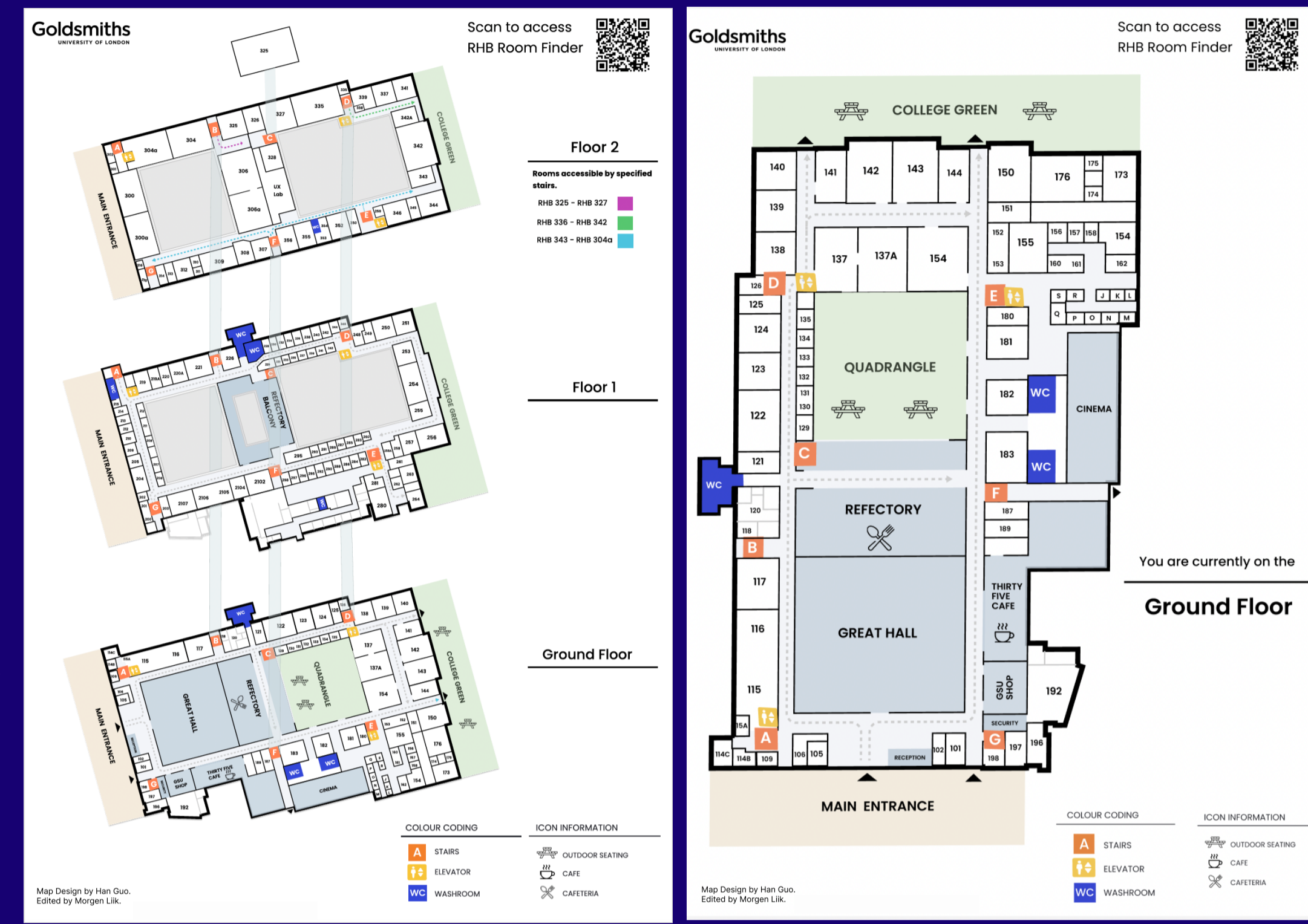
Conclusion

Possible technology and design-based interventions were a focus of this project. The concept of interactive maps was explored, but after analysing user feedback and secondary research, this technology did not appear to be a good fit. Instead, updates to the functionality and design of the room finder, coupled with QR codes to increase access and location feedback, presented a better way to address various pain points. Overall, the outcomes of this project were cost-effective solutions that target critical issues experienced by students when navigating RHB.

