MAGE

EMILIA ZIOLEK
21307067
Advanced Modeling of Form

TABLE OF CONTENTS

House Style **Individual Style Ergonomic Exploration Form Exploration Monster Modelling Concept Modelling Concept Iterations Redefined House Style Final Model Development Final Model Renders** Reflection

Group Theme Descriptions - AMoF

'contemporary minimalism'

'smooth finish'

'light and shadow'

'line breaks'

'Braun Dieter Rahms style'

'Detailed simplicity'

'sleek design'

'dynamic lines'

'timeless'

'juxtaposition of surfaces'

'silver streaks'

Contemporary Minimalism

'futuristic minimalism'

'monochrome'

'hard lines meet soft features'

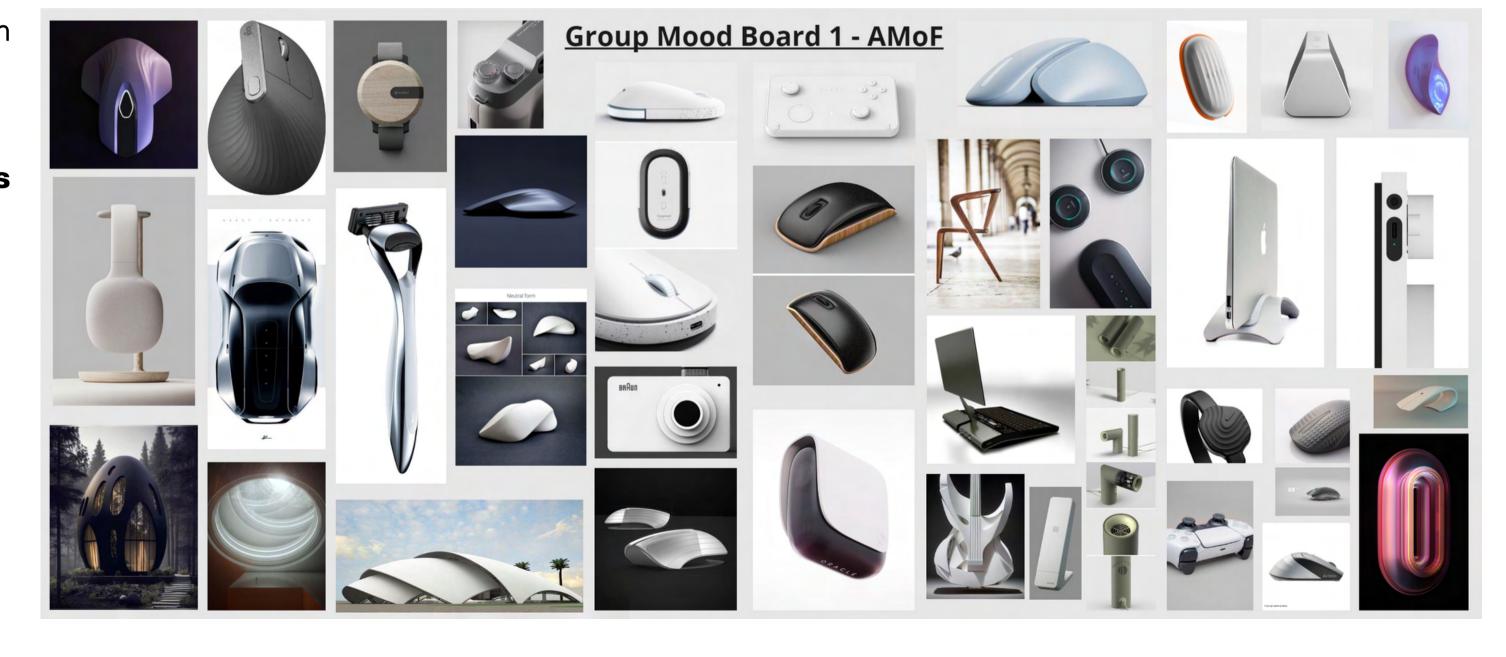
'shines off soft features'

'emphasis on chamfers'

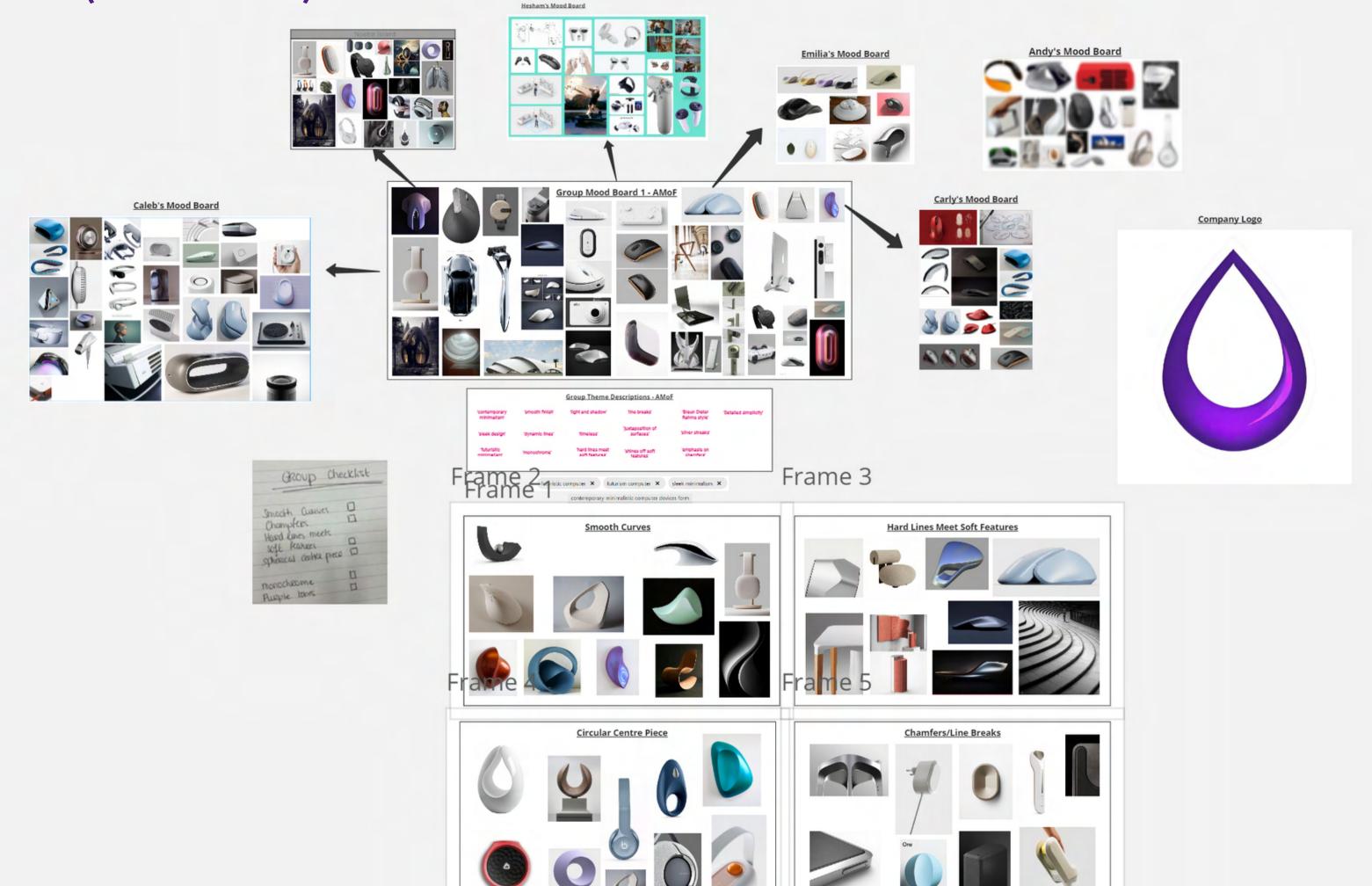
Our company is heading in the direction of minimalism, with designs that emphasize **hard lines** meeting soft features, emphasize line breaks, and emphasize detailed simplicity.

HOUSE STYLE

Company Theme:



HOUSE STYLE (MIRO BOARD)



INDIVIDUAL STYLE

My Theme:

Contemporary Minimalism – The Computer Mouse

The objects that I most drew my inspiration from were the mouse pictures from the company theme board. Involving emphasized curvature, dynamic lines, and futuristic intent.





