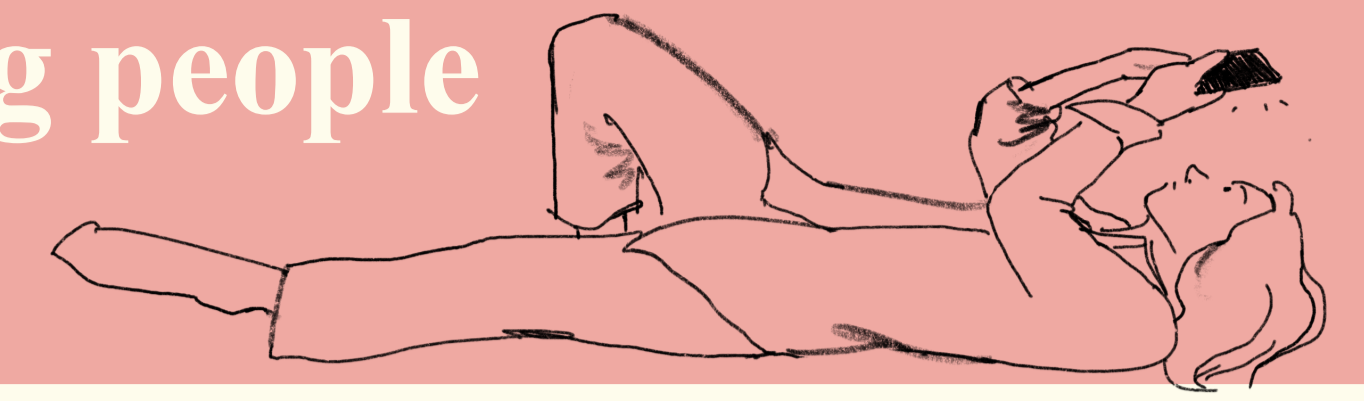


Using selfie app to raise