

PDP

Jorg Eikens – s1261886

Identity

The best way I could describe myself would be as a "thinkerer", a coalescence of the words thinker and tinkerer.

I am very much a tinkerer. I like to tinker with new tools and mechanisms to get a good feeling of what exactly makes them tick and what you can do with them.

I am very much a thinker in the way that I like think of new ways to use or exploit those new tools and mechanisms.

In groups, I like to take on the role of the monitor. I analyze matters independently and critically. I like to look at matters from a very objective point of view and make decisions based on what is true and well *thought* out, not based on what *feels* right.

A lot of the time I also take on the role of the specialist in groups. Since I am quite proficient in electronics and programming, I almost always get assigned to task within that field. I really don't mind it though, since I get to *tinker* a lot when working with electronics and programming.

Vision

Nature is one of the most inspiring things in this world. To see how it adapts to different environments is something of which we can learn a lot. Take a tree for example. No matter what is built around it, it always finds a way around those buildings or even right through it. This doesn't have to be the case. In my ideal world, technology and nature don't work against each other, but hand in hand were possible or around each other when necessary. Operating should go without a hassle.

Though the aesthetic should not be compromised in any way. When something functions properly and is easy to use, but it is a pain to look at, who would want to show that something to the public?

I want to find a balance between aesthetics and functionality, without compromising much on both of them. They are equally important.

Competency development and goals

Electronics:

Technology & Realization

Math, Data & Computing

I want to improve my familiarity and skill in electronics. Electronics are everywhere and I will be designing them, so it is a very useful skill to have as an industrial designer. I currently have some experience with microcontrollers like the one found on the Teensy boards. I want to learn more about them, like how to implement only the actual microcontroller chip in my own PCB design, because this can save a lot of space in smaller circuits. I also want to learn how to make circuits for simpler tasks without the use of a programmable microcontroller, because again, this could save a lot of space on a PCB, but also could cut down on the costs. Next quartile I will be following the course Creative Electronics where we will learn more about using microcontrollers. But also a lot of information can be found online. I learned a lot from certain YouTube videos which explain how common components in electrical circuits work. Notable YouTube channels are Great Scott and Make. I think the most effective way to design efficient and small circuits is just to tinker a lot with circuits and build my own. With Creative Electronics I have a couple of projects, so my goal is to make the electronics I build there to be as small as I can make them. Not only with that course, but also with my design project. It will involve led lights and sensors of some kind and I am the only one in the group willing to tackle that problem, so I will do my best to make it as good and small as possible so the electronics won't hinder the final product in any way.

CAD programs:

Creativity & Aesthetics

I want to become more proficient in using CAD applications. Last semester I have learned how to use Solidwork. I've found that a CAD program like Solidworks is a really good way for me to make a model of what a final product should look like. I really like the workflow and the fact that everything is measured exactly, so you can enter real world units like a breeze. I had previously worked with 3d modelling programs like Blender, though this doesn't really compare well to a CAD program like Solidworks. My only problem with Solidworks is it's limited export features. I also want to get more in depth with the different functions of a CAD program, so I can create more different kinds of shapes. Because with the tutorials I had previously followed, I only really touched the surface of what CAD programs are. What I can do to get better at Solidworks is read literature about it, but I really want to complete more of the integrated advanced tutorials in the program. I can build up more experience in the program by making 3d models of the prototype for my design project, smart and the city. I also want to learn a different CAD program than Solidworks to fix the export options is to learn a different CAD program. Fusion 360 from Autodesk seems like a good alternative to learn. Learning a different program would also improve my general sense of these kinds of programs and how to work with them, so it would only be a good thing to learn how to use Fusion 360. So what I am going to do for the upcoming semester is, for each assignment where a physical prototype is necessary, I will make at least one rough prototype in Solidworks for that assignment. So that will be multiple models for the design project, and also one for creative electronics. Also for some hobby project I will continue to make models, which I already have done multiple times. By the end of the semester I should have a nice collection of models made in CAD programs.

Speech:

Teamwork & Communication
Business & Entrepreneurship

I would like to learn how to become better at talking. How do I sell myself or a product to others? I find that I am not always able to make clear to others what I mean, or I tend to overwhelm them with loads of details and facts. I want to be able put what I mean into words.

What I mainly need to do is think more before I speak. Me and friends of mine notice for example that when I talk a lot of English in one week, my Dutch actually improves, just because when I have to speak English, I am forced to think more about what I am about to say. You can also think of what you are going to say about something beforehand, like you would do with a speech or presentation. For my design project I want to, for both the midterm and final demo day, really think of what my lines are beforehand and learn them out of my head, just so I have a better understanding of what I can say in that context. What I also want to do before the actual presentation or demo day is do a pilot presentation for other people and then have them tell the things which stand out the most about me talking, both positive and negative, and what I could improve. I also want to look into workshops and lectures about tips and tricks for giving better speeches.

Write better reflections:

Self-directed & Continuous Learning

For some of the courses I took last semester, my reflections where insufficient. I want to learn what makes a good reflection.

What I can do to improve my reflection writing skills is ask other people if I can see their reflections and dissect them to see what kind of structure they use in their reflection, which I can then use to structure my own reflections. I should also take a closer look at what I was expected to learn in the corresponding course, so I can actually reflect on whether I reached the goals and what I could improve on. In the course Professional Identity and Vision we will be following a module about reflecting, so I will learn there too how to write better reflections. I should be seeing my grades for the reflection being sufficient and I should also have a better understanding of what I learned during a course.

Planning:*Self-directed & Continuous Learning*

Although I do finish most of the tasks I have, it can save a lot of stress if you plan certain things ahead of time. I have tried several methods to keep track of my activities and this I have to do. Not all have been that successful, though others have been more successful. Most digital solutions don't really work that well for me. Writing it down on a physical medium works a lot better for me. What helped me the most of the different methods I tried was, at the start of the day, writing a to do list for every day in my dummy. During the day I cross off the things I finished and add new things to the list. This which I did not finish move to the next day. The problem with this is that you end up with a long list of this which get constantly postponed. What I want to do is create a schedule, but on a bimonthly basis. In my room I will hang a large whiteboard on which I will write all of the deadlines for the upcoming months and special events and such. Basically like I do with my to do lists, but then on a monthly basis.