

# How to Alleviate Students' sense Of Isolation And Disconnection From Video Lectures

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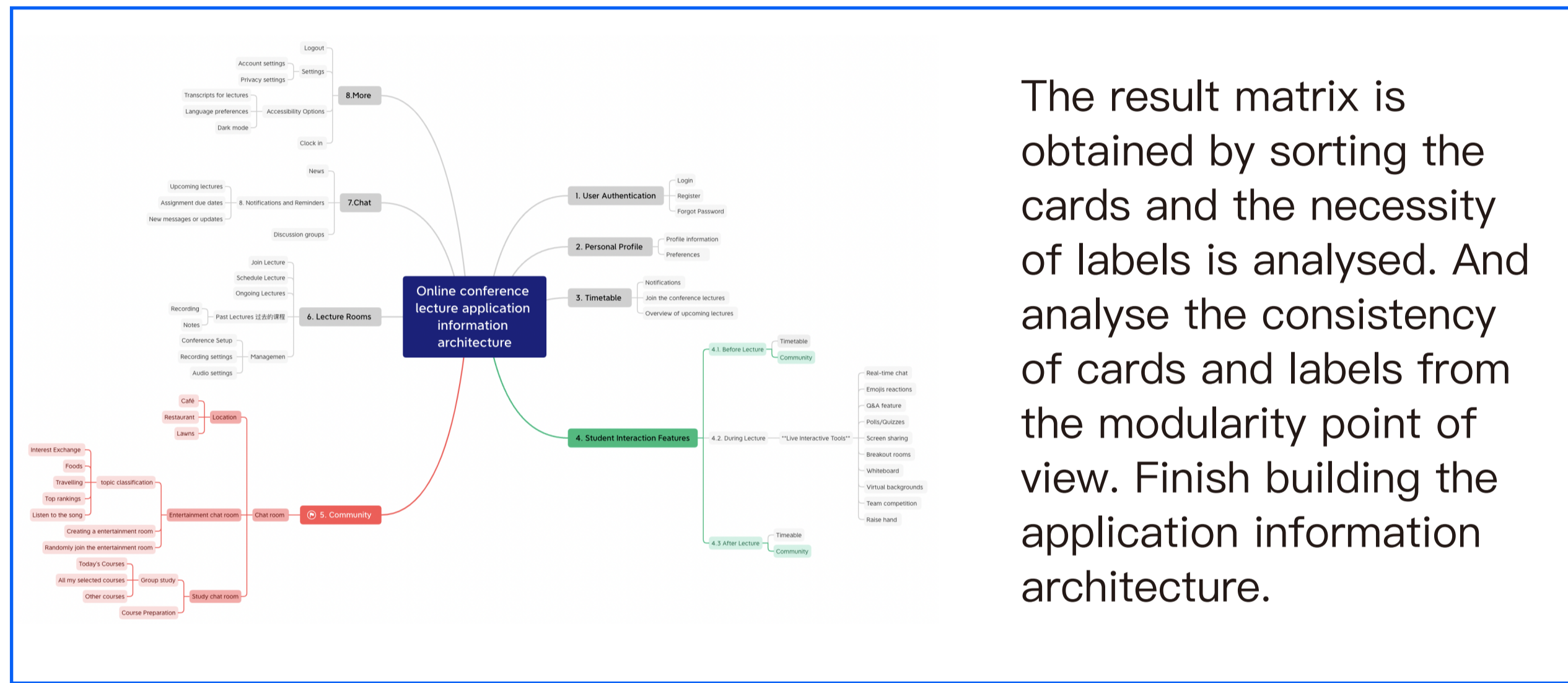
## Introduction & Background

During the COVID-19 pandemic, the shift to online education via videoconferencing has become a critical but challenging adaptation. While it offers security and flexibility, the lack of face-to-face interaction and a diminished sense of community can lead to students feeling isolated and disconnected. This in turn has a negative impact on academic performance and mental health. In response to these challenges, this study aims to optimise the online educational experience by increasing interaction and diversifying forms of engagement.

## Abstract

This study aims to enhance the online educational experience and foster a sense of community by increasing interaction methods and optimising the delivery process. My goal was to mitigate the negative effects of isolation between users during online instruction. This study created stronger connections between students and increased user engagement.

## Study Methodology



## Card Category

The result matrix is obtained by sorting the cards and the necessity of labels is analysed. And analyse the consistency of cards and labels from the modularity point of view. Finish building the application information architecture.