References
Alvarez-Vargas, D., Abad, C., & Pruden, S. M. (2020). Spatial anxiety mediates the sex difference in adult mental rotation test performance. *Cognitive Research: Principles and Implications*, 5, 31. <https://doi.org/10.1186/s41235-020-00231-8>

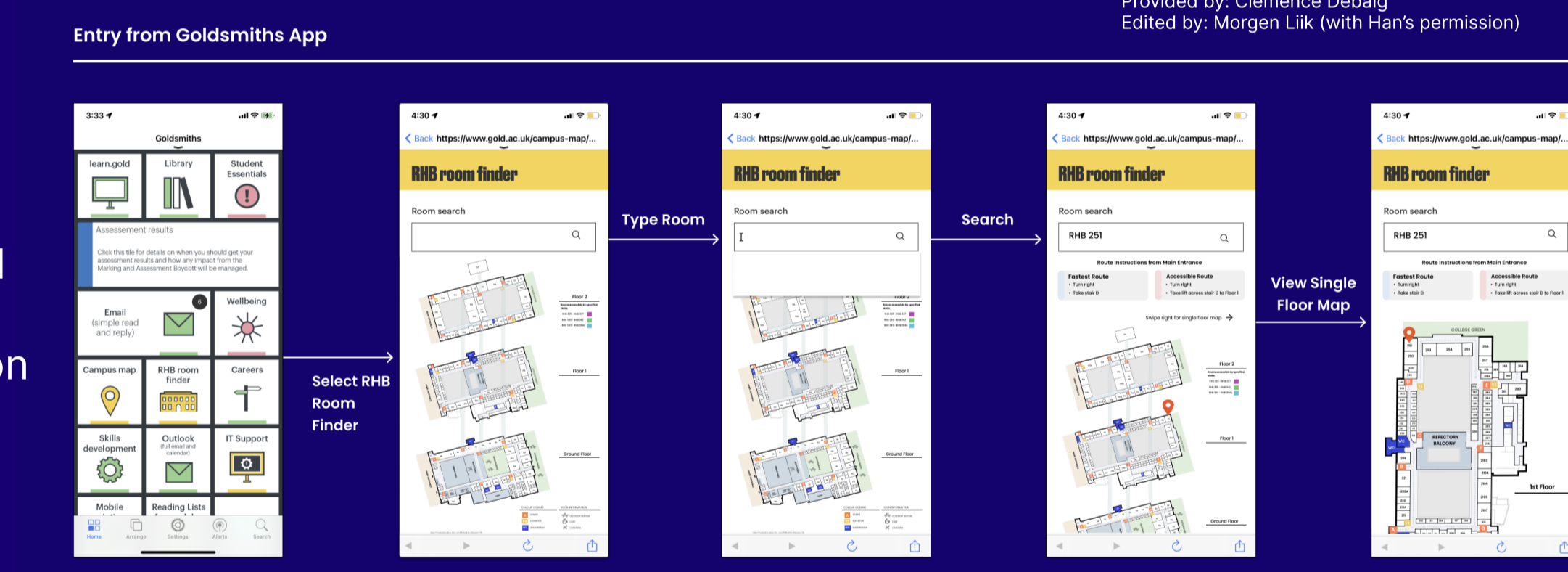
Proposed Solutions

Map Updates
To address confusion regarding floor and stair information and improve general information clarity, updated single-floor maps and a new multi-level map should be developed. To the right are examples of possible maps.



