The design of a mood tracking and regulating product for students' mental well-being

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Background and topic
This bachelor assignment was created by the Interaction Design Research Group of the University of Twente.

According to research [1], university students experience high levels of stress, depression and anxiety, and the global covid-19 pandemic has increased the symptoms of depression and anxiety among the general public [2]. Which is why the aim of this project was to design a product that can both track and regulate the mood of university students, to help them improve their mental wellbeing.

The main research question was;
How can an emotion reflection and regulation (and calming) product help university students to regulate their negative emotions and stress?

Approach
To answer this question, a literary research about mood, current mood tracking technologies and methods of mood regulation was performed, after which a survey was distributed among university students to learn more about the effect of the pandemic on their mental health and their wishes and requirements for a mood tracking and regulating product. Based on the information gained during this research phase, a list of requirements was made. During a general ideation, multiple students were asked to give their opinion on the ideas, based on which more requirements were made.

Based on the results from the research, it was concluded that manual mood tracking would be the best method to use. It was also decided to use mood improvement methods that provide the user with immediate mood improvement and stress relief, as well as methods that gradually improve the user's mood resilience over time. Immediate mood improvement would be provided by creating a pleasant and stress relieving experience, and long term mood improvement would be provided by enabling the user to share their mood with friends and family to form deeper connections, and by enabling them to track and analyze their mood to give them more insight into their mood fluctuations.

Concept
Each of the mood improvement methods named above was incorporated into multiple concepts, of which the Cloud concept was chosen as the final concept.

The Cloud concept consists of a lamp in the shape of a cloud (image 1), which uses light and sound effects to simulate weather conditions (sunlight, rain, thunder, etc.). This lamp creates a pleasant and calming atmosphere for the user, since nature has a calming effect on people [3].

The lamp can be controlled with a physical controller (image 2), which the user can use to set their preferred weather conditions. The controller can also be used to track mood, in which case the weather conditions act as metaphors for positive and negative mood (sunlight for positive and rain and thunder for negative mood), and the controller can be used to share the user's current mood with their friends. The mood tracking data can be viewed in an app.