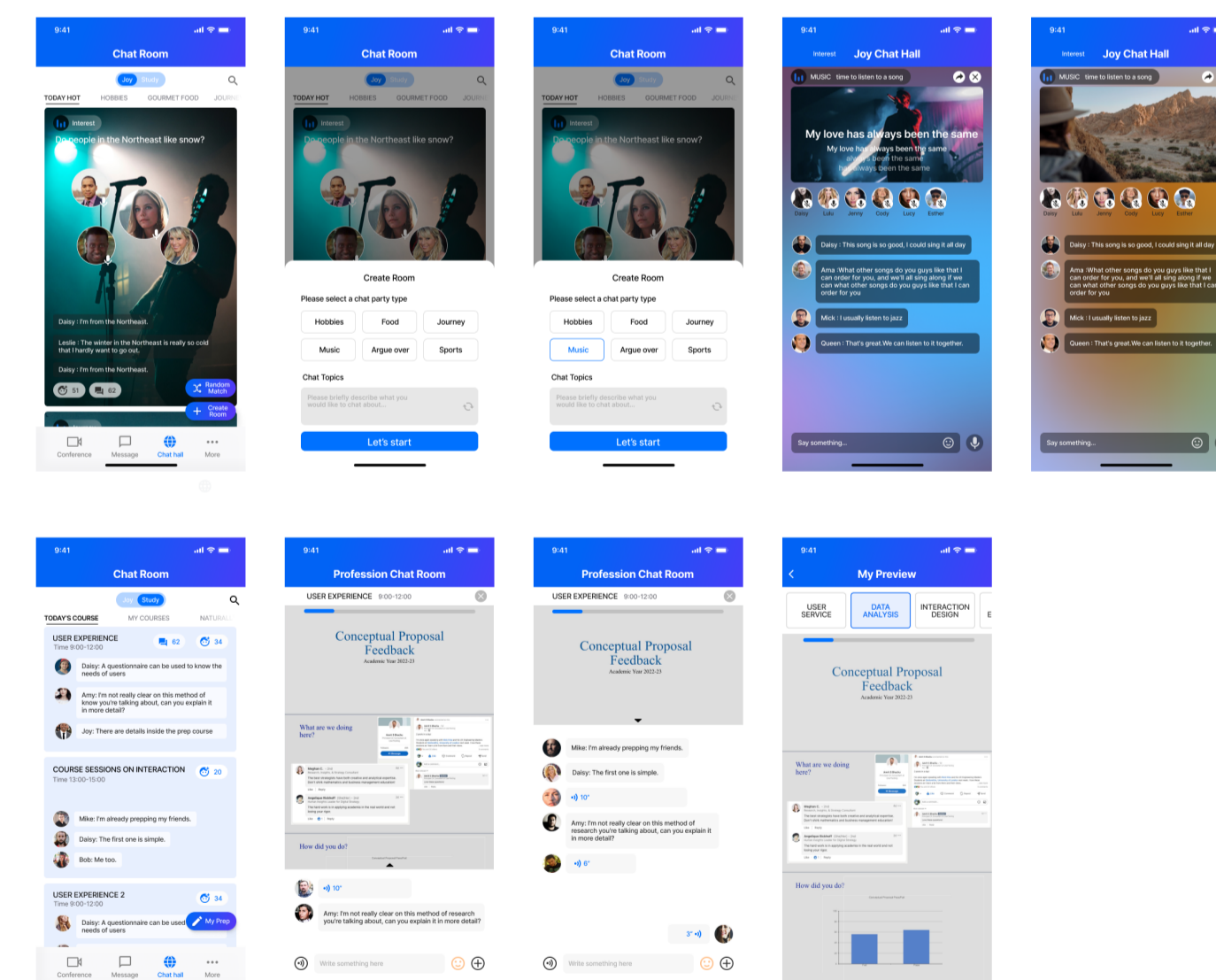
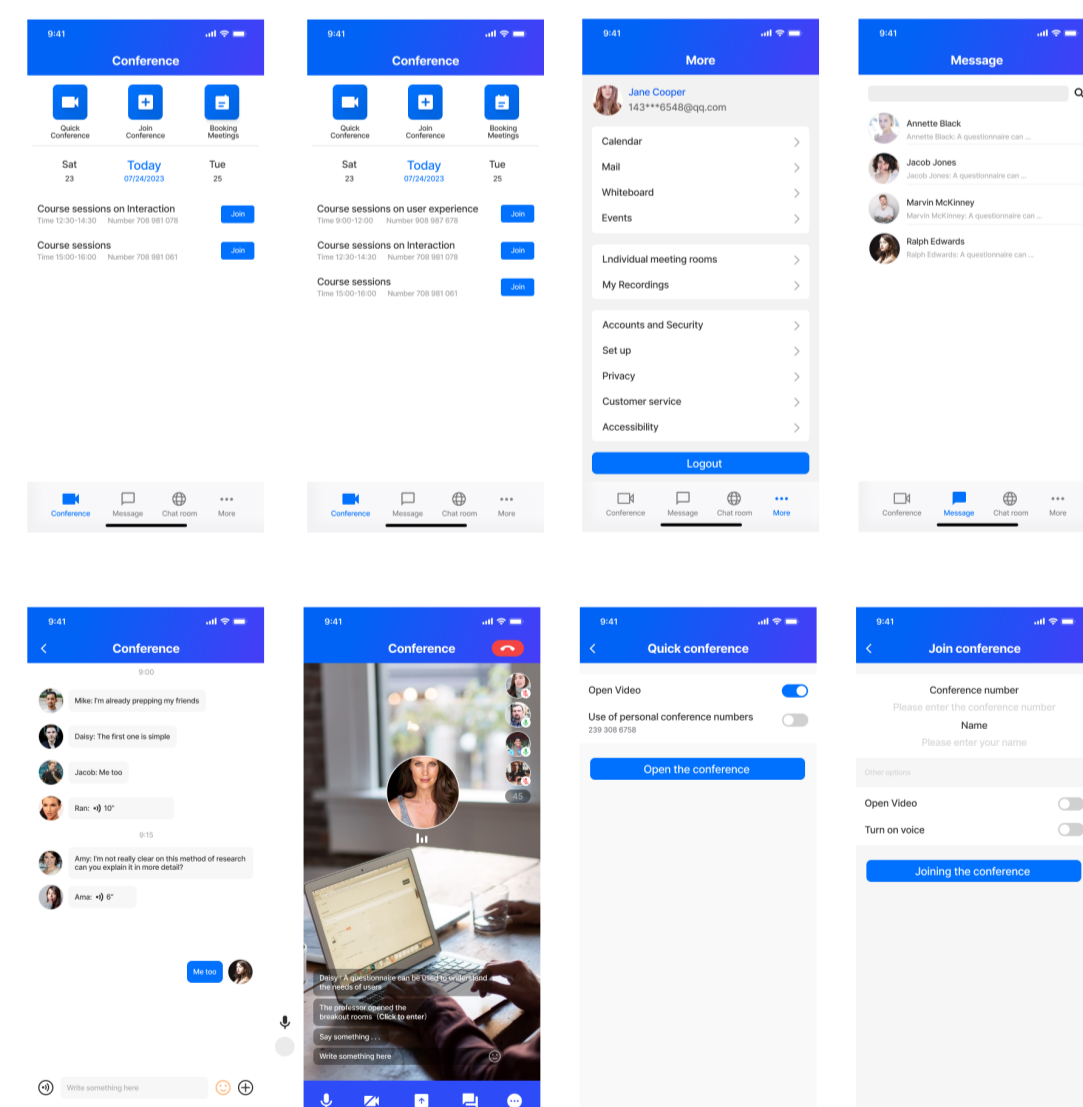
