

Rehab app for fine motor skills of hands



Example how write exercises could look like

Special Focus

In connection with this work, a concept of a rehabilitation app for hand therapy was developed. The main feature of this app is to increase the motivation of patients to perform their home exercises regularly and completely. Various functions have been tested to increase this motivation. The result of various tests is that a duel function the best to increase the motivation of the patients. The patient can choose between doing the exercises with a duel partner or in a dueling group. In addition, it can be selected if the other patients are determined anonymously or if they should be selected from the friends list.

The app should be a tool for the actual therapy. The therapist can individually determine and adjust the exercises for each patient so that these exercises are tailored to the therapy. This is how the best possible results should be achieved.

Abstract

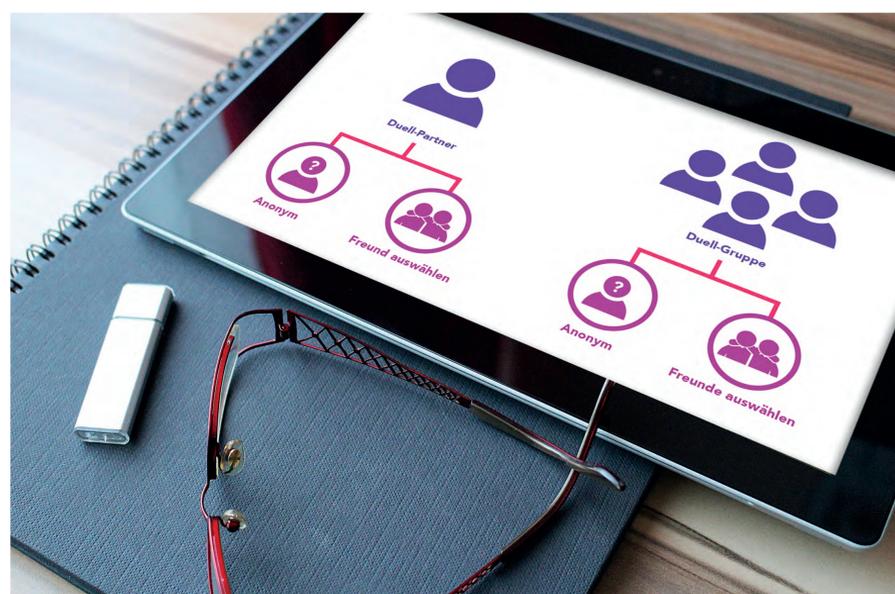
Patients in the hand therapy with permanent damaged fine motor skills in their hands and fingers have to do exercises in addition to their therapy sessions, in order to improve their motor skills in the long term and to get better in handling everyday situations. These hand exercises are mostly difficult for these patients, because they mean pain and great effort for the patients.

A rehabilitation app for tablets with a function to increase the motivation should help these patients to do the exercises more regularly and completely.

The Lean UX method was used to find out which function could be the best for this purpose.



Cooperation between therapy sessions and home exercises



Filter function for dueling

Result and Future Work

The result of the user tests is that dueling with one or more other patients and a performance comparison of each exercise is the most efficient way to increase the motivation and that the patients do home exercises more regularly and completely.

In the future the whole design of the app will be designed and tested to find out how all day situations can be included in the exercises. Also there will be tested how the results of the exercises can be shown in graphics to make it able for the therapist to plan the further course of therapy with this data.



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