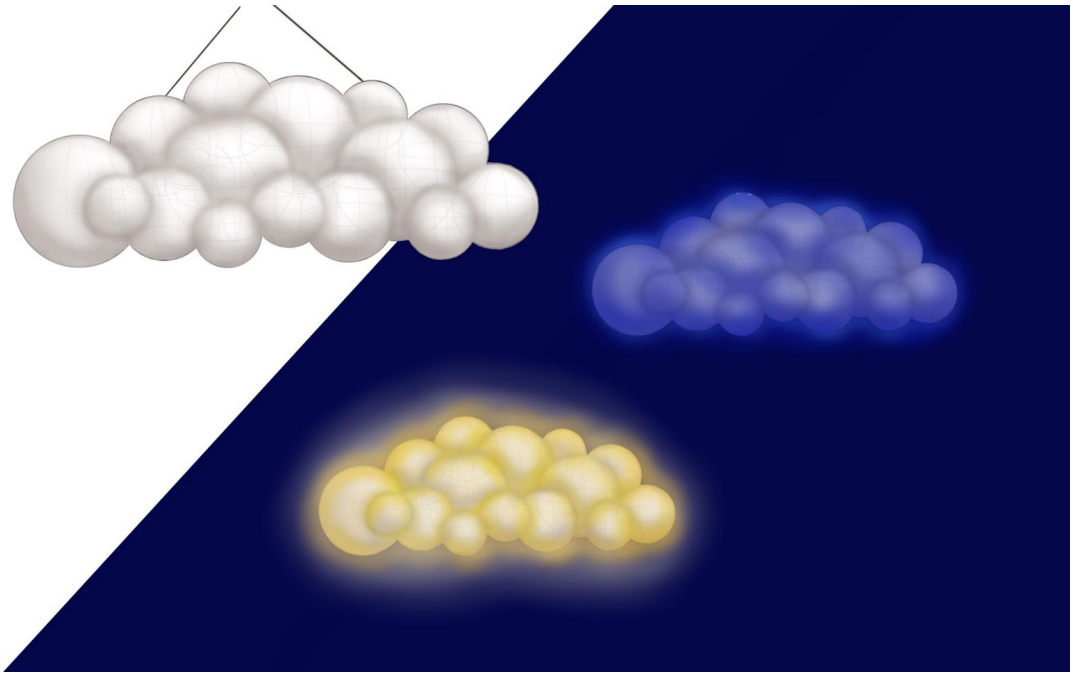

Image 1

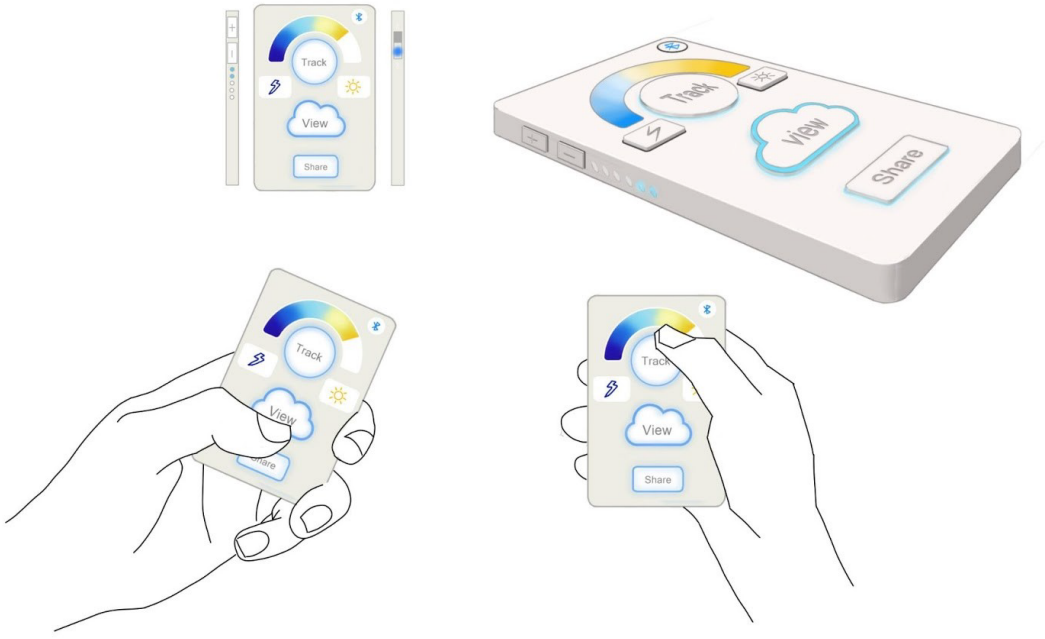

Image 2

Usertesting and final concept
To test the concept, a prototype of the cloud was made (image 3), which was evaluated during multiple user tests.

