Similar products:

One of the most highly rated sleeping ios app is called Sleep Cycle. It uses the built-in microphone of the iPhone to track the user’s sleeping quality by analyzing the body movement, and wake the user up when he/she is in the light sleep during the wake up window.

There is also another app called Sleep Genius that has some additional functionality. It would analyze the sleeping cycle and find out the optimum time for the user to go to bed. It has a revive cycle alarm that would wake the user up slowly with a soothing sound within a 5-minute interval. It can also play relaxation music to induce the user into a power nap or deep sleep.

App design:

For the mobile system design part, an app will be written to collect the data from the Microsoft band and send the data to the web server for analysis. It can also act as an interface for the user to view his/her sleeping report, provide feedback and set reminders.

First of all, it would read the data from the Microsoft band, which includes the heart rate data, body temperature and accelerometer reading. The band would send those data to the phone via Bluetooth. The app would collect the data and output it as a text file named by its date. After every night, it would pop a survey out to check if the user has a good or bad night, was the user cold, and how many times has the user woken up that night. Together with the data obtained from the band, the survey would be sent to web database for further analysis.

After the analysis by the web database, the app would receive the ideal room temperature for the user and use it to adjust the smart heater reading. A history of the user’s sleeping quality would also be available to view on the app. The current plan is to connect it to the Nest API to change the optimum room temperature.

The app would also include other features such as alarm clock that aims to wake the user up gently during his/her light sleep stage. Calendar events would also be incorporated into the app, in case there’s a long-haul flight coming up, the app would send notifications to remind the user to sleep earlier/later to adjust their body clock to the new time zone.

Currently, we have tried to transfer the real-time data of the microsoft band to be read by the ios app. (?) (tszho’s )

UI Design Task

1. Survey for sleeping quality
2. Showing Data
3. Hisotry / reports
4. Settings
5. Alarm
6. Calendar
7. Notification
8. Help
9. Rate App
10. About Us

Calvin:

/\*\*\*\*\*\*\*\*\*\*\* i type this before \*\*\*\*\*\*\*\*\*\*\*/

I mainly participated in application development to design interface for customer feedback. We are using iOS system with programming language Swift. At the moment, I have done the “hello world” self-assessment. The application will have a function for the customer to customise their favourite temperature and switch it in real-time. The temperature data will be recorded and send it back to the system to apply machine learning algorithm. After selecting the temperature, there will also be a feedback system asking for ratings of the temperature changes. This is for ensuring the system is working as the customer demands.

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