Suus van Gogh, 1837796 Creative electronics, TU/e 10/04/2023

## Reflection

In the course 'Creative electronics' I have been working on several assignments and a mini project. Before this course, I already had some knowledge about working with a breadboard and an Arduino from both high school and the course 'Creative programming'. However, I

only knew the basics and converting a schematic to a circuit on a breadboard was still new to me. In the beginning I tried to go too fast without fully understanding the working of a breadboard. This did not work out and made me take a step back by first watching some videos about breadboard circuits. This helped me to understand what I was doing and it made subsequent assignments run more smoothly. Therefore my main learning point was to study the technical components and knowing their abilities before starting off.

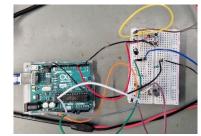


Figure 1 Working with an Arduino and breadboard

In the mini project I also learned how to integrate technical components in a design to come to the best possible solution for my targeted user group. When brainstorming, I started with looking at the possibilities of all components instead of coming up with an idea first. This way of thinking was new to me. Also, this was the first time of having to do all aspects of creating a design: exploring user needs, creating visuals, prototyping and making it work.

My weak side as a designer is considering the technical aspects into a design. However, I believe that you can create better designs if you are aware of technical capabilities and can integrate technical aspects. Therefore, I want to learn more in the expertise areas 'Math, data and computing' and 'Technology and realization'. This course helped me to improve myself in the area 'Technology and realization'. First of all, I gained more knowledge about working with an Arduino and a breadboard. Secondly, I enlarged my experience in prototyping. I created a small, wooden car for the mini project. I did not have any experience yet with woodworking, so this was completely new to me.

Also, I improved myself within 'Creativity and aesthetics'. One of my goals for the second semester is to improve my graphic design skills. For the mini project, I created multiple visuals and a layout for the poster which contributes to achieving my goal. I learned some new skills within the Adobe apps which can help me with designing in the future.

The mini project contributed in my personal development. As a designer, I am interested in the fields of vitality and health. Especially in creating designs for everyday life within these fields. The mini project can be seen as such a design, since we designed a steering wheel cover for deaf people. Those people can now feel and see the beeps in a car when they are too close to an object. This can make driving a car easier for them. I really enjoyed designing something that is



Figure 2 Prototyping with wood



Figure 3 Results of mini project

both useful and where the technical aspects work. This feels as a confirmation of my interest in this field of designing.

I do not want to specifically focus on the technical aspects of designing in the future. However, I do think it is very useful if you are able to make the technical aspects in a prototype work for user tests. Therefore I still like to learn how to solder, to make the prototype look more neat.

In conclusion, I look satisfied back at the course 'Creative electronics'. I learned a lot more about electronics in a short amount of time. Besides, I defined myself more as a designer and who I want to become as a designer.