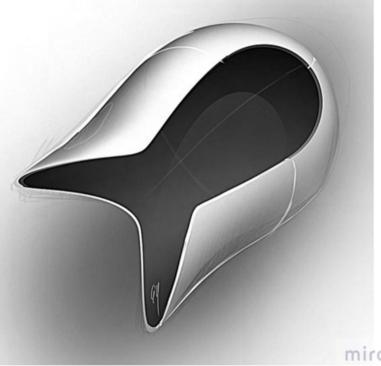








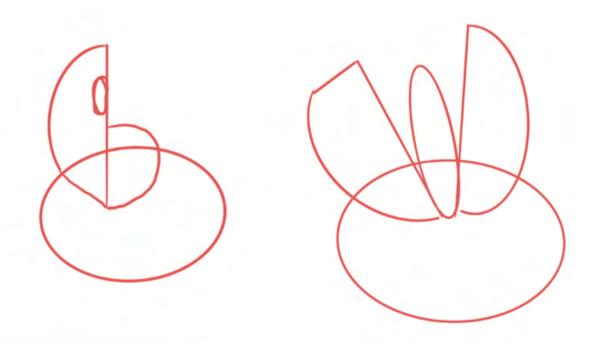


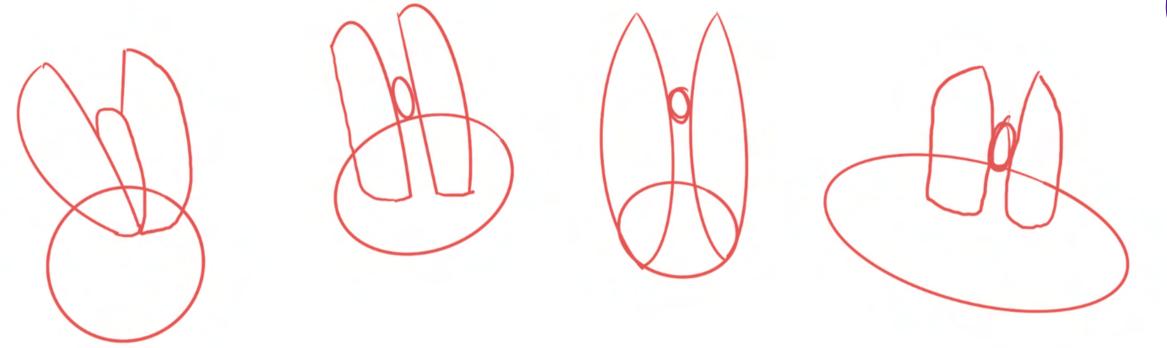


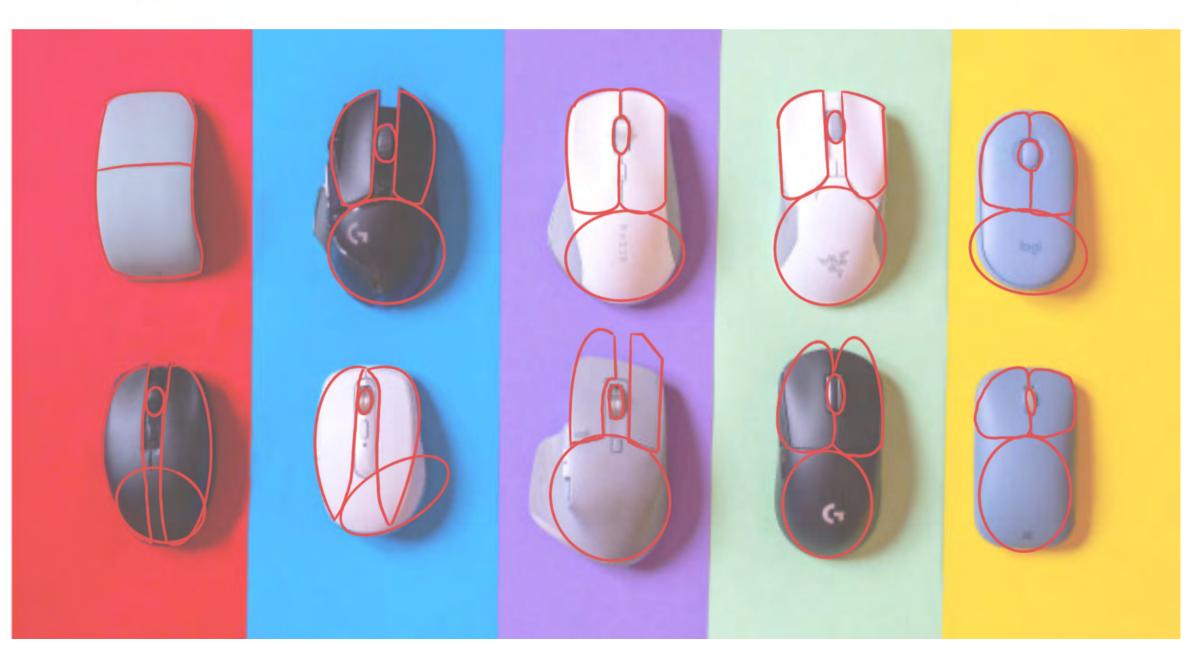
Ergonomic Exploration

WHAT IS A MOUSE?

Investigation of features was made through evaluating existing products.



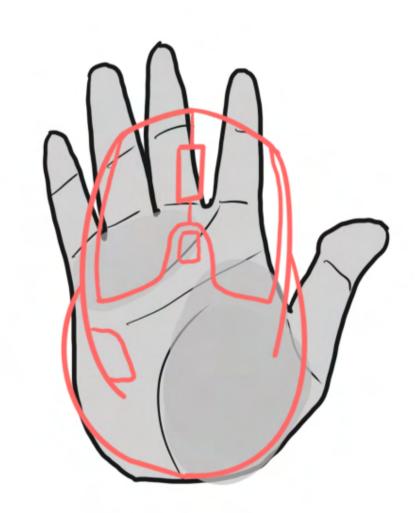




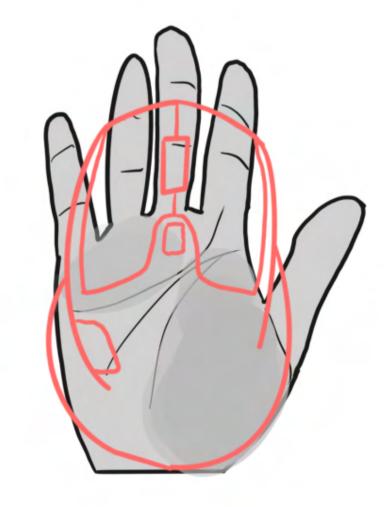
TARGET DEMOGRAPHIC

Target: Creative Professionals

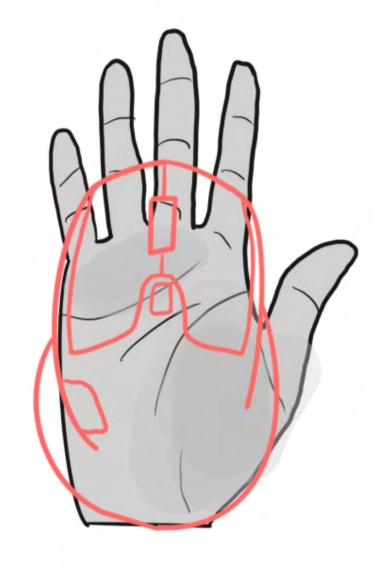
Different Hand Shapes of User Demographic;



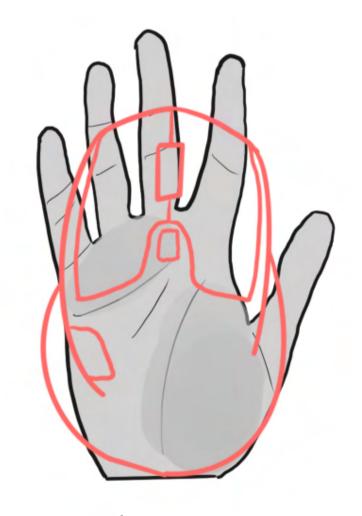
Long Palms, Short Fingers



Square Palms, Short Fingers



Long Palms, Long Fingers



Square Palms, Long Fingers

Ergonomic Exploration

FORM ANALYSIS



Will the mouse be left-handed or right-handed?

What is the scale of the mouse?

What direction of the features is most comfortable?



What can I change?





What finger placement is best for the user?

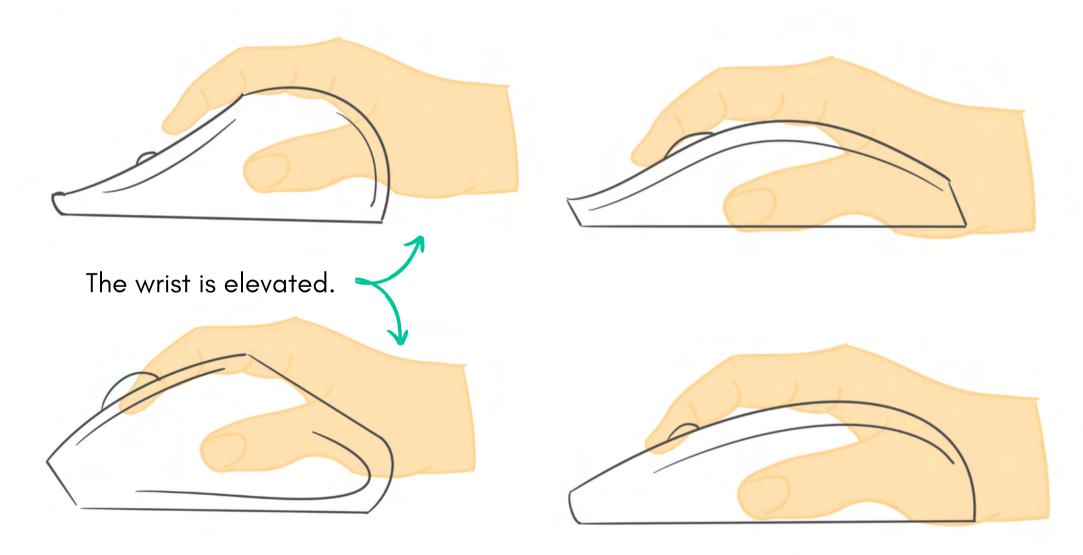


Ergonomic Exploration

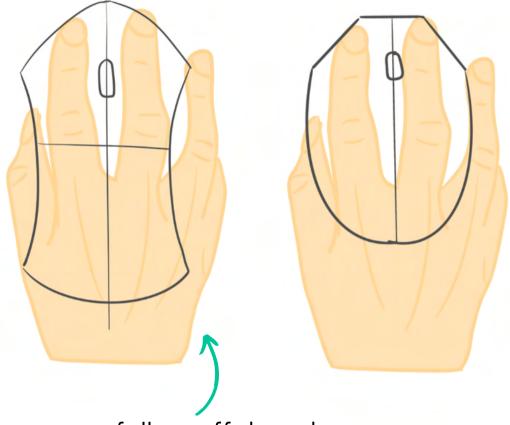
FORM ANALYSIS

I continued with analysing the most comfortable wrist patterns from orthographic views.

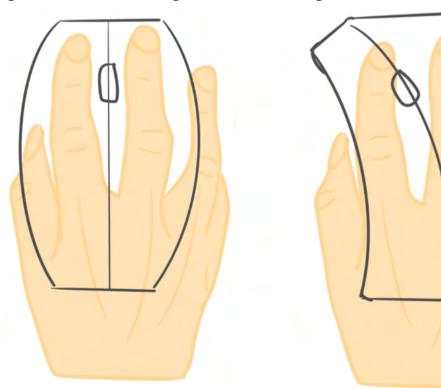
Investigation of different mouse patterns for the wrist.



Investigation of different finger placement patterns.



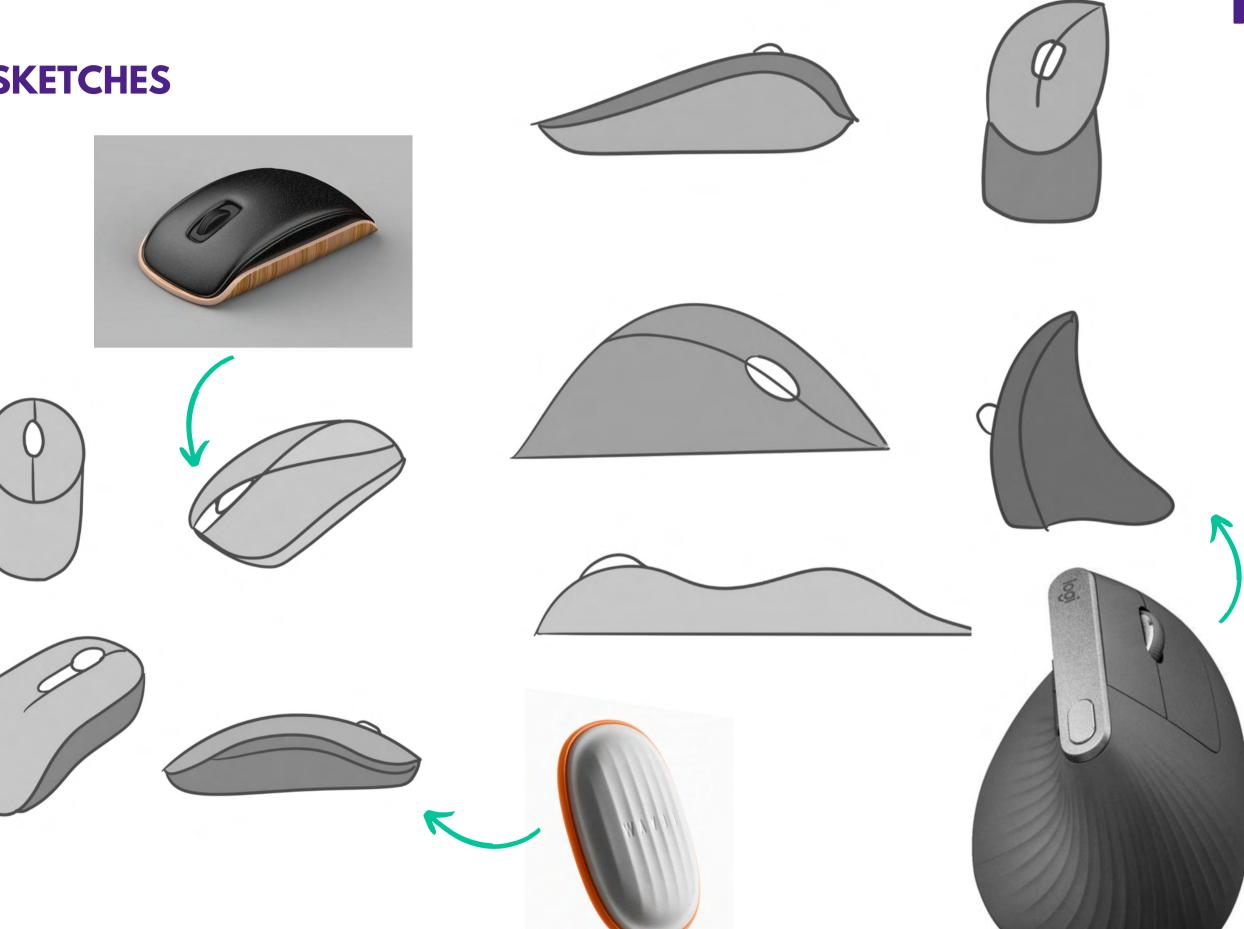




Form Exploration

EXPLORATION OF STYLE WITH SKETCHES

I began with very simple patterns drawing inspiration for the house style to get an idea for shape.



Form Exploration **EXPLORATION OF STYLE WITH SKETCHES**

Exploring the form of objects from the house style while referencing the research on my target demographic.

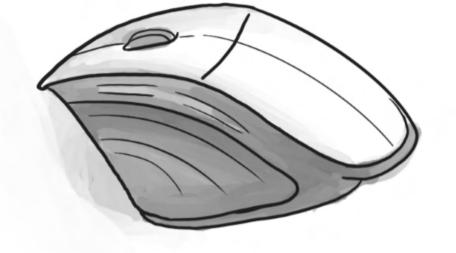




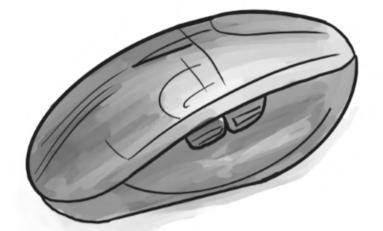
Sketches become more detailed.



