Reflection

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# GENERAL REFLECTION

01. COLLABORATION PROCESS

Although I have designed many houses as an Architect Engineer, I have never realised how the house will change in the future influenced by technology.

Within my PIV I describe myself as wanting to become an independent, self-employed designer who combines Architecture and Industrial Design in solving contemporary problems. In my view the design we propose in this course touches upon my design vision, since we proposed a space for the future aiming at solving problems such as the understanding and expression of emotions in extend resolution. Our proposal changed during the semester in order to become more precise and achievable. Our approach raises awareness and opens room for playfulness, further exploration and critical discussion. Due to our "Emotion-Responsive Interactive Home" we invite the user to utilise a unique system probably not accepted by everybody, but which could have a positive effect, if used responsibly. The design process greatly inspired me in taking decisions upon the following quartile.

My background in Architecture and interest in combining it with Industrial Design helped me in selecting this topic: AI & Home: The Past, Present, and Future. This aligns with my goal of pursuing a career as an **Architecture Engineer** with an **Industrial Design twist**, fitting my **PIV**.

The group dynamics posed challenges due to differing work ethics, goals, methods, communication styles, and opinions. Initially it appeared cohesive, but later these differences emerged. Despite the obstacles, I appreciate the final design proposal. I actively participated in project management by setting timetables and assigning tasks. In the beginning, the teamwork involved a quite extensive brainstorming and seeking similar ideas (Delaux, 2019), individually and among all members, that I contributed in all. Even though I frequently expressed opinions that occasionally aligned with feedback, it was sometimes neglected.
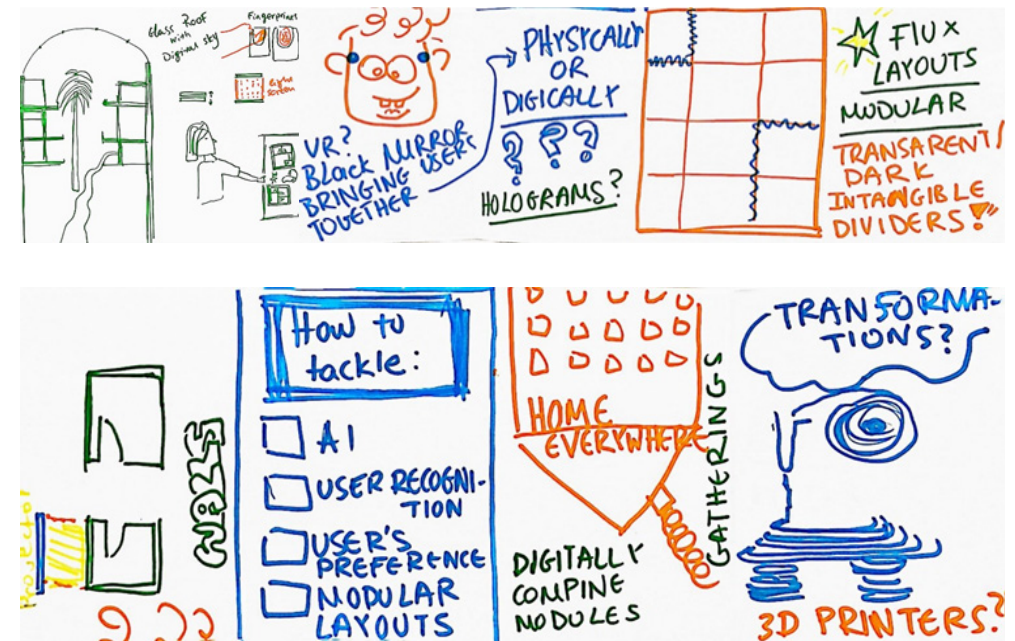
After choosing the design path, we were divided into digital and physical design pairs. I was part of the physical design team, that restricted me from working on something new, learn how to code as I spent so much time on the physical probes and visualizations and this task was delegated to someone else. After a while, one team member repeatedly missed scheduled meetings and feedback sessions, avoiding responsibilities, leading to uneven workload distribution.

02. THE DESIGN PROCESS

Initially, the idea was about home everywhere or nowhere, based on our diverse group experiences where some members like me live away from home and need to adapt in this new country. As a result, many international students in the Netherlands feel homesick and face mental health issues (International students in the Netherlands – Statistics & Facts, 2023, 59% of International Students in the Netherlands Deal With Mental Health Issues, 2022). Therefore, the initial conceptual idea was about having empty rooms all around the words that, based on our personalised data and preferences, would transform into our familiar home, the views, the colors and the furniture. We shifted from an abstract idea to a simpler, more applicable concept: the house reflects the user, enhancing emotions through activities, lighting, music, and speech (Kurt, 2014).

