Design food informatics for vulnerable groups

BACKGROUND

eHealth solutions seizes opportunities in technology advancements (e.g., social networks, IoT, big/small data) to empower people managing their own health conditions. Success in e-health scenarios revolves around engaging people in understanding, reflecting and making meaningful changes to their health condition. Working with data is a key element in this process.

Food informatics is a specific eHealth area for the prevention and management of overweight and obesity. On a day-to-day basis, this problem relates to understanding what do we eat and why we eat what we eat. On the one hand, collecting information on what we eat is been mostly supported by means of self-reporting via time consuming medical food measurement questionnaires or standard commercial apps. They have proven to have little success in engaging people to actively self-report. On the other hand, reflecting on the reasons why has been seldomly supported.

This project invites you to design a food informatic system for vulnerable groups, specifically adults with low socio-economical-status (SES) who are commonly low data, health and technology literate, to feel engage in collecting and reflecting on relevant and meaningful data around food behaviour and its context.

ASSIGNMENT

The goal of this design project is to design a food informatic system that is:

1. Engaging - by addressing *people's competences, needs and preferences* to engage in data in their daily life.
2. Rich – by encapsulating the complexity of eating in relation to people's physical, social and psychological context.

For this, an active participation of the target group is required during the design process to closely involve them in the exploration, prototyping and testing of ideas in the specific context of use.

In this assignment, you are invited to address the following general design goal: How can personal data around food become a meaningful and relevant activity in the daily life of people with low SES?

PROFILE

For this project, we are looking for a DfI and/or IPD student who is interested in designing interactive devices that empowers people to actively collect and use information about themselves around their day to day activities.

Affinity with persuasive and motivation theories (e.g., nudging, confrontation, peer-pressure, gaming, etc.), sensing techniques (real-time sensor data collection), and interaction design (multimodal techniques, data visualization, etc.) are highly relevant for this project.

PROJECT CONTEXT

Your assignment will be part of the FoodSampler project, funded by ZonMw's Create Health programme to support healthy and active ageing. Thus, you will work with members from the FoodSampler consortium (researchers and practitioners on nutrition as well as on e-health technologies) to innovate the ways in which food behaviour knowledge can be generated. You will have access to a budget to support your prototyping and testing activities.

CONTACT INFORMATION

If you are interested, please send your CV and portfolio to Natalia Romero Herrera (n.a.romero@tudelft.nl)

Consortium partners:

Funded by: