Reflection Creative Programming

For the course Creative Programming, the main objective is to learn programming first in a visual context using Processing only, and later in a tangible context by using Arduino, sensors and actuators. The course is the first step towards integrating technology to approach interactive and intelligent systems, products and experiences. For the second challenge the assignment was to make an interactive application using both Arduino and Processing.

Over the past two months I have acquired my first programming skills. In the beginning of this course I knew absolutely nothing of any programming language, so I am thrilled to have made the first steps in learning all these new languages. Languages that I can for example use to make complementary applications or sites. Programming was something I wanted to learn about before I started this study, because for me it is closely related to interaction design. One of my goals is to improve myself as an interaction designer, so I am glad I like programming so far.

For the first challenge, I just started with trying stuff out in the Processing environment and seeing what happened and where it brought me. This intuitive and experimental approach helped me understand the basics of Processing. However for the second challenge, I wanted to do something more conceptual. I thought it would be more relevant for me to learn how to make Processing and Arduino do what I want, instead of just randomly following where it brought me.

For this challenge I wanted to combine my love for fashion with Arduino and Processing. During one of the lectures it was mentioned there is an Arduino that you can sew into clothing, the Arduino Lilypad. This immediately caught my attention, so I ordered one online, together with some LEDs, sensors and conductive thread. I started drawing and thinking of how I could combine the two programs with a piece of clothing, without making everything feel like separate pieces. I believe too often technology and clothing are merged in a very unnatural way, as if the technology is just added for the sake of adding it. In those cases, the technology does not add any value at all and I really dislike that.

Because of my annoyance by this lack of meaning, I have made a diptych that links both a digital artwork and a wearable one. Both artworks can be looked at individually, but when they are connected they actually make sense and complement each other. The print on the dress is the left side of the artwork, and the Processing one is the right side. When linked, the LEDs on the dress light up. When you press 1, 2, 3 or 4 in Processing, you can focus on a group of LEDs behind one of the colors of the print. To add another layer in between the artworks, I installed an app on my phone which allows me to control the keyboard and trackpad of my laptop. This way I can stand next to my laptop and control my dress without any extra effort.

In the future, I would like to continue working with the concept of connecting the digital and physical world in a way that is even more effortless and intuitive. Right now I still have to be connected to my laptop to be able to fully show how the dress works. I would like to use programming to enhance objects and wearables in a way people do not even notice the programming is there. Because interaction design is something I wanted to improve on before I got here, I am taking the course Tangible and Embodied Interaction in quartile four. During that course, I hope to make it clearer for myself how I want to use programming in my design process.