

# Public Summary

At the University of Twente, located at Enschede in the Netherlands, the Technohal situated. This building will serve as a base for the health cluster. The Facility Service Centre (FSC) is looking for an object that could enhance the health cluster's image and profile; a health check object. The result of this assignment provides the FSC a well-considered and usable design proposal of such health check.

First, stakeholders, ethics and context were analysed. With the requirements from these in mind, three directions of health subjects are explored: (1) Stress & Concentration, (2) Physical Fitness and (3) Nutrition Assessment. The most valid subject was stress and therefore relaxation, a relevant subject at a university. Next, a literature study was conducted about occurrence, stressors, symptoms, consequences, measurement of stress levels mental and physiological, relaxation techniques and existing interventions. Additionally, end users (and their stress) are analysed with possible use scenarios. An overview of design requirements was given. Via ideation and a literature study of persuasive design and behaviour change, a development proposal is created. Which is evaluated via a questionnaire.

The object has two sorts of stress checks. The first is a 'bare' stress check of two minutes, which gives a vague range in the users' stress levels. The second is an extensive stress check, where the user can conduct his or her own research in what sounds, breathing exercises and Virtual Reality environments are decreasing their stress levels most. The first is at the bar of the design, the seconds are at the chairs. Both checks are measured via the hands, which the user places on the indicated traces. In the hand traces are biosensors: to obtain information about Heart Rate Variability and Galvanic Skin Response. Also, the user uses their own smartphones as an external user interface of the product via NFC technology. Storyboards are created to sketch the first use of the short and extensive stress check.

The design has triggers via text and a visualization, creates awareness and might even enable the user to improve stress management via the website. At the website, an overview is given of existing interventions with scientific-based information. Additionally, the object has a wall with greenery on the back. The wall makes sure the check feels more private in the big building and makes sure non-users also benefit of the object. Additionally, the greenery improves the acoustics.

Materials, costs and dimensions are defined and the final design is evaluated. Final, extensive recommendations are given for next steps.