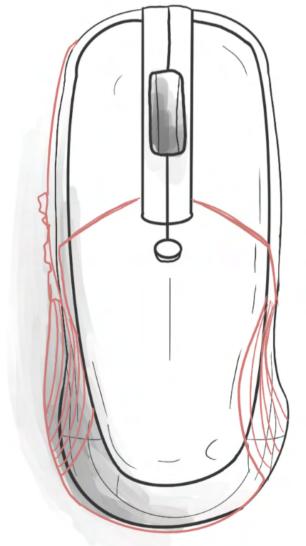


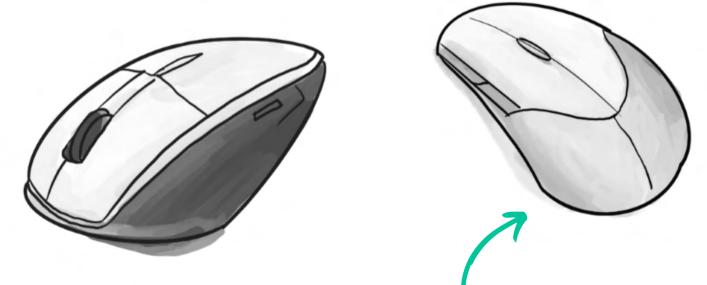


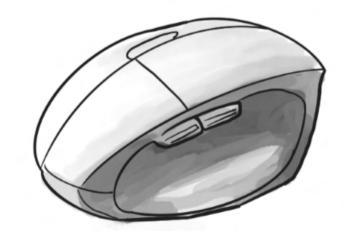












Continuing to explore form from House Style.

Looking at the overview of mouse features and what could/can't be excluded.

EXPLORATION OF STYLE WITH SKETCHES



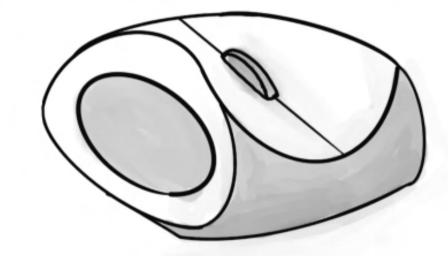
More sketches of exploring the form of objects this time from my own style board and trying to see all possibilities of form.



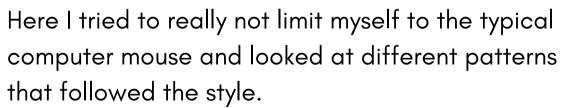




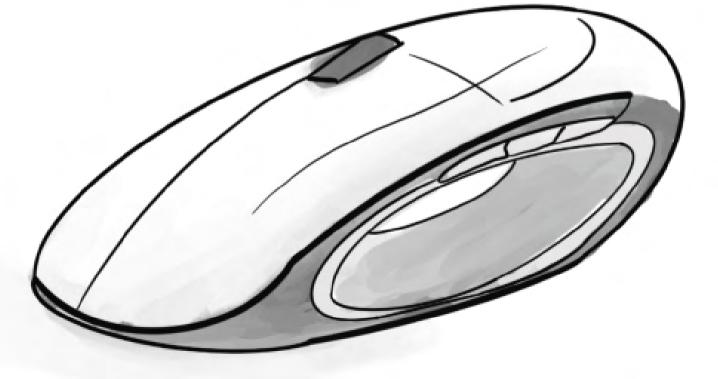


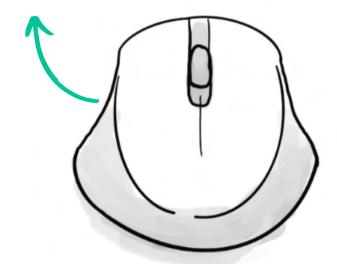












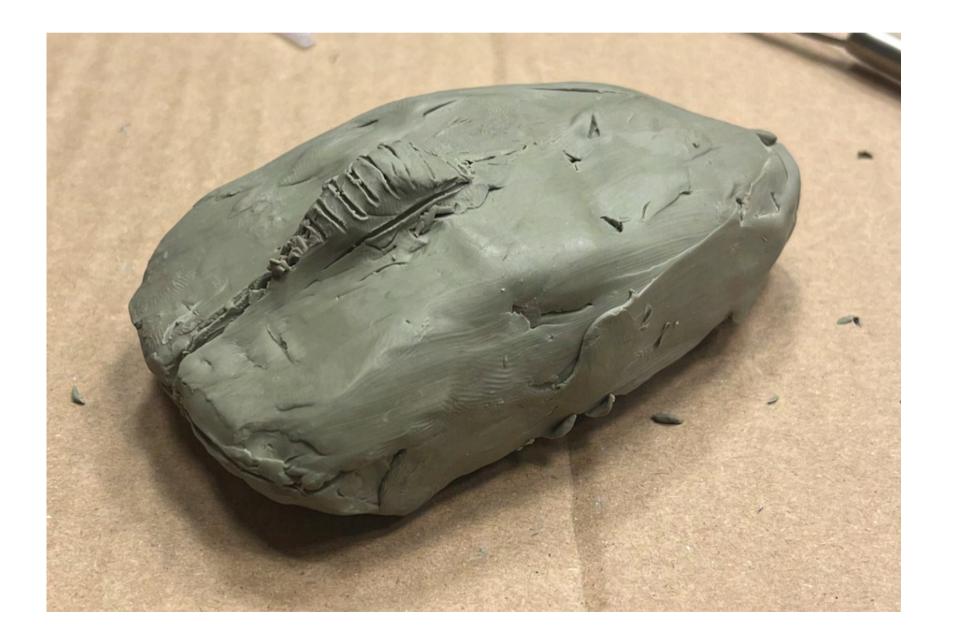




Volume - Structure - Human Anatomy



My first Monster Model focused on the Volume, Structure, and Human Anatomy of the model.



The structure for the object follows the guidelines of a computer mouse model that I investigated on the previous slides.



The volume of the model is the rough size of an average human hand, comfortable sitting in the palm.

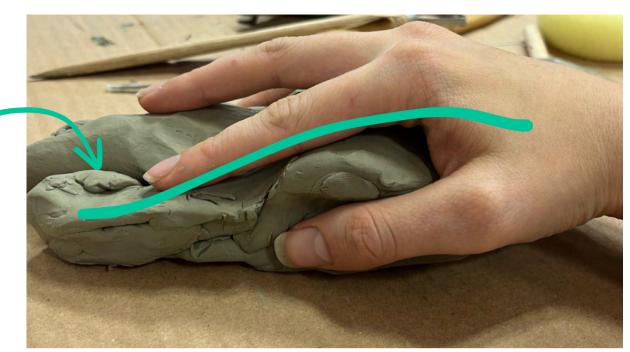


Monster Modelling MONSTER MODEL

Form - Volume - Scale

My second Monster Model focused on the Form & Scale aspect of modelling.

Following the form pattern that suits the wrist the best.







Tested on a number of classmates by looking at the universal fit for the length of the mouse.



Monster Modelling MONSTER MODEL Scale

Dimension Reference:

Length: 11cm MIN 15cm MAX

Width: 4cm MIN 6cm MAX

Height: 3cm MIN~6CM MAX





PEER FEEDBACK:

I consulted with my team on the size and scale of my monster models and we all came to the same agreement that the sizing was appropriate and suited us all.



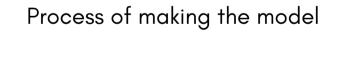


Concept Modelling FIRST CONCEPT

My first concept focused a lot on the main feature; the hole running through the middle. I worked using the orthographic and linework I made in Designer.





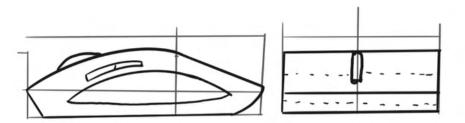


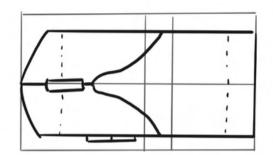
HOUSE STYLE INSPIRATION:



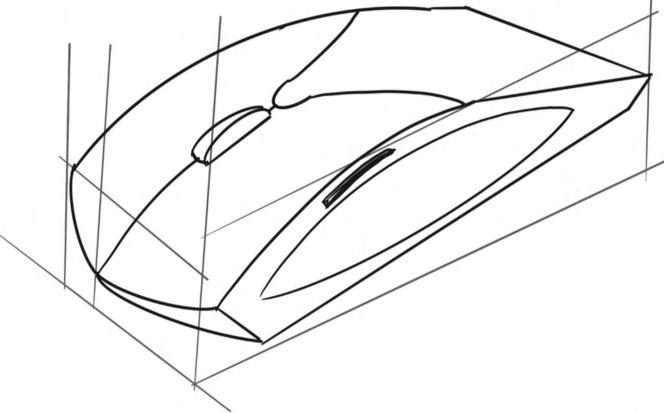


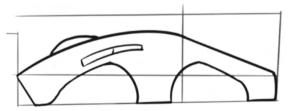


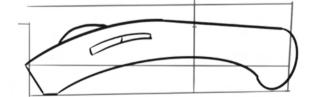


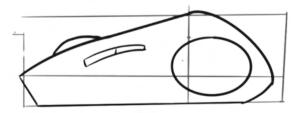


Orthographic views that helped me identify directions during modelling.