awareness of sub-health issues among young people

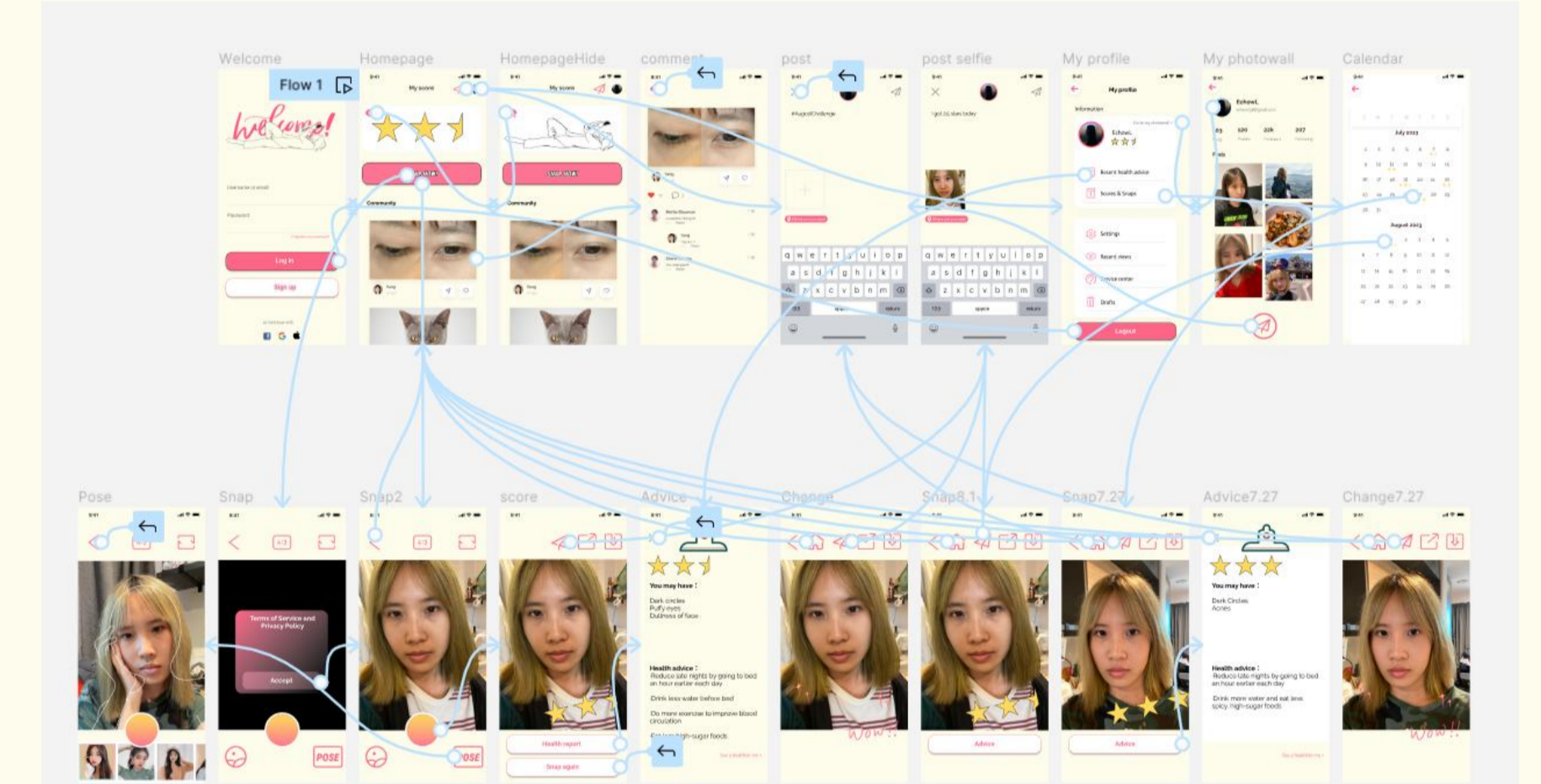