For the final design we incorporate a range of emotions through face recognition and patterns determined by AI. Despite the complexity, I carried out a brief research, collecting relevant scientific papers that I shared with other team members for analysis. Consequently, we focused to the fundamental human emotions: Happy, Calm, Stressed, Sad and Angry and their corresponding colors (Murray, 1957; Jonauskaite, 2018). Considering this project as being an exhibit we excluded the emotion of Anger, since we believed that it wouldn't fit in a museum setting.

Looking back, it seems that simplifying the design proposition, was a good call, in order to come up with a good design in the given time frame. The initial idea was complex, involving various aspects in digital design, such as face recognition, data collection, projection, and house implementation. I believe that in the end our project proved to stand out notably among the other projects, receiving substantial positive feedback and reactions due to the uniqueness of the idea that may benefit the future society.

03. MY ROLE IN THE TEAM
CONTRIBUTION
LEARNING ACTIVITIES

I was involved in several design phases. I handled the presentation setups, content list creation, and contributed significantly to diverse design aspects. I oversaw the creation of the physical prototype, which included laser cutting (AutoCAD), assembly of the mockups, and 3D house layouts (Rhino3D). Initially, I concentrated on just one room (1), but we ended up designing the entire house because the proposal changed (2) and needed to show the transition and the different paths between the rooms. After the pre-demo day, we observed problems with the mockup: it was difficult to navigate the hallways and the high walls. In order to ensure more room for token movement, I redesigned it without corridors and I shortened the walls (3).
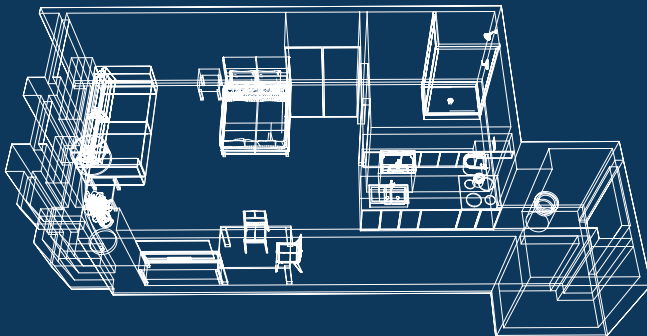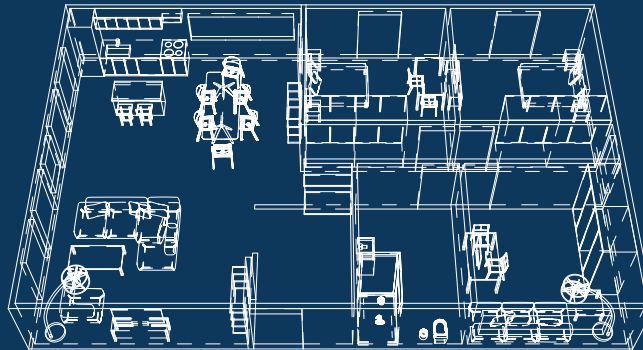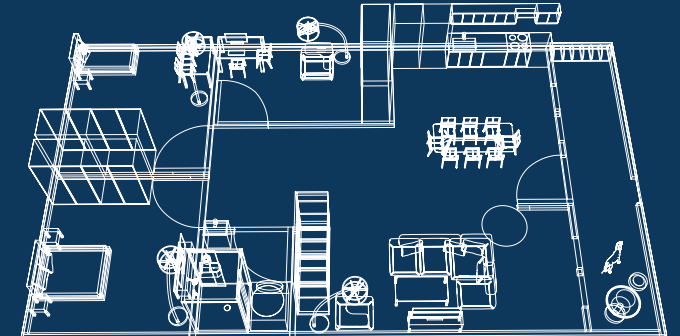