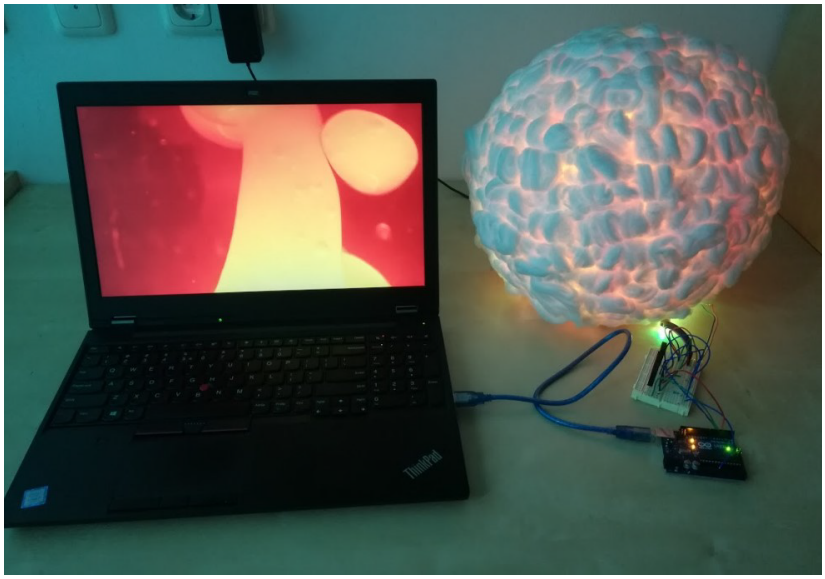

Image 3

As a result of this usertest, it was decided to change the concept to a cloud-shaped pillow which uses light, sound and vibrations to imitate weather conditions (image 4). This pillow can be held by the user to lower their stress levels and improve their mood.

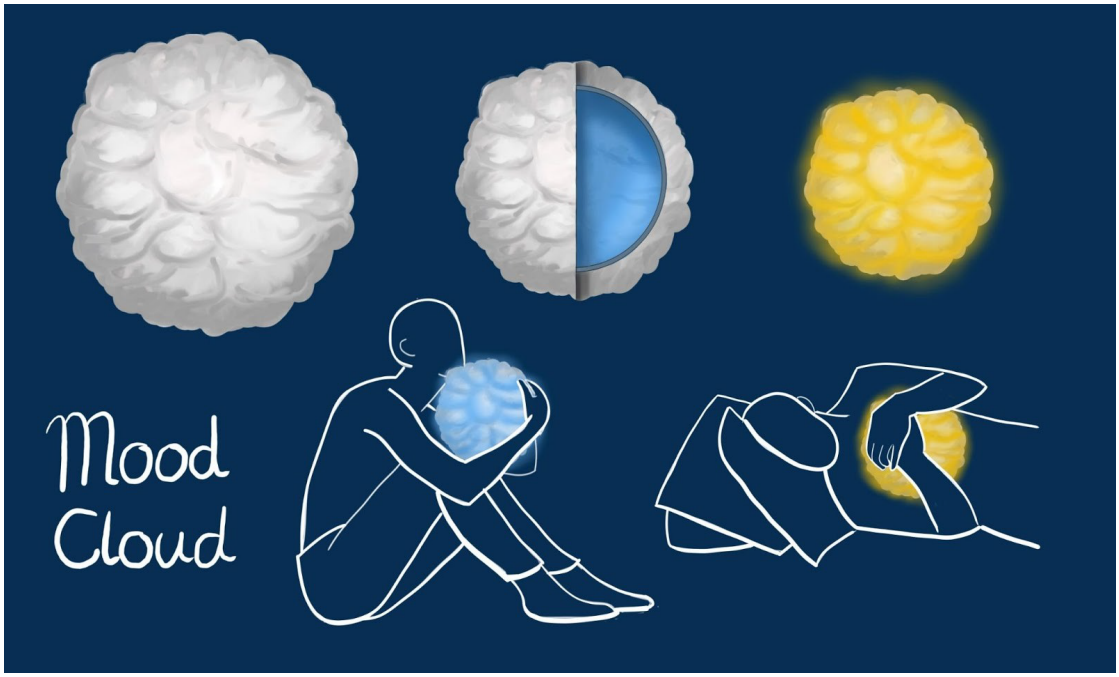

Image 4

Based on feedback gained during the usertest, the controller (image 5) and app (image 6) were redesigned as well.

Conclusion

The participants of the usertest were positive and enthusiastic about this concept. It could improve the mood of university students by relieving their stress, giving them insight into their mood fluctuations and helping them create deeper connections with their friends and family. Since the testing group was quite small, more testing with a larger group of participants will be needed to prove the effectiveness of the concept. More development is needed to turn this concept into a real life product.