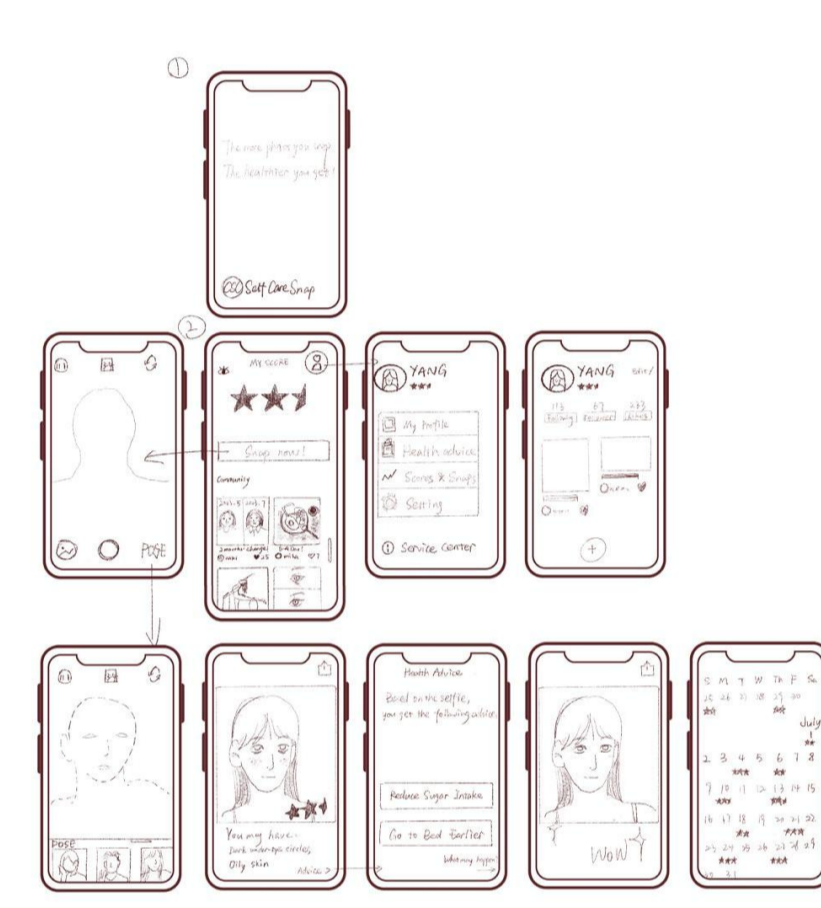