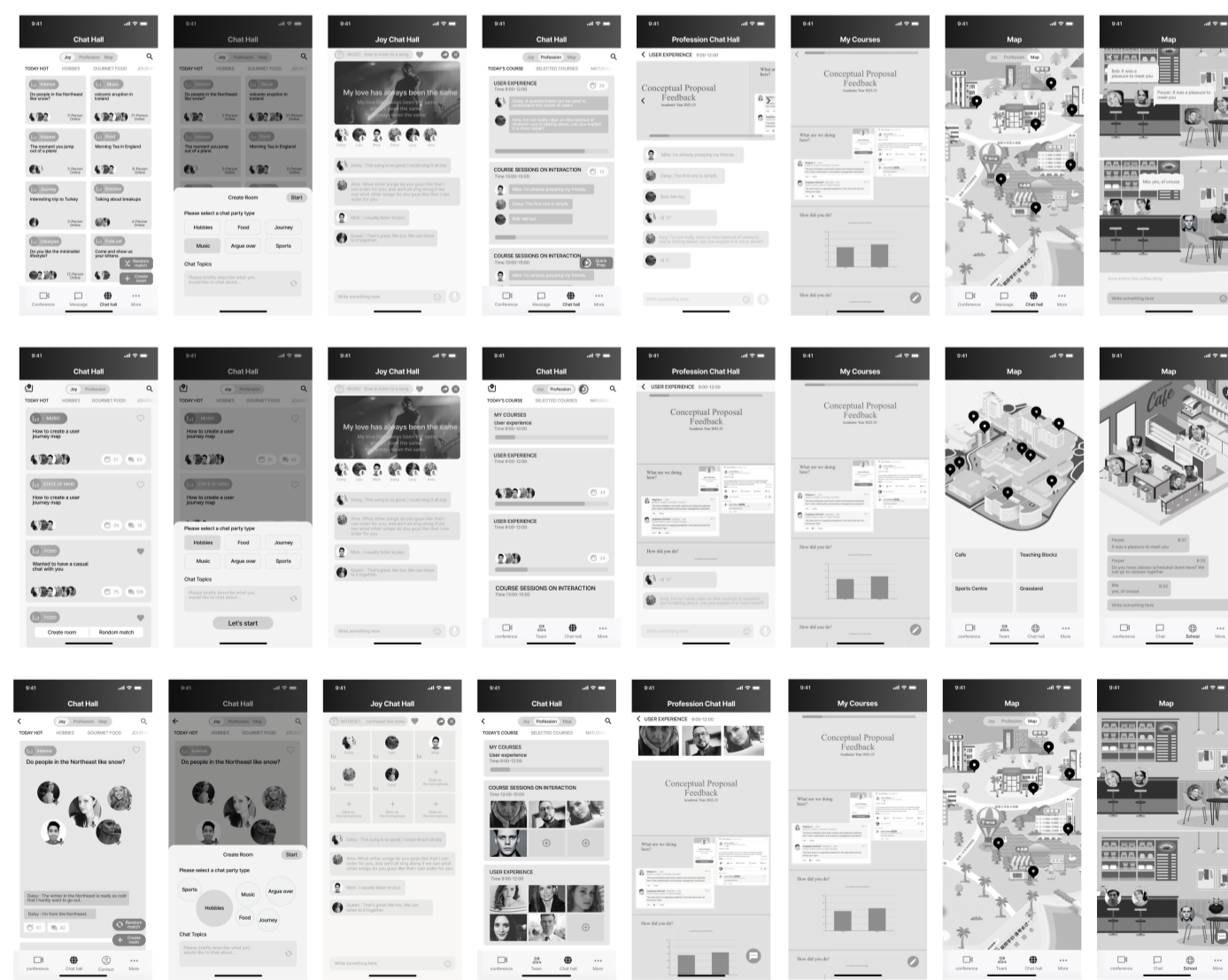
## Testing & analysed