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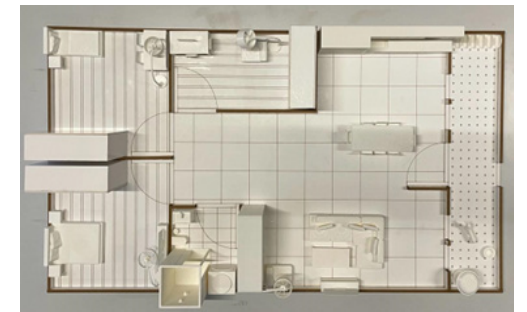
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I worked on the design and development of tokens and holders, 3D modelling (Rhino3D) and printing. While exploring ways to convey emotion intensity through shapes and sizes, we encountered code recognition problems with smaller sizes. Hence, we opted for a recognizable size. Due to tech constraints, I streamlined the final product during prototyping. I was responsible for:
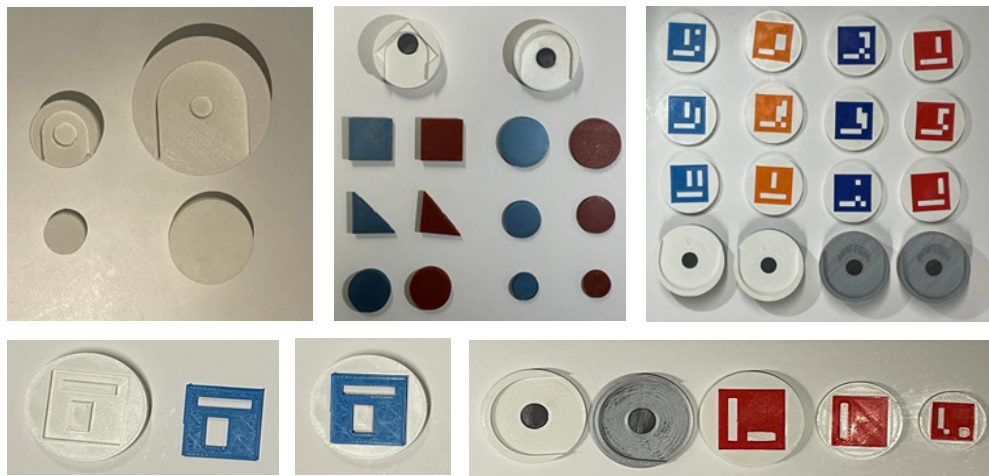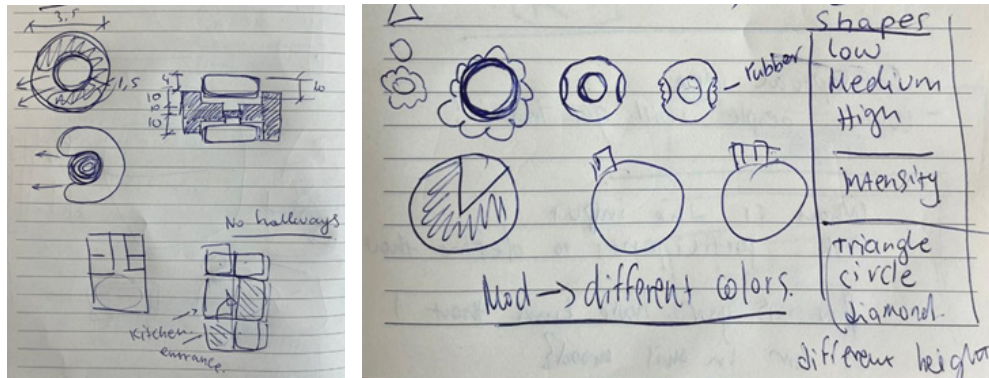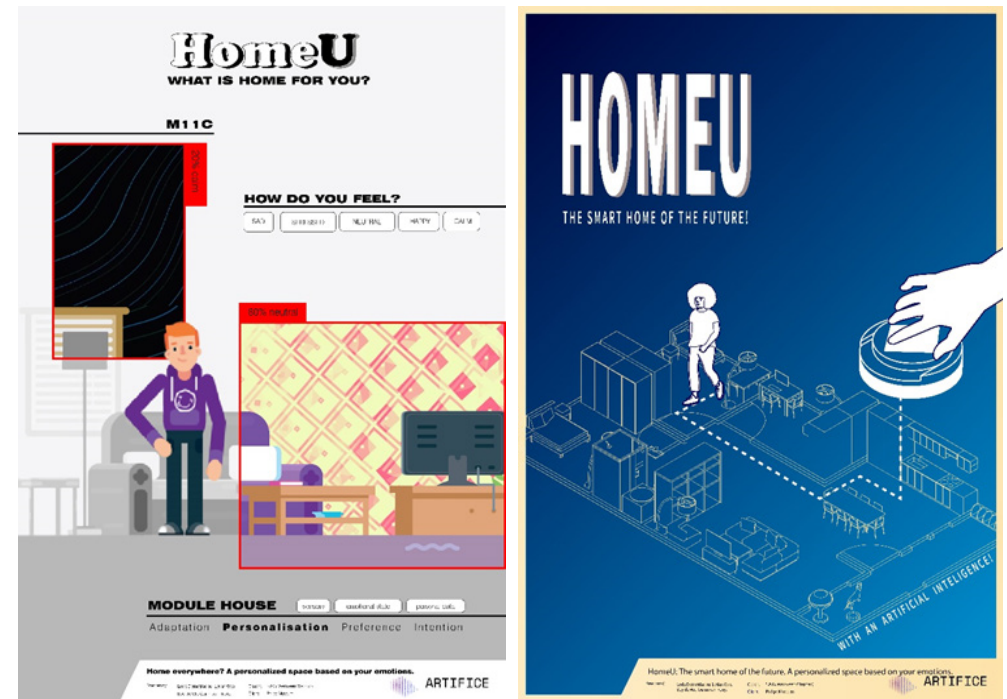