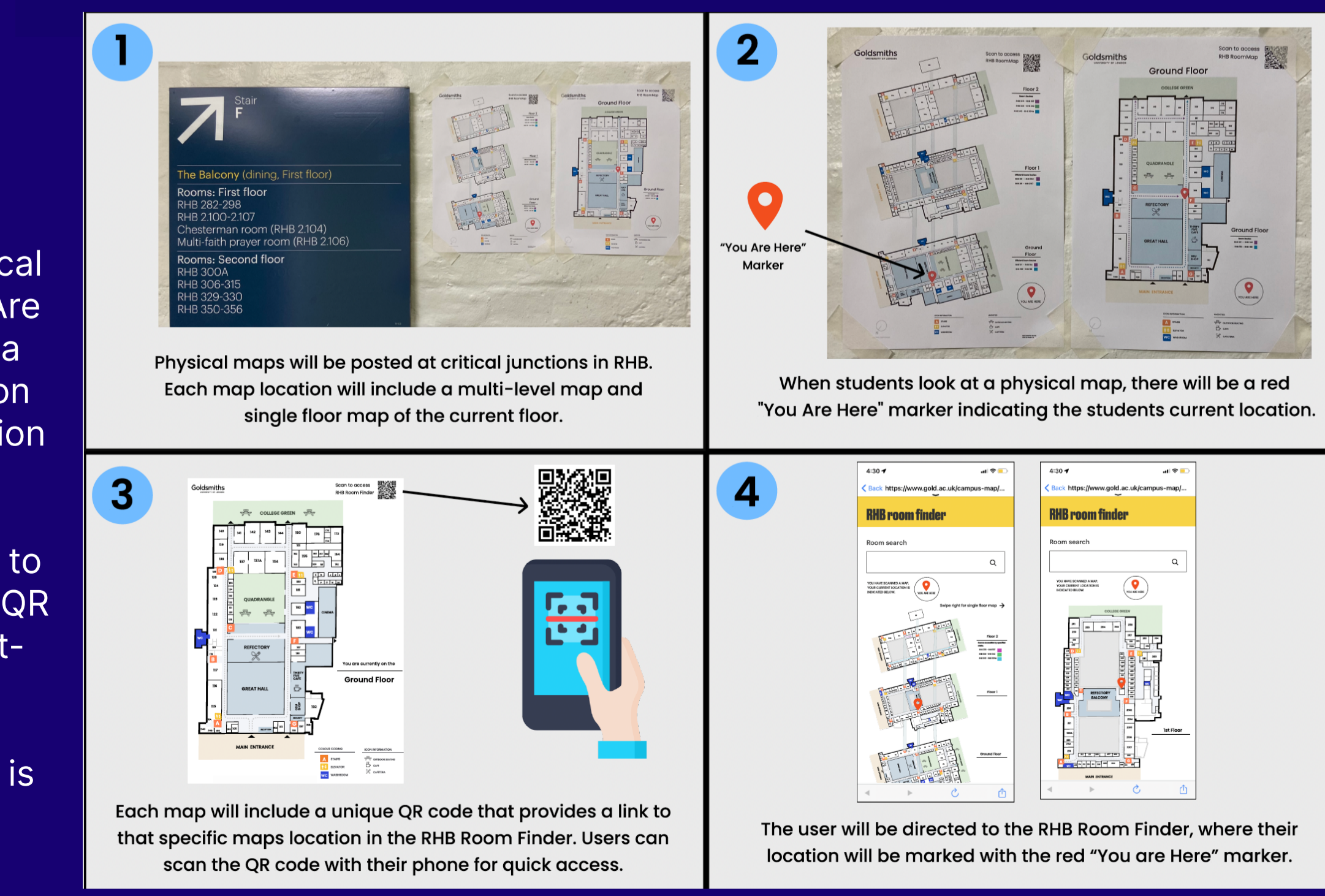
App Process Updates

Updates to the Room Finder's landing page, route instructions, and search feature would help address information and usability issues identified by users.



Physical Maps X QR Codes

Posting updated physical maps with clear "You Are Here" markers offers a way to improve location feedback and information overload.



Linking physical maps to the Room Finder using QR codes presents a cost-effective technical solution to location feedback. To the right is an overview of this process.