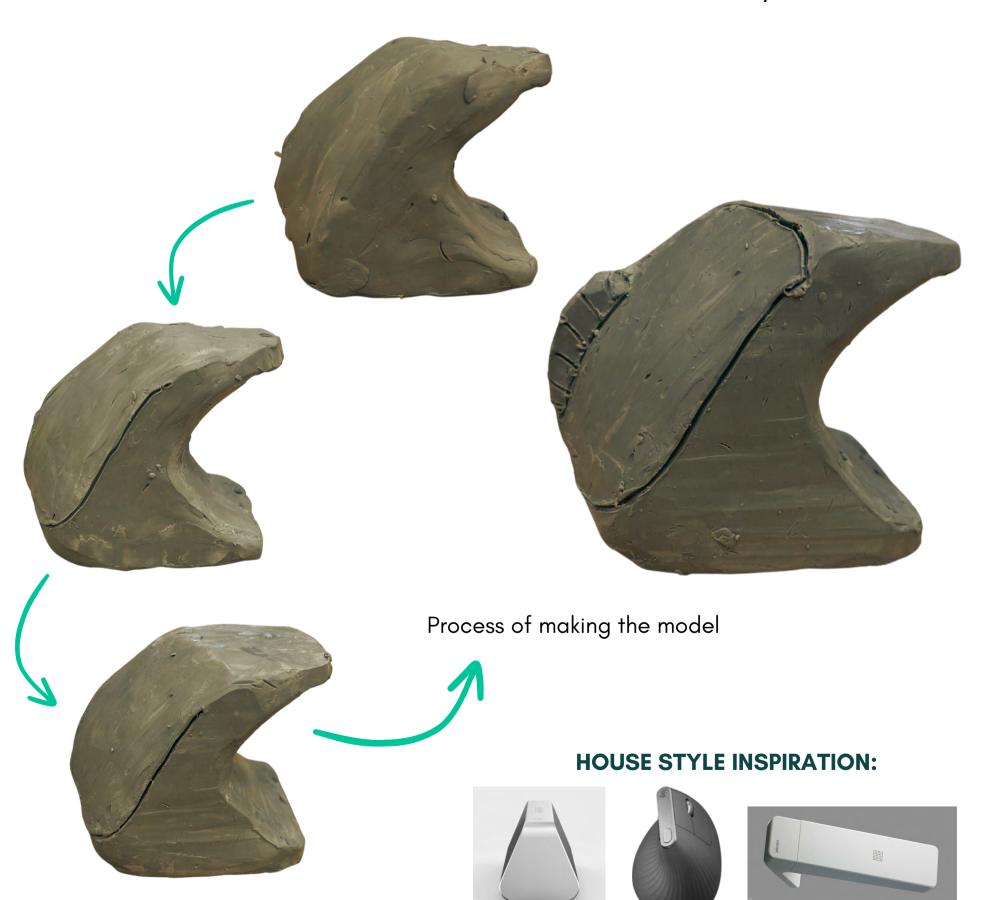


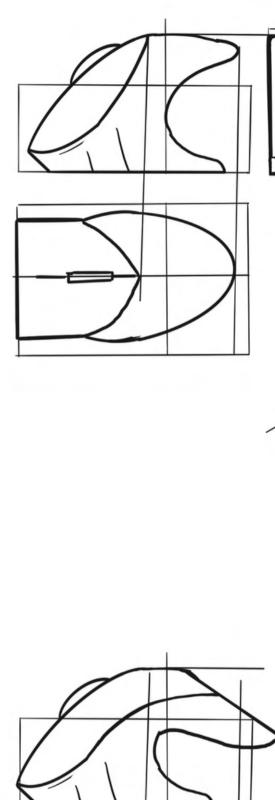


Explored some alternative concepts in my sketching

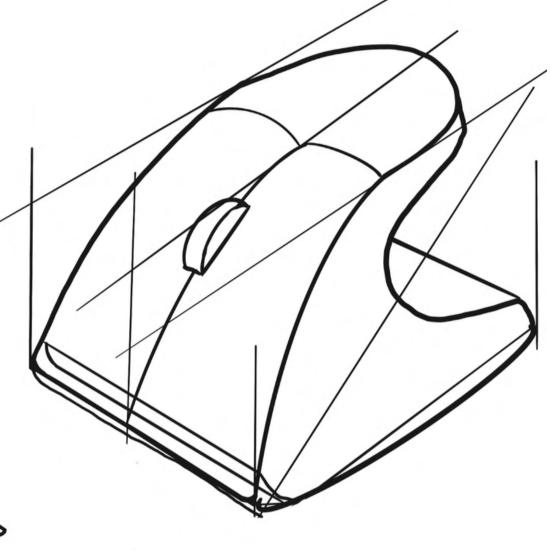
Concept Modelling SECOND CONCEPT

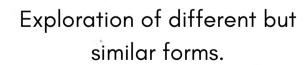
In my second concept, I wanted to explore a different style of vertical computer mice. This focused a lot on wrist dexterity.

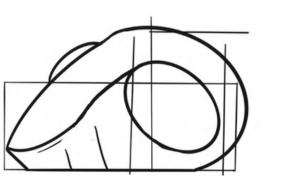


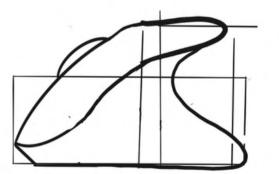


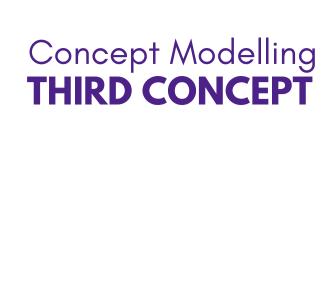
Orthographic views that helped me identify directions during modelling.





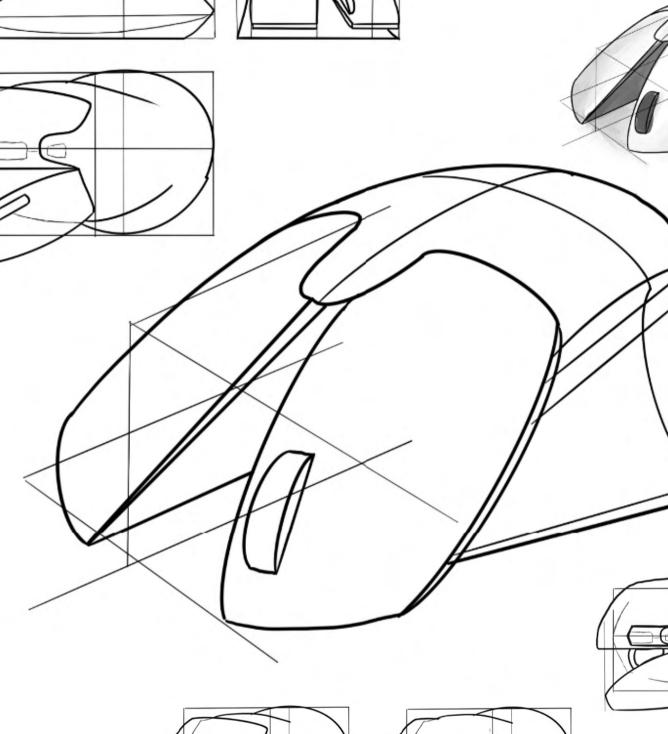






My last concept revolved a lot around the separation of the left and right buttons from the mouse base.









HOUSE STYLE INSPIRATION:







Exploration of different but similar forms.