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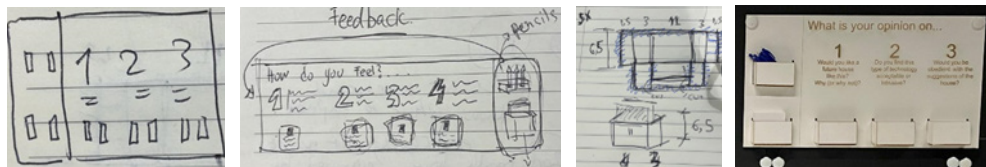
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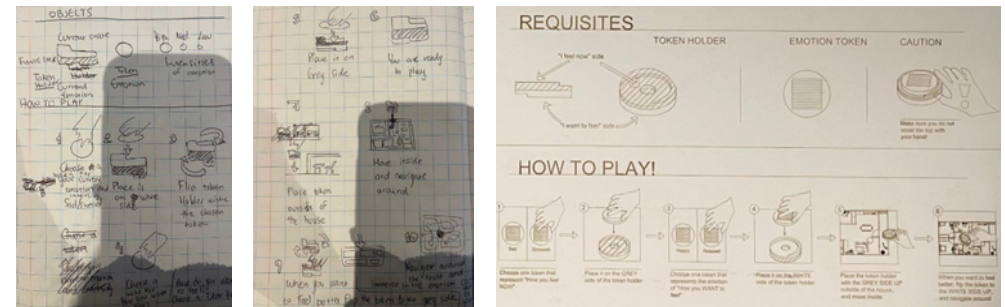
Pre-demo and Demoday's posters.

For the report, I handled the Abstract, Methodology, Envisioned concept, Ethical considerations, Acknowledgements and the Graphic design. Discussion was written by me and Lexie. Overall, I reviewed and revised the entire report, ensuring content alignment and improving poorly articulated sections from other team members

04. MISSED OPPORTUNITIES
NEW LEARNING GOALS

While coding was primarily in my learning goals, because my focus was primarily on the physical product, concept development and presentation, leaving insufficient time to delve into this new skill from scratch. As a result, I set a new learning goal, to learn basic coding, and for that reason I chose the course "Creative Programming". This course introduced me to its potential integration with design and machine learning and a different perspective, than Architecture, of the possibilities on how technology can intersect with user and societal aspects of design. Throughout the course, I conducted personal research on AI, diligently engaged with the provided materials, and actively participated in all related squad workshops.

05. GROWTH AS A DESIGNER

My goal as a designer was to conceptualize futuristic home concepts enhancing the users' needs and desires. Originally, I aimed to create a flexible, adaptable room that could be "customised" anywhere. This made me wonder what "home" really means. Though further research, I gained a clearer understanding of more practical and viable alternatives.

Following a different design approach than Architecture, fascinates me. Different scales, functions and focus: While architecture focuses on quality and durability, Industrial Design emphasizes quality, user-centered design with a strong value proposition and research background. In Industrial Design, I found prototyping to be more pivotal—it's a valuable tool for user testing and decision-making, unlike its more abstract or demonstrative use in Architecture. While designing and prototyping the physical products I enhanced my skills of 3D modelling (Rhino3D) and printing.

Moreover, I honed soft skills in communicating and collaborating within an international team, planning and organizing, dealing with scientific information, framing my personal identity and vision and reflecting on my collaborative and learning experiences in design as well as pitching in English (Presentations, Pre-demo, Demo day). This course provided a strong foundation for my Industrial Design education, offering diverse design perspectives in comparison to other squads. From this course I concluded that I would like my M1.2 to aspire to balance more the physical and digital design while expanding my knowledge on Technology and Realisation in the field of User and Society and Business and Entrepreneurship and thus I contacted various relevant coaches for potential mentoring.

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