

sweet sleep

An App for personlized analysis for supporting user in sleep

An increaing number of people suffer from a poor sleep quality, improving sleep quality is a socical problem in our daily life.



problem space

The first body of life is spent in sleep. When sleep is insufficient, the human body is prone to problems. Poor sleep quality can lead to emotional instability, inefficiencies and other life problems. Long-term sleep disorders can lead to depression and anxiety. Although an increasing number of people have problems with poor sleep quality, they do not know the reason for poor sleep quality.



what is the sweet sleep and the aim

“Sweet Sleep” is an app that analyzes data related to people’s sleep quality to improve people’s sleep quality and give people some advice to improve people’s sleep quality. This app runs on smartphones and is easy for people to use in different locations.

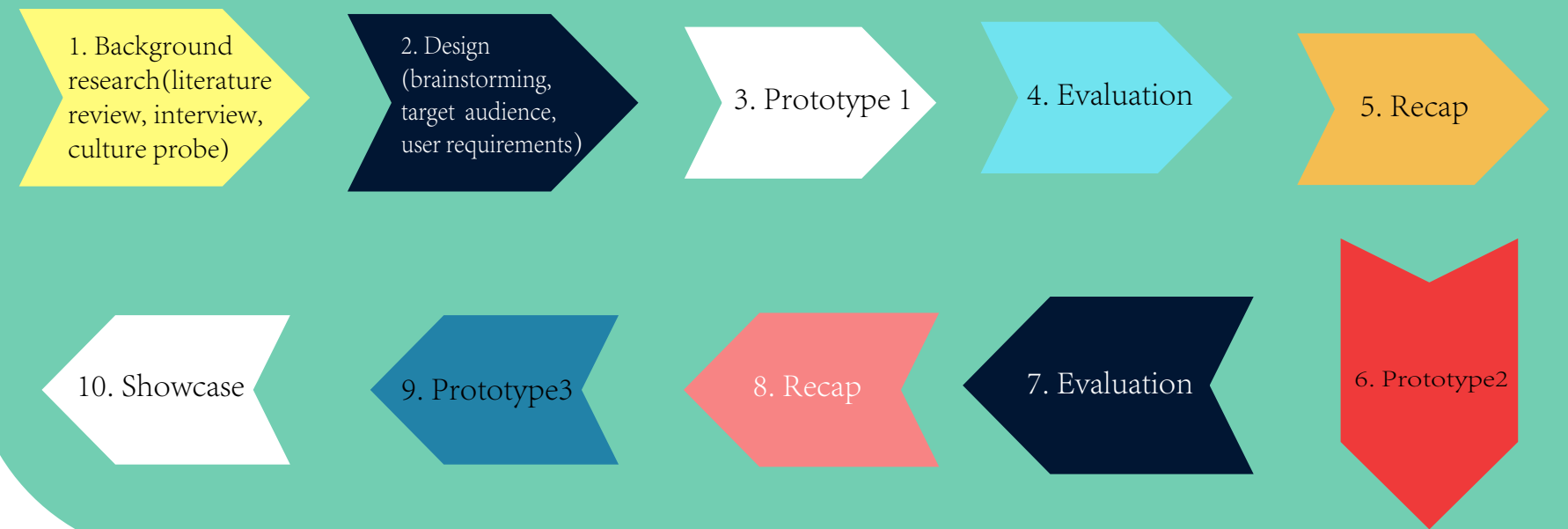
The aiml of this product is to improve the quality of people’s sleep. People with poor sleep quality can use this app to understand what factors cause their sleep quality to be poor, and the system will give people advice on improving sleep quality.

background reserach

Sleep is a part of people’s life. Sleep can provide sufficient energy for people to work and study. With the rapid development of society, people’s sleep quality declines, and improving sleep quality has become a topic of social concern.

A poor sleep quality comes from bad habits, and many people have poor sleep, mainly because they are bad habits. Some people like to drink tea or coffee before going to bed, which can cause people to get excited before going to bed. Nap is another factor that affects sleep quality. Excessive diet can also lead to poor sleep quality. Good nap habits promote the quality of sleep at night, as do regular sleep. The amount of exercise also affects people’s sleep. Exercise is good for people to relax. A good attitude can promote people to sleep easily. The increase in exercise will be more conducive to people’s sleep.