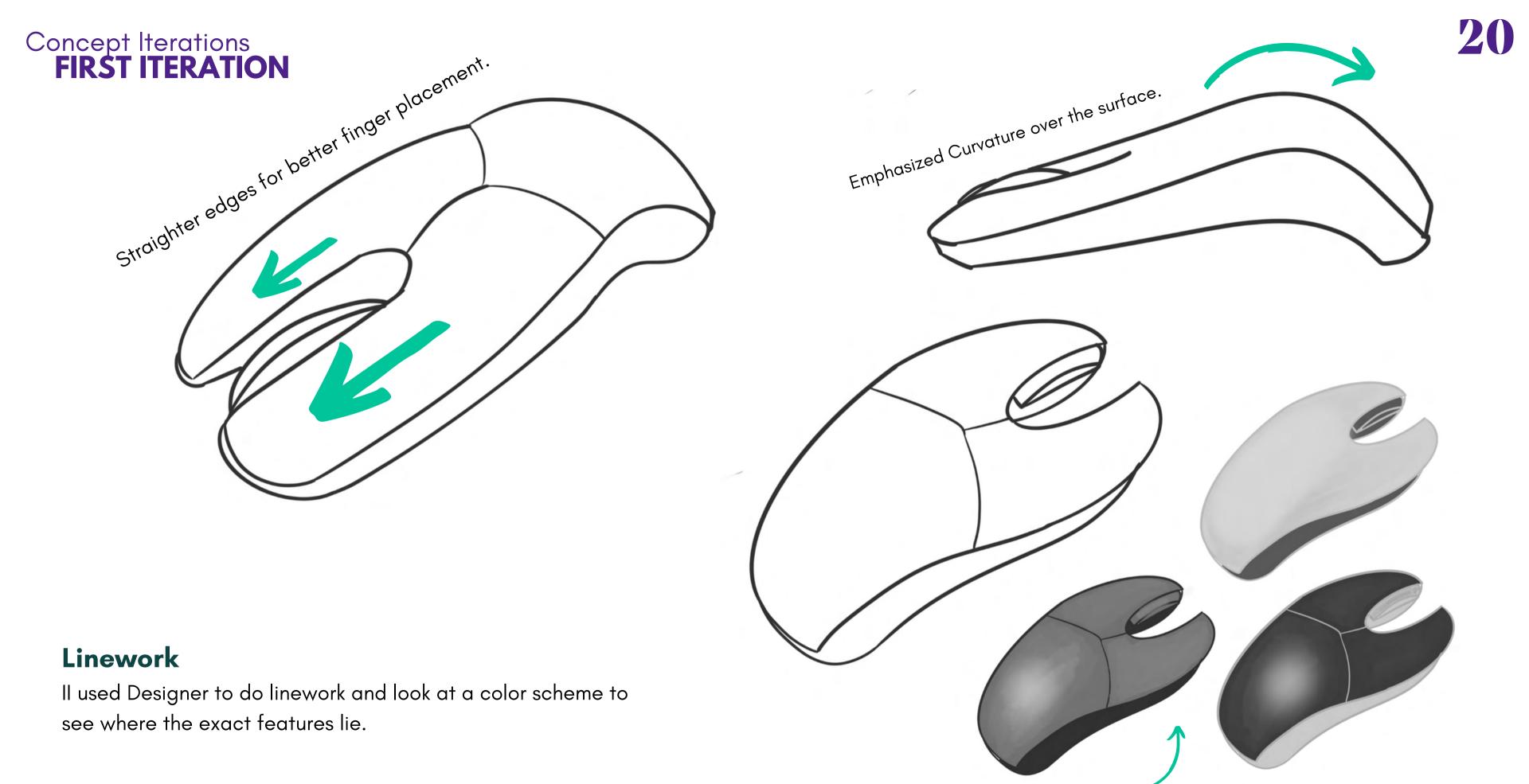
Concept Modelling CHOOSING THE DIRECTION

I chose my third concept to go forward with as I liked it the most and figured I had a lot of creative freedom to work with. It also suited the house/individual style the most out of the three.









Looking into monochrome colours to better visualize the feasibility of the model.

Physical Model Exploration:

I made the physical clay model using the Designer sketches as a reference.





PEER FEEDBACK:

I brought this model back to the team and these are the main points that we discussed:

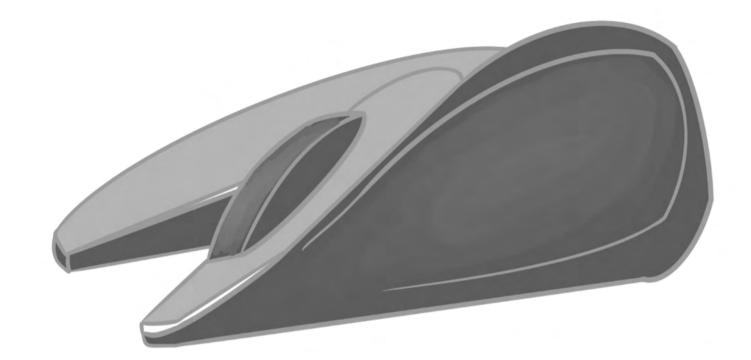
Intuitive: They found the model to be quite intuitive, there was no doubt where the finger placement needed to go.

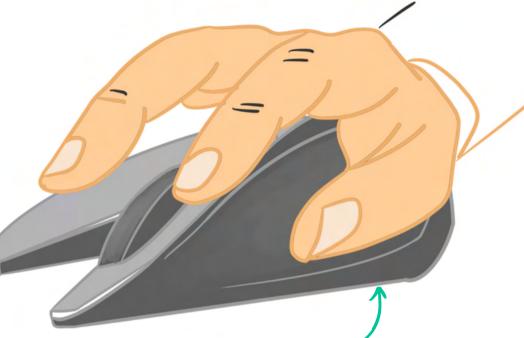
Height: The model had a really nice height where it needed it (The hump for the wrist), It was not too far forward or too far back.

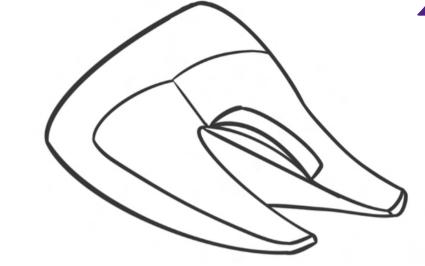
Length: The length of the model suited everyone comfortably.



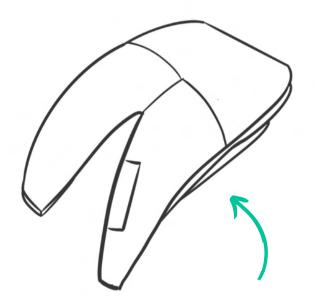
Concept Iterations **SECOND ITERATION**



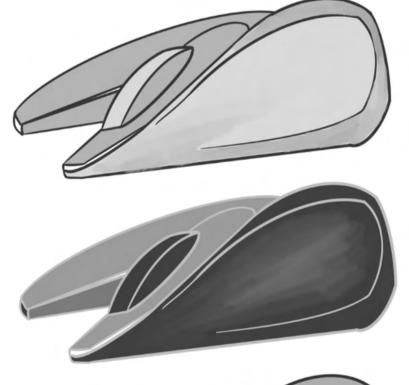


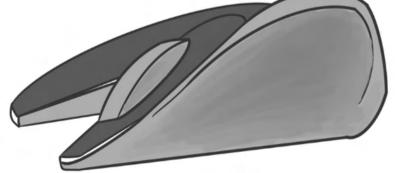


Hand placement on the mouse.



Fingers are tilted in a more natural curved way.





Designer Iterations & Linework

I decided to go with a second direction in the iteration of the concept as I wanted to go into a few more things involving the house style and ergonomics.

I didn't necessarily want this model to be better than the last, but I wanted it to explore a different aspect of the style and something I might have missed.

> Looking into monochrome colours to better visualize the feasibility of the model.



Physical Model Exploration:

I again, made the physical clay model using the Designer sketches as a reference.





PEER FEEDBACK:

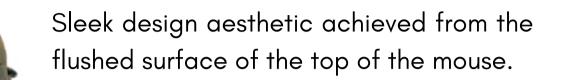
I brought my model back to my group.

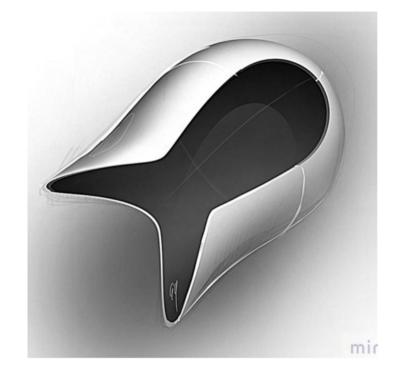
Curvature: Fits into the palm really nicely and is more comfortable

Placement of Thumb: Much more in-depth and adjusts to everyone's dimensions.

Concept Iterations HOUSE STYLE OUTCOME

"Emphasized Line Breaks"



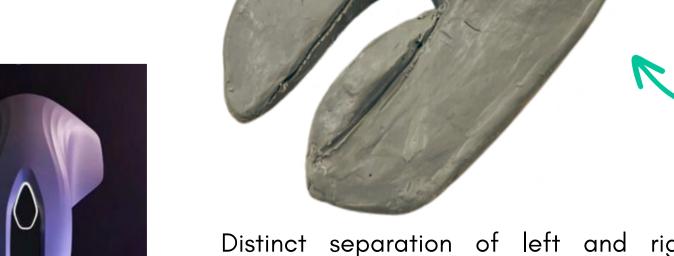


"Hard Lines Meet Soft Features"



"Emphasized Curvature"

The round hump on all models that brings detail into the curvature.



