Innovative behavioural therapy interventions for Tourette's syndrome

Yuhan Shen

Abstract

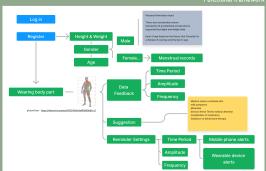
The project is used to assist in the treatment of Tourette's patients, enabling them and their family members or physicians to help train patients in behavioural therapy through the wearable device's data collection, reminder function and visual data feedback from the app. The wearable device is small and lightweight, and conforms to the human skin for extended wear. The aim of the project is to help Tourette's patients to slow down their disease and become more comfortable with normal social activities in their daily lives.

Introduction & Background

This project investigates the possibilities of wearable devices to assist in the treatment of Tourette's disease, and is based on the idea of behavioural therapy as part of the Tourette's treatment modality. Currently, behavioural therapy requires a high level of adherence and compliance from both family members and patients, and both doctors and family members need to devote a great deal of attention and vigilance to assisting Tourette's patients with behavioural therapy, which makes it difficult to carry out this therapy. This project is able to replace the human effort in behavioural therapy to a certain extent, thus helping

Diagram / Design



















Study Methodology + Testing & Evaluation

sary to find a number of patients to be interviewed one by one, the interviews will be based on the different feedback of each person on the design of the project for the concept; in the middle of the project, for the selection of the product part of the material and the user experience, it will be the target users of the material experiments and low-fidelity testing, to get the feedback and make modifications; at the end of the project to produce high-fidelity models and test again, iteration and optimisation of the project.

Research Results

The initial research of the project will use interviews to help the researchers summarise the pain points face in low fidelity, and provide modifications for the project to drive the design improvement and optimisation; and at the end of the project, the iterative project will be optimised by using the experiments of the high fidelity and high fidelity application interfaces, and the feedback from the questionnaire survey.

Conclusions & Future Work

2. There was no response to feedback from users of the project's wearable devices once they were finally produced and put into use.

3. In the next step, I will continue to explore the feasibility of putting the wearable device into production, and whether the output of the final product and its wearable use can do the job of slowing down the twitching behaviour of Tourette's patients; and continue to explore the development of user experience design in the medical field to make human-centred design.