Design processes

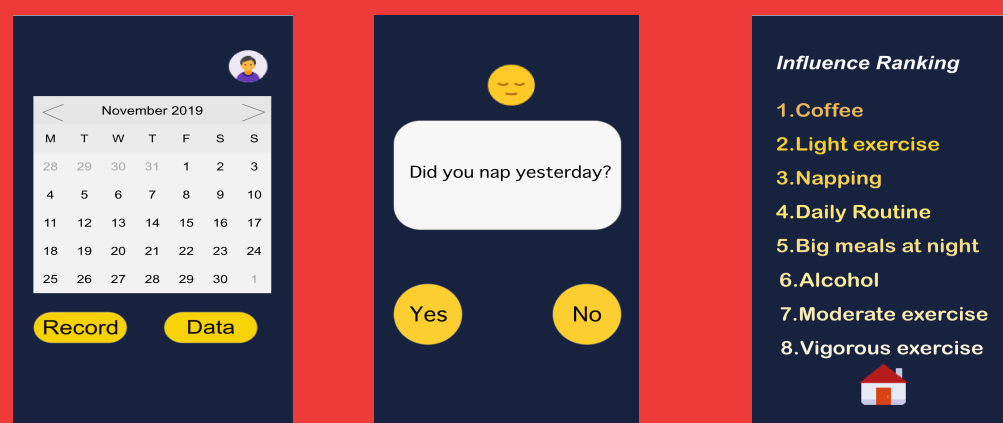


prototype

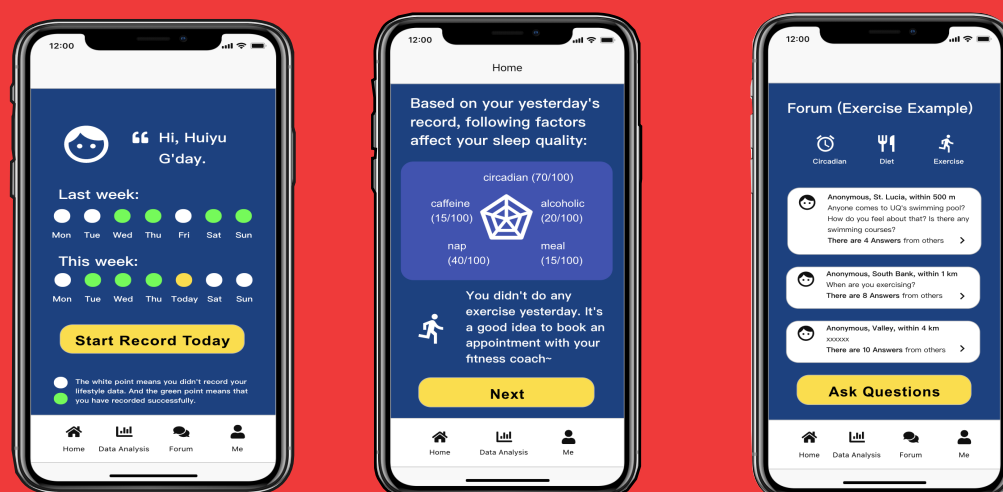
original apple watch prototype



First mobile App prototype



Final mobile App prototype



Our products have undergone three iterations, from the original Apple Watch and the first generation mobile app to the final app. The reason for abandoning Apple Watches is that we need more subjective data that users actively record to analyze their results and the mobile app is more intuitive. In short, our second-generation mobile app is the first generation of UI-enhanced version. They all have a purpose of analyzing the degree of sleep quality by various living habits based on long-term user records, helping users to understand their body functions. It will provide scientific recommendations based on the results of the analysis. On the other hand, we also have a forum, which has different classifications, where you can answer other people's questions, others can also answer your questions to help me. The final generation of the APP analysis page replaces the previous ranking list with a radar map. Users can see from the radar chart that those factors have a greater impact on them, and some impact is small. The system will advise users based on factors that have a large impact. The score for each factor is 100 points. By recording daily data on their daily behaviour, the the system will further understand the user's habits and calculate the scores more accurately. For example, the user used 10 days of software and the system calculated the proportion of factors affecting coffee to 20. When using the 30-day software, the system calculates a value of 25, which indicates that the coffee factor has little effect on the user's sleep results and the system does not recommend that the user tries not to drink coffee.

Target audience

The user base of our app is for people who suffer from sleep problems but cannot find the cause and solution. They can use our products to find out why they have poor sleep quality and improve their sleep quality.



Future work

Our team has implemented product prototyping and back-end analysis code at this stage. But the problem we are facing now is the combination of them, which is that how to transfer the data entered by the user in the APP to the data analysis model we made. This is what we need to do next. On the other hand, UI and functionality also need to be continually optimized through user testing to develop a real app.