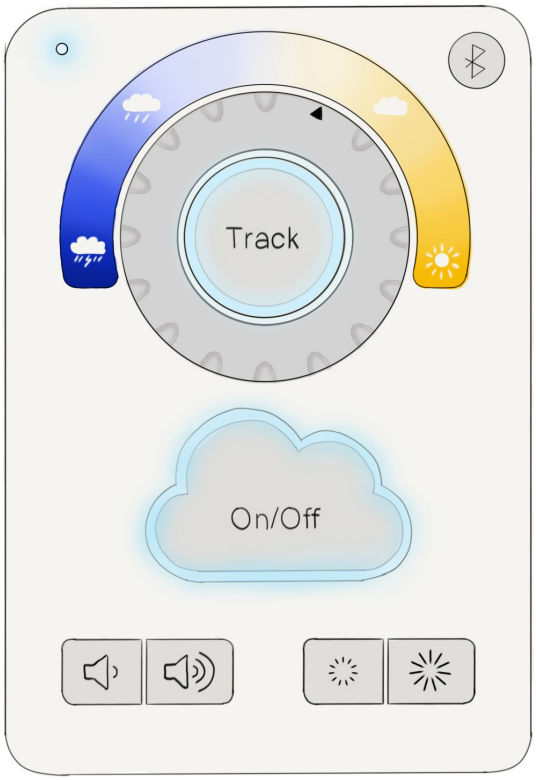

Image 5

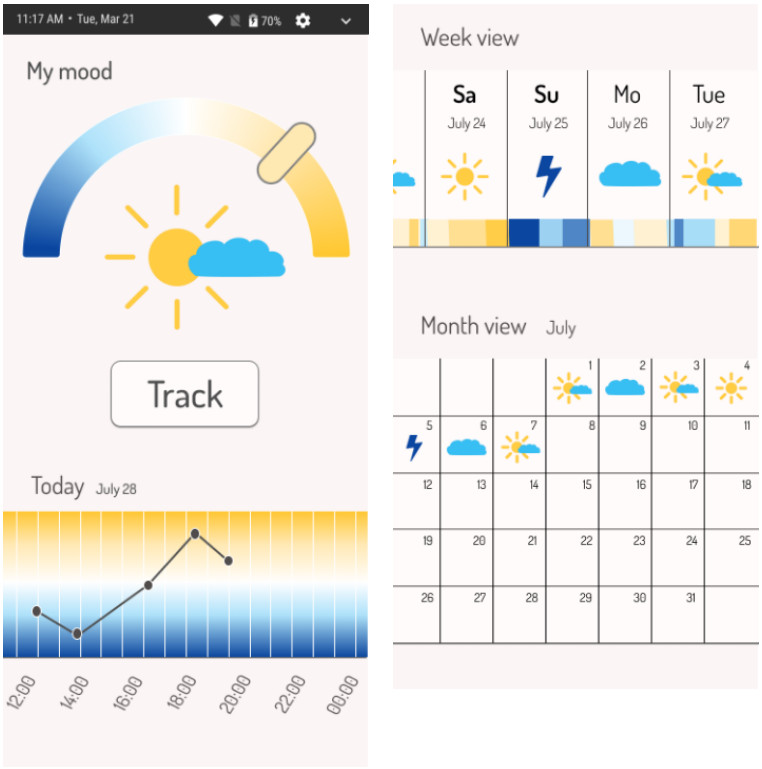

Image 6

References

1. Kelders, S., Oberschmidt, K., & Bohlmeijer, E. (2019, August). Student wellbeing: A cross-sectional survey of mental health of UT students.
2. Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., Ho, R. C. (2020). Im-mediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the gen-eral population in China. International Journal of Environmental Research and Public Health, 17(5), Article 1729.
3. Garde-Perik, E. V. D., Trevia, F., Henriksson, A., Geurts, L., & Ullerup, H. (2016). Getting a GRIP on work-related stress: design and evaluation of a nature inspired relaxation space. International Journal of Arts and Technology, 9(3), 253-272.