test module	mandates	validity	efficiency	customer satisfaction
Entertainment & Social Rooms	During non-school hours you would like to relax by listening to music and chatting with other users.	100%	21.6S	2.8
	How to create a topic room	100%	15.4S	3.8
	If you don't find a target interest room and wish to randomise into a topic room	100%	12.6S	3.6
Study Room	If you wish to have a pre-course and exchange questions with your classmates prior to the course, please contact us.	90%	19.6S	3.8
	Go to my course preview	80%	21.5S	3.8
Map Mode	Access to social themed rooms via map mode	100%	24.8S	2.6

I recruited 5 target users for usability testing. The test data was recorded and the most advantageous solutions were selected by evaluating their effectiveness, efficiency and user satisfaction. Optimise the flow of experience by incorporating actual user feedback.

## Eye-tracking test

Three users were invited to participate in eye-tracking study to assess both the distribution and trajectory of visual focus on the interface. To gauge the application's user engagement and its effectiveness in mitigating feelings of isolation.



## Design

Chat room : Before and after classes, users can select chat rooms that align with their interests to foster a stronger sense of community.

Study room : Provide rooms where users can have discussions before and after the class.

Self-study: individual pre-study of selected courses

## Conclusions & Future Work

By adding a chat room format to the online lecture process in order to provide opportunities for users to socialise before and after the online lecture. Community connections between participants were strengthened and the sense of isolation and disconnection associated with the lack of face-to-face interaction was mitigated. However, due to technical and resource constraints, full user testing has not yet been conducted. In the future, I plan to further develop the back-end code and testing tools, as well as conduct back-end data analysis of the chat room feature to understand its specific impact on alleviating user isolation and user satisfaction for continuous optimisation.