Clear goals
In this chapter I will look back at my measurable goals and see whether I have achieved what I stated in the Personal Development Plan.

Sketching principles
What is it?
Getting a grasp on the concept of sketching a behavior in a system, without going in too much detail.

How will I achieve it?
Follow the assignment Sketching Interactive Systems and make my homework.

What will my proof be?
A series of sketches made for the assignment and a document of my view of the sketching principle.

What was the result?
I successfully followed this assignment, making multiple sketches and getting a good understanding of the principles.

Verdict: Successful

Designing interactive system layouts
What is it?
Using and understanding the program Sketchify and how it can be used to simulate behavior and interface layouts.

How will I achieve it?
Follow the assignment Sketching Interactive Systems and experiment with the program, also through the homework.

What will my proof be?
A series of sketches made for the assignment and a document of what I learned about Sketchify.

What was the result?
I successfully followed this assignment, making multiple sketches and getting a good understanding of the principles. I also used the sketches to support my project.

Verdict: Successful

Business Models
What is it?
Having an understanding of how business models are built up and what I should do to make one.

How will I achieve it?
Follow the assignment Business Modeling and create models for homework and receive feedback.

*What will my proof be?*

A complete business model of a company, with an explanation and a story in a document

*What was the result?*

I successfully followed this assignment, creating a business model with a group and making a story around it.

*Verdict: Successful*

**Making models into designs**

*What is it?*

Using a business model as a basis to create a tangible model that represents the model in a complete, yet creative way.

*How will I achieve it?*

Follow the Business Modeling assignment and creating a tangible model for a company.

*What will my proof be?*

Pictures and explanation of the physical model.

*What was the result?*

The business model was transformed into a village and successfully created a metaphor for the company in a creative way.

*Verdict: Successful*

**Copy paste from nature**

*What is it?*

Using concepts as found in nature in own products.

*How will I achieve it?*

Following the assignment Intelligent Products.

*What will my proof be?*

A document about how I used or can use this principle in products or programs.

*What was the result?*

I followed this assignment successfully and applied a learning algorithm that is based on human learning. However, I have not really applied a concept from nature to technology, as seen for example in biomimicry.
Verdict: Failed

How will I improve this?

Look into assignments that are close to this idea and follow this.

Adaptive systems
What is it?

Learning about how adaptive systems work and can be made.

How will I achieve it?

Following the assignment Intelligent Products.

What will my proof be?

A document about how adaptive systems can be made, hopefully with a self made example.

What was the result?

I successfully used a learning algorithm to make a system that detects the locations of allergens in a certain place. Both an implementation and document was delivered.

Verdict: Successful

Presentations
What is it?

Skill in presenting researched material or finished products.

How will I achieve it?

Presenting throughout the semester for different subjects and purposes.

What will my proof be?

A document with self reflected improvements in presentation techniques and if possible a little movie of a presentation at the level I want it.

What was the result?

I had experience in presenting due to the project and most of all the assignment Business Modeling. In this assignment I did voice acting for a movie and did multiple very successful pitch presentations.

Verdict: Successful

Placing a system in a context
What is it?

Being able to put a system or technology in a context where it can be useful.

How will I achieve it?
Write a small piece about how everything I make/come up with can be used for real and what my expectations of impact on society will be.

*What will my proof be?*

Documents on how to put project and assignment result to use.

*What was the result?*

I realized a product in the project that would be applicable for real in the future and documented the impacts of this technology on society.

*Verdict: Successful*

**Brain storming and discussion**

*What is it?*

Getting familiar with the concept of brainstorming to reach a new idea or way to go.

*How will I achieve it*

Brainstorming sessions and discussing them in various assignments, but most of all in the project.

*What will my proof be?*

Pictures of several mindmaps, results of brainstorming and a reflection on how it can help me in the future.

*What was the result?*

Throughout the project I discussed with my group and multiple design students and experts about what would be the next step to take. However, I have no documentation of these meetings in the form of reflections and mindmaps.

*Verdict: Failed*

*How will I improve this?*

Document my discussions, reasoning’s, etc better in the future.

**Going from problem to technology approach**

*What is it?*

Analyzing problems and then coming up with possible solutions.