Distinct separation of left and right mouse buttons, a design that splits.



PEER FEEDBACK:

I consulted with my team about the concept and direction I was taking and we agreed that I was on the right path following our house style.

REDEFINED HOUSE STYLE

GROUP Checklist

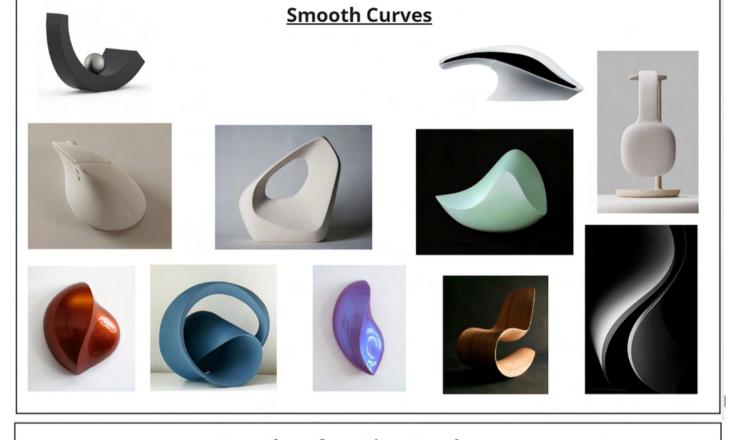
Champters

monocheome Purple long

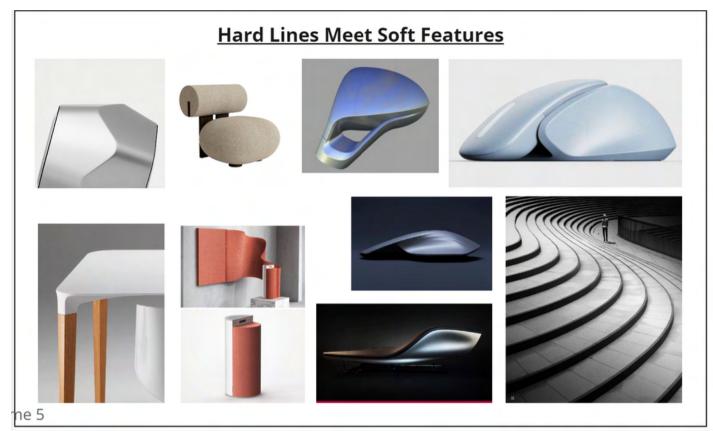
Hard lines meets

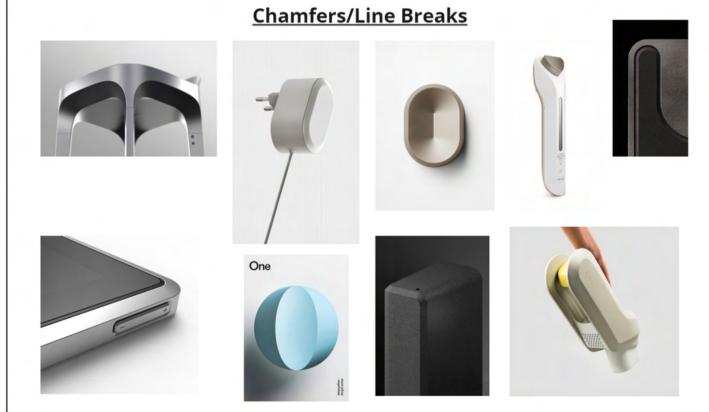
Soft features []
Spherical centre piece []

Our group got back together to revisit our original house style and revise it down to all the features that we needed in our models.





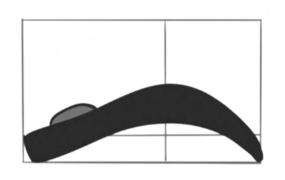


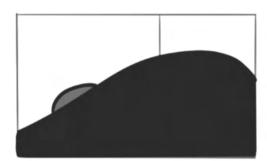


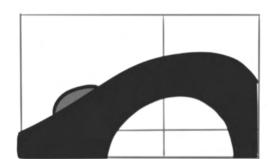


DEVELOPMENT USING SILHOUETTES

I used Designer to overlay my two iterations top and bottom to give me insights as I begin my final model.

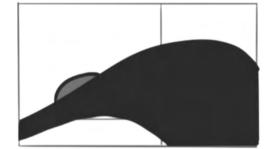


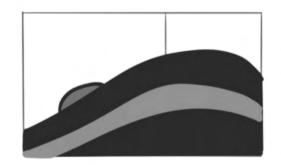


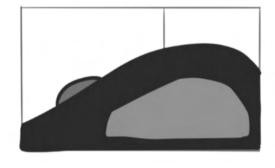


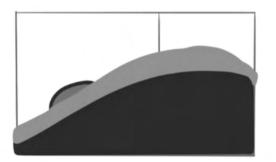


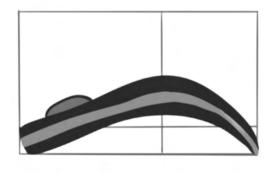




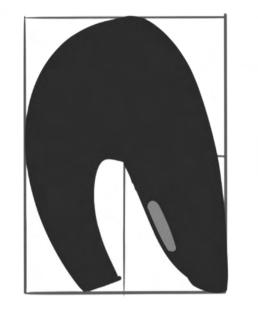


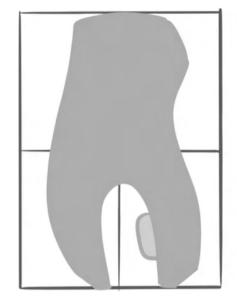


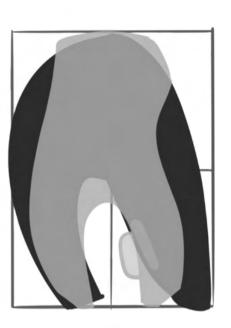


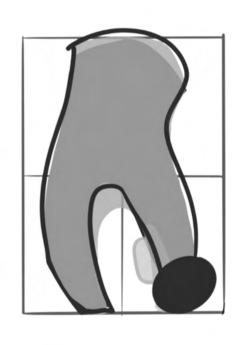


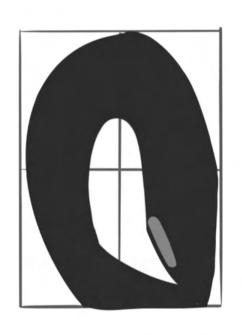
I really liked the thought of the two fingers 'merging into a circle and it fit into 'circular centre piece' aspect on our board.