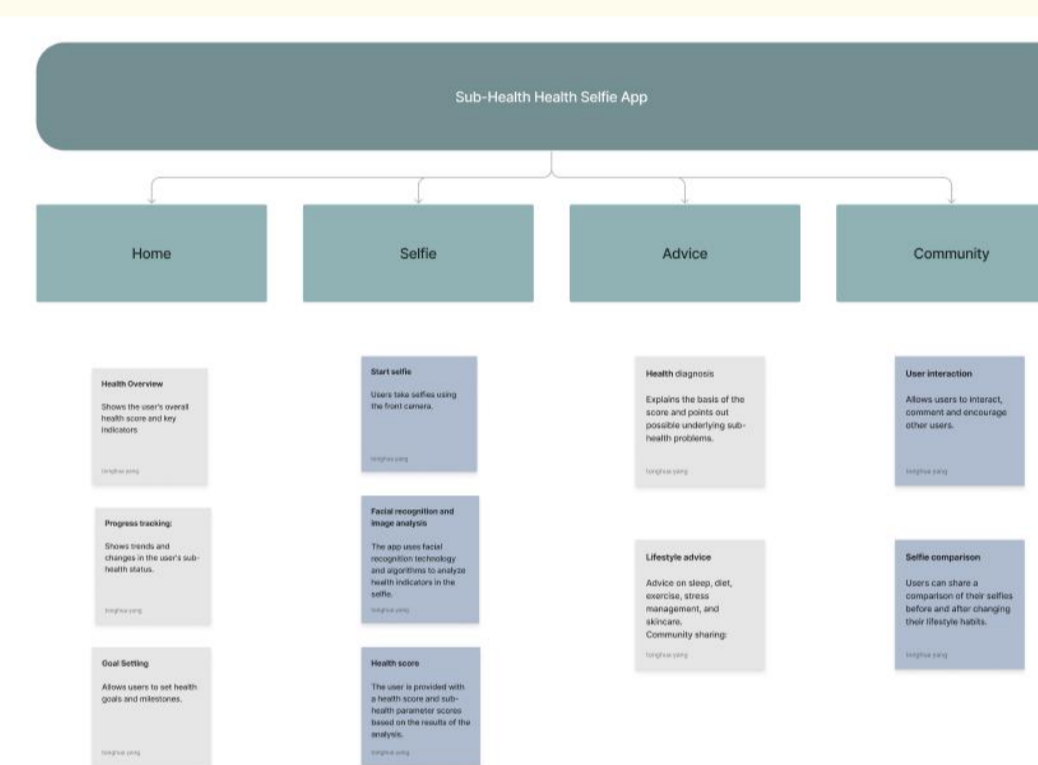
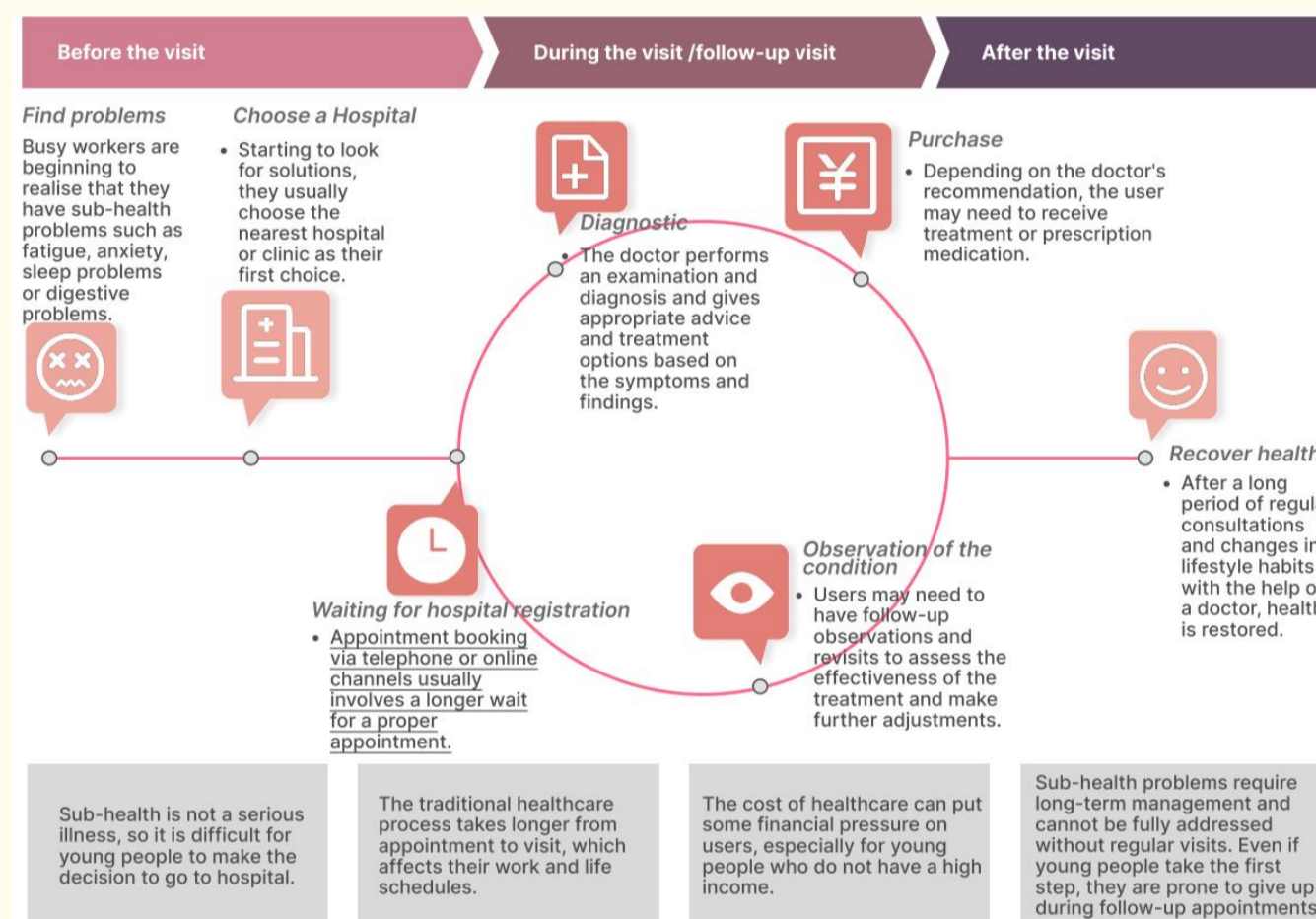


