

Healthbot

INTRODUCTION

We are project Healthbot, our team consists of four Industrial Design Engineering (IDE) students and three Embedded Systems Engineering (ESE) students. Together we are working on the next version of the Healthbot: a robot meant to assist elderly people with dementia to ease the workload of caretakers.

This is the third semester that the project is active under guidance of Jeroen Veen, an ESE teacher from the HAN University of Applied Sciences. Our main goal is to expand the Healthbot's features in various areas. These concern creating more interaction between the Healthbot and the user, improving movement in the neck to create more fluid motion and freedom in movement and adding more ways to monitor the user.

JOURNEY & LEARNINGS

Our first move was splitting the Healthbot's features into different categories and assigning project members to each category which we thought would be interesting to further develop. With our collected deskresearch we started making prototypes and tested these with teachers and fellow students, but also out in the field.

One of the big challenges we faced teamwork, especially between IDE and ESE. The two disciplines don't often work side-by-side in real work environments, so it was difficult to work together at first. We discussed this with our Skills teacher, with who we decided to fill each other in more about what we were working on. This really helped us get more involved in the others' work and allowed us to work side-by-side on parts of the project.

We also visited the daytime activities of the DrieGasthuizenGroep, a caretaking organization for elderly with dementia. The firsthand feedback from the target group on our designs and ideas was very decisive for our decision making, even helping us decide to scrap certain ideas.

OUTCOME & IMPACT

The end result of our hard work is a new and improved Healthbot, capable of assisting and interacting with the care-askers and caregivers. Using its improved neck-mechanism, new concepts for interaction and new sensors.

With a boatload of research and suggestions the Healthbot can be taken into the next chapter of the project, so the next group working on the Healthbot will be able to build on the fruits of our labor and create something that caters to even more people's needs.