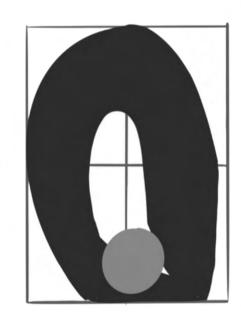


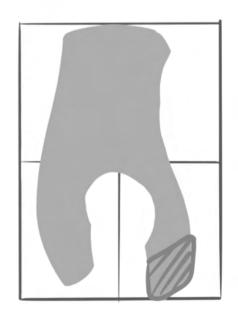


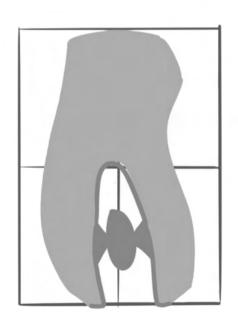


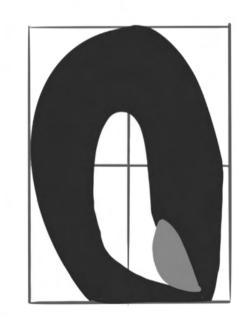




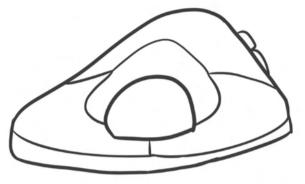


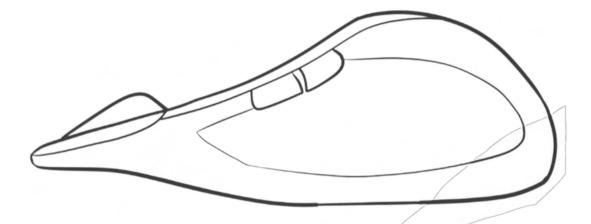




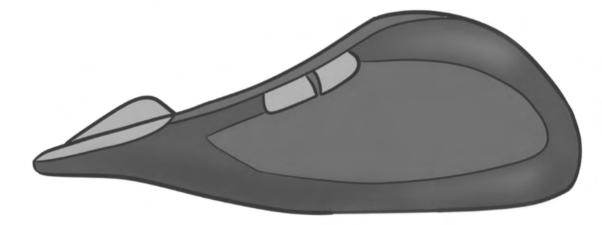


Final Model Development FINAL CONCEPT SKETCHES





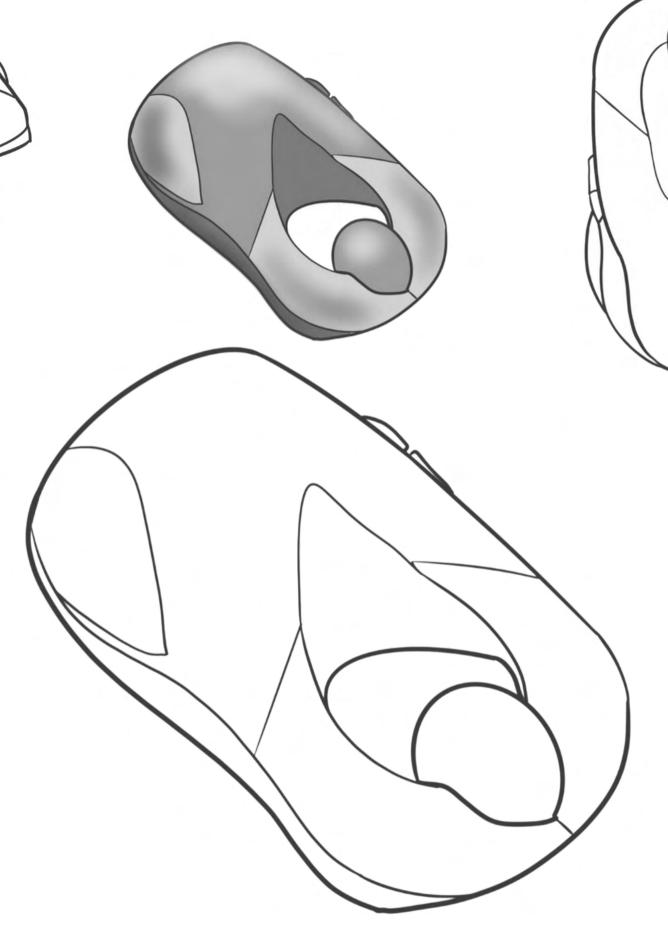
Gap for the thumb as previously explored.



HOUSE STYLE INSPIRATION:







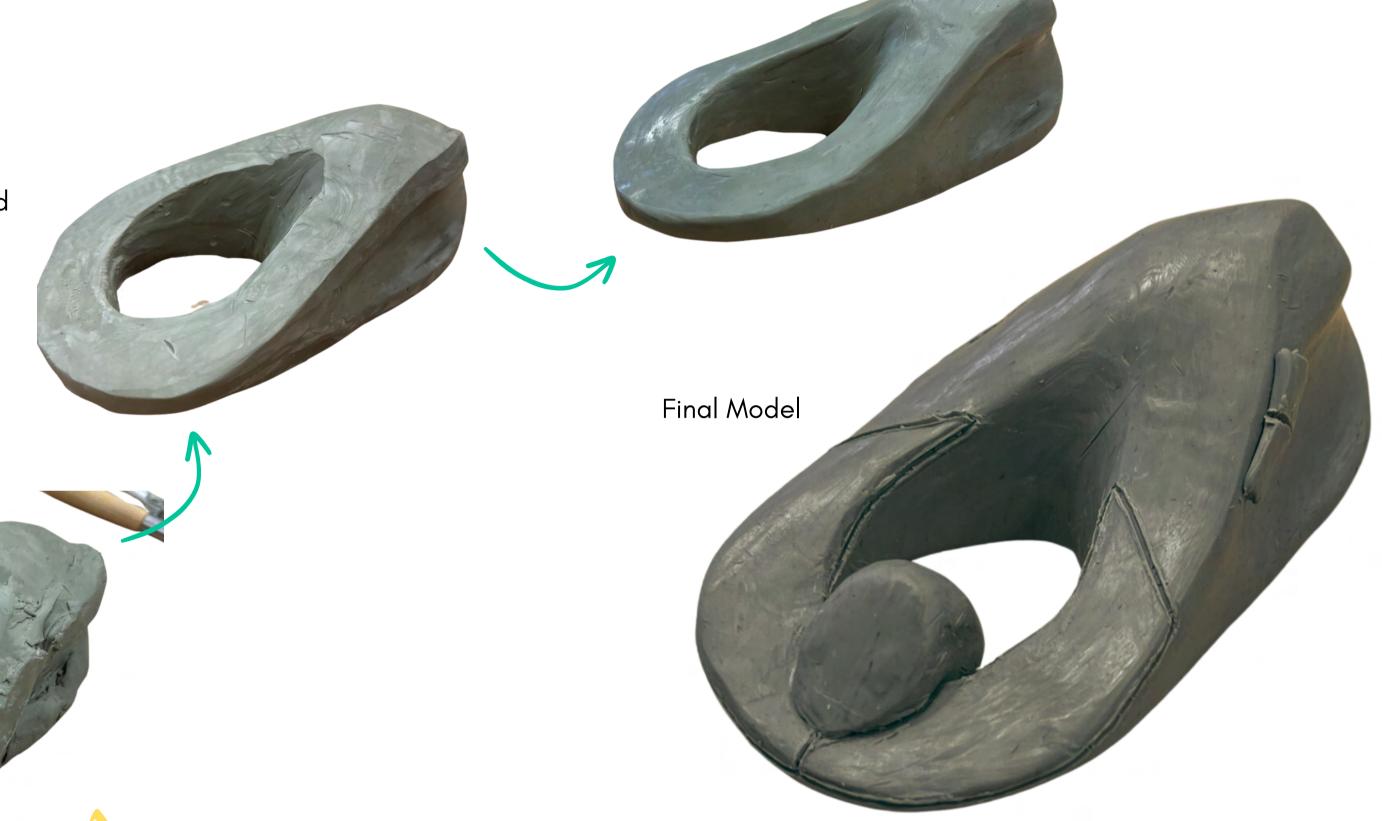




Exploration of colour.

Final Model Development MODELLING PROCESS

I formed the basic shape and spent a few days refining the model so that it is bump-free and smooth.



PEER FEEDBACK:

My teammates really enjoyed the aesthetic quality of my model and felt that it stuck with the values of our redefined house style. They found it comfortable and interesting to use.

Final Model Development FINAL MODEL PICTURES











Final Model Renders ORTHOGRAPHIC RENDERS







Final Model Renders REAL-LIFE RENDER



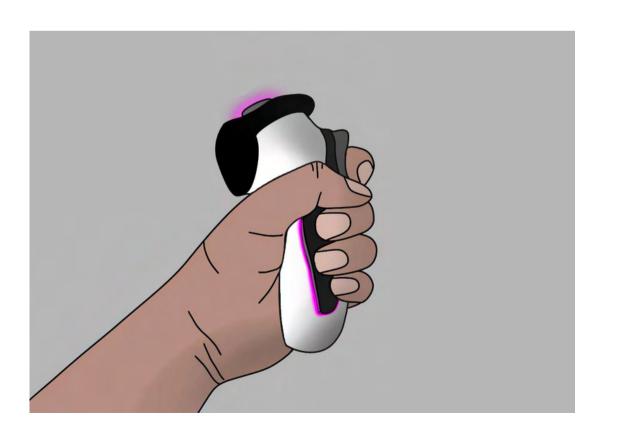
HOUSE OUTCOME













PRESENTATION



REFLECTION

What: I enjoyed the primary objective of working with a house style throughout the project and utilizing the style for the foundation and requirements of our models. The transition to the ideation phase was both individual and collective, so it was interesting to see the vast differences in our interpretations of the same design language.

So What: I really saw the power of working together in collaboration to create products that align with the company's essence and are fully usable and realistic designs. The clay modeling really helped bridge the gap between concept and reality and the idea of teamwork helped us leverage each other to our strengths.

Now What: Most of all this project encourages me to reflect on how to apply these principles I learned in the future of my projects. There was a balance of individual creativity and collective vision that I really liked about this project and want to continue working within the workplace. I feel that it made me a more competent, emphatic, and visionary designer that I want to bring forward.