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Abstract

Today, many Chinese young people are facing sub-health problems. However, due to many reasons, sub-health problems are often ignored or incorrectly treated by them. This study aims to design and evaluate a subhealth selfie app. The app uses facial recognition technology and AI image analysis algorithms to assess users' subhealth indicators, such as skin condition, dark circles under the eyes, and lip shade, and provide personalized suggestions for improving their lifestyles. Through usability testing and user feedback, the app's potential in promoting healthier lifestyles becomes evident. This innovative solution bridges the gap between health awareness and enjoyment for young adults.

Design



Study Methodology

Online Survey

In order to ensure the normality and practicability of the APP I designed, I collected, sorted out, and read a lot of relevant literature before designing the product, and sorted out and analyzed the current status and shortcomings of the research of the previous scholars, so as to accumulate knowledge about the state of sub-health of the Chinese young people and their daily living habits. I also conducted research through social media, collecting many related topics posted by Chinese young people on Xiaohongshu, Weibo, etc., and learned about their concerns about their personal sub-health status and the means they are willing to take to maintain their daily health. These efforts helped me to better understand the definition, symptoms, and impact of sub-health issues, as well as the market demand from young Chinese people who are concerned about their health, and the limitations of existing solutions. I created a user experience map based on these, a step that helped me understand the process users go through when addressing sub-health issues, and helped me identify their key pain points and needs.

Offline Survey

In order to evaluate the user experience and usability of this App, I conducted two usability tests, utilizing card sorting, face-to-face testing, and questionnaires. I employed the System Usability Scale (SUS), a standard tool widely used to evaluate system usability. The purpose of the questionnaire using the SUS scale was to collect user evaluations of the app in order to better understand the feelings and choices of the target users.

Conclusion

Overall, the Sub-health Selfie App has great potential to encourage young people to pay attention to their subhealth issues, improve their lifestyle, and enhance their overall health. In the future, further research and validation will be important to further improve the design and functionality of the app. This includes more user testing and more iterations to address potential user interface challenges and to ensure that users have a good experience when using the app. Through continuous improvement and integration of user feedback, this product can be further refined to provide a better service to users, thus further contributing to the overall health and well-being of society.

Introduction

In today's fast-paced lifestyles and high-hour work environments, the physical and mental health of young Chinese people is under pressure from many sources. A large amount of literature has clearly shown that modern Chinese young people are affected by their lifestyle, diet, and exercise habits in their living and working environments, which has led many young Chinese people to fall into a state of sub-health. Sub-healthy state refers to a state between health and disease, which is defined as a state in which a person's psychological behaviour, physical characteristics, or certain physical examination indicators are disturbed, but without typical pathological characteristics. Although previous scholars have conducted research on many aspects of sub-health, there is limited research on technical solutions that combine entertainment and health concerns. Chinese young people have a certain awareness and subjective desire for 'health maintenance', and it is of theoretical and practical significance to improve the sub-health problems of Chinese young people through new technological means.

Testing & Evaluation

After completing the Lo-Fi prototype sketches, I conducted my first usability test using a card categorisation method. I recruited 10 users to participate in the test and asked them to prioritise the app's features and functionality by categorising the cards according to their understanding within 5 minutes. The results of the test showed that the majority of users' categorisations were consistent with my design. However, by analysing the similarity matrix, I found that it made more sense to put Add New Post and Community together rather than Add New Post and My Profile together.

I modified and tweaked the prototype based on the results of the card categorisation and created a Hi-Fi prototype. I then recruited 5 target users again for a second usability test. The test consisted of two main tasks: 1. Take a selfie and share it on the station. 2. View my photo wall page. After the participants completed the tasks, I had them complete the System Usability Scale and interviewed them briefly. I then modified and refined the Hi-Fi prototype based on the results of this test.

Research Results

Through usability testing, I found that the user interface of the Sub-health Selfie App is intuitive and easy to use for the most part. Although there were a few minor issues that needed to be addressed, these did not have a significant negative impact on the overall user experience. Therefore, the development of such a product is feasible in terms of encouraging young people to be aware of their sub-health issues. In my testing, I found that features related to selfies and sharing were popular with younger users. These features offered a particular way to monitor and improve their sub-health, providing them with a novel experience and an effective service.

However, the difficulties that users experienced when testing also suggest that I need to focus more on interface visibility to ensure that users can easily find the options they need. In the future, further research and validation will be important to further improve the design and functionality of the application. This includes more user testing and more iterations to address potential user interface challenges and ensure that users have a good experience when using the app.