

# Pictorial Aesthetics of Interaction

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## INTRODUCTION

This pictorial shows the design process and the reading materials that are implemented for the design of an alarm clock. The use of acting out the situation of your product, this way making use of soma aesthetics to improve the connections between sensations, feelings, emotions and subjective understanding and values [2]. As well as seeing other groups during lectures, using their interpretations for further development in our design [1].

## DESIGN PROCESS

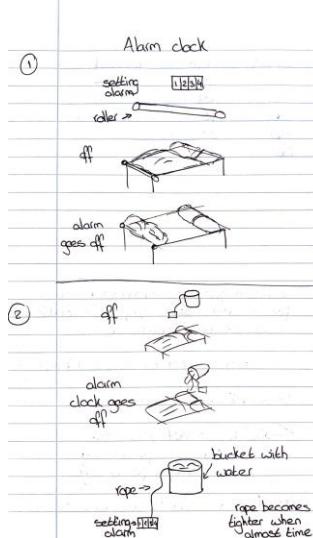
The design process started by a lecture about the Frogger Framework [4], which taught me to use the vocabulary feedforward and feedback during my design process. Based on this new knowledge the design process started with a first ideation iteration on our own (see Figure 1).

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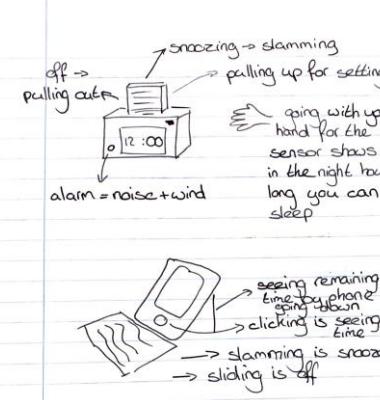


**Figure 1 - iteration one**

The first iteration concluded that the prototype should be buttonless as this is something, we don't like on normal alarm clocks. It showed us where an alarm clock should exist out of and how you could make it different from standard alarm clocks. Based on this the second iteration with new ideas were created (see Figure 2). Iteration two was not very different from iteration one as we didn't know what exactly to do but had one best idea and was

developed further in iteration three (see Figure 3). An alarm clock looking like a round box with time indication. Setting the alarm by marbles. This idea was made from cardboard for a better physical exploration. The prototype made us think about the direction of the alarm, should it show the amounts of sleep and should it show the time you want to wake up?

This question was further explored in iteration four. A foam model showing the amount of time you can sleep by the boxes placed on the edges (see Figure 4). We kept the box look, as we liked this kind of mysterious front from our third iteration. This iteration gave an example if we liked the visible part of how much time you have left to sleep.



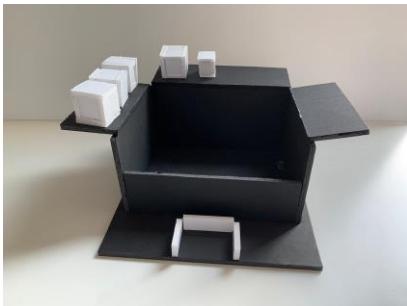
**Figure 2 - iteration two**



**Figure 3 - iteration three**

To make a grounded decision on the choice between iteration three and four a persona was made, showing the context and characteristics. Which showed to who we want to design and what fits best with that person. Giving the insight of preferring a mysterious, chocolate box/jewelry box and not immediately showing the time you have left to sleep.

Finally choosing the looks. Deciding that it should be luxurious like a jewelry box for that mysterious vibe. Using a wooden look alike material for the outside, white marbles for the alarm setting and silk for the insight (as jewelry boxes have this most of the time) (see Figure 4, 5, and 6). The lit of the alarm clock tilted for an easier look on the time from inside your bed. Using no numbers as the upper part of the lid should indicate the twelve. Making use of perceived and feedforward affordances to open our alarm clock and set the time [3]. Closing it by positioning the lit in the right order according to the slot at the side.



**Figure 4 - iteration four**



**Figure 5, 6 and 7 - iteration six**

### DISCUSSION/REFLECTION

With the reading materials in mind we were able to decide easier on interaction decisions. That's why the eventual prototype looked like a jewelry box that showed the real time and gave the option to set and snooze the time. By implementing functional feedforward in the round shape, with pointers forming a clock. Implementing inherent feedforward by the slot and pointers that can turn if the winter or summer time switches. Having functional feedback by the sound that wakes you up. Using inherent feedback by the weight of the marbles and in the future using augmented feedback by lights in the prototype. Not all frameworks included eventually. Using these frameworks is helpful as well as limiting, as you can be obsessed by implementing this instead of creating original and innovative ideas for your design.

### CONCLUSION

Being reminded that acting out and seeing your concepts is of use for your final prototypes, as it gives you insights for improvements during the process. Getting new knowledge about design vocabulary is effective to have, as this gives insights in how interactions in prototypes work and should be implemented for the optimal impact in your design.



**Figure 8 - final design**

### REFERENCES

- 1] Scott R. Klemmer, Björn Hartmann, and Leila Takayama. 2006. How bodies matter: five themes for interaction design. In Proceedings of the 6th conference on Designing Interactive systems (DIS '06). Association for Computing Machinery, New York, NY, USA, 140–149. DOI: <https://doi.org/10.1145/1142405.1142429>
- 2] Vasiliki Tsaknaki, Madeline Balaam, Anna Ståhl, Pedro Sanches, Charles Windlin, Pavel Karpashevich, and Kristina Höök. 2019. Teaching Soma Design. In Proceedings of the 2019 on Designing Interactive Systems Conference (DIS '19). ACM, New York, NY, USA, 1237–1249. DOI: <https://doi.org/10.1145/3322276.3322327>
- 3] Jo Vermeulen, Kris Luyten, Elise van den Hoven, and Karin Coninx. 2013. Crossing the bridge over Norman's Gulf of Execution: revealing feedforward's true identity. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '13). Association for Computing Machinery, New York, NY, USA, 1931–1940. DOI: <https://doi.org/10.1145/2470654.2466255>
- 4] Stephan Wensveen, Tom Djajadiningsrat, and Kees Overbeeke. 2004. Interaction frogger: a design framework to couple action and function through feedback and feedforward. In Proceedings of the 5th conference on Designing interactive systems: processes, practices, methods, and techniques (DIS '04). ACM, New York, NY, USA, 177–184. DOI: <http://dx.doi.org/10.1145/1013115.101314>