*How will I achieve it?*

Use this approach in the project to create new ideas.

*What will my proof be?*

Documentation about how the process went in the project.
What was the result?

I tried going from a problem and reaching a fitting technology. In some sense I did this by finding the Raman Spectroscopy. I still feel that this technology was more a basis to find an interesting problem than the other way around.

Verdict: Failed

How will I improve this?

In other projects I will try to apply this approach again.

Prototyping

What is it?

Creating physical models to make concepts more clear and find new problems/ideas.

How will I achieve it?

Making prototypes in the assignments/project where possible.

What will my proof be?

Documenting about how I did prototyping and how it helped, with some pictures if possible.

What was the result?

Although I made a prototype and worked on a tangible model in Business Modeling, I feel like I have not gained enough skills and did not experiment enough with prototypes during the project.

Verdict: Failed

How will I improve this?

In future projects I will try doing more experimenting early on.

Social View and debate

What is it?

Analyze the social impact of certain inventions and products.

How will I achieve it?

By analyzing what concepts and nanotechnology could mean for the future.

What will my proof be?

Documentation with findings and thoughts about what the social impact will be of nanotechnology and own concepts.

What was the result?
I analyzed the impact of my technology on future situations and placed my product in the context that followed from this.

Verdict: Successful

Thinking of the influences and consequences
What is it?
Analyze the possible bad or good consequences of a product.

How will I achieve it?
By thinking about own ideas and products in the project.

What will my proof be?
Documentation in the form of possible scenarios for my concept.

What was the result?
I focused on making a product that was most of all useful. I succeeded in thinking of scenario’s for my product and analyzed what could happen. A small improvement might be needed by thinking of some worst case scenarios.

Verdict: Successful

Sell Product
What is it?
Presenting a product in such a way people will be wanting it.

How will I achieve it?
By presenting products in the assignments and project getting feedback.

What will my proof be?
Notes of the feedback: How good my selling was and how it can be improved.

What was the result?
Although I made a prototype and presented it in a nice way, I feel like the prototype and presentation was still lacking.

Verdict: Failed

How will I improve this?
Improve in the Form and Senses competency by following workshops, etc.

Teach about my expertise
What is it?
Trying to teach other people what I have learned in my studies.

_**How will I achieve it?**_

By giving a mini course about a subject that I have mastered in my studies

_**What will my proof be?**_

Slides/homework exercises, etc. about how I prepared the lessons.

_**What was the result?**_

I successfully conveyed some of my knowledge to Industrial Design students by giving a workshop.

**Verdict: Successful**

**Get more insight in design**

_**What is it?**_

Look at different designers and their creations and form an opinion on them.

_**How will I achieve it?**_

Visiting websites, exhibitions, museums, etc.

_**What will my proof be?**_

A document about what I have visited, perceived and what my opinion/conclusions are.

_**What was the result?**_

Through visiting the Dutch Design Week I gained some insight in what I saw as a good and a bad design. Also in the project I found

**Verdict: Successful**

**Overall development**

In this chapter I will look how much these measurable activities have contributed to my abstract goals.

**Using different approaches**

The first thing to look at is whether I gained new approaches to solve problems this semester. I used multiple discussions and explorations in the project to find new ideas and new ways to tackle a problem: Thinking from a problem, thinking from a certain technology and thinking from a target group. I also used the program Sketchify to experiment with behavior. All in all I have gained a lot of new approaches I can now apply in Computer Science.

**Getting new skills and knowledge**

Next thing to look at is whether I have gained any completely new skills or knowledge. In the Business Modeling assignment I gained knowledge about companies and skills to analyze them.
Throughout the semester I gained skills in programs to visualize things and gained insight in successfully reflecting.

**Fixing the gaps in my computer science knowledge**
Then there is the matter of adding anything to my computer science skills. Doing the Intelligent Product assignment I gained knowledge of neural networks and learning algorithms. I also gained skills by implementing such a learning algorithm myself.

**Being more innovative**
So finally, have I really stimulated my abilities to innovate? That is of course hard to say. But I think I have improved my possibilities by giving myself more skills and approaches I can now use in Computer Science.