

# 2023 PORTFOLIO

AKSHAY BHURKE

DJOT CANNABIS OIL DISPENSER  
NEBULA HOOKAH DESIGN  
LOGITECH DESKTOP MIC CONCEPT  
CLAW GAMING MOUSE  
POETIC PHONE CASE DNA



**djot**

## CANNABIS OIL DISPENSER

Client Project

A revamp of Djot's Smart Cannabis Oil Dispenser  
Prototype based on their new branding and  
existing engineering constraints.



## Requirements and Constraints

Cartridge loading - Cartridge loading should remain the same (In from bottom) due to engineering constraints.

Upright grip - Due to cartridge design, dispensing needs to be done with device held roughly perpendicular to ground, and the intended grip should allow this easily.

Leakage proof - Create solution for temporary sealing of nozzle.

Fidgetability - Create moments in the design that could contribute to fiddling or fidgeting with device when not in use.

Design should pair well with new branding - bold, eye-catching, youthful.



**The Original Cannabis Oil  
Dispenser Concept.**

A man is shown in profile, looking upwards with his mouth open, holding a small glass dropper with a black cap. The dropper is tilted, and a small amount of golden liquid is being dispensed into his mouth. The background is dark and out of focus, with a single bright circular light source visible. The overall mood is calm and focused.

## The Product

The Djot Cannabis Oil Dispenser was made to not only provide an easier and safer way to ingest cannabis other than smoking/vaping - but also provide a method to add it to your drink of choice via a measured dose of cannabis oil.

A proprietary cartridge full of a particular flavour, brand, and strain of cannabis oil can be inserted into the device, and the device itself can be used to customize and even save dose sizes for exactly the effect the user is seeking.

The image shows three 3D printed grey ergonomic device prototypes on a table covered with design sketches. The sketches include various views of the device, such as top, side, and perspective views, along with handwritten notes and annotations. One sketch on the right has the text "MIRRORED CUTOUT SO IT CAN STAND BY ITSELF." The prototypes are arranged in a row, with the tallest one on the left and the shortest one on the right. The background is a light-colored surface with several sheets of paper containing technical drawings and sketches.

## Concept Development and Ergonomics Study

After a couple of rounds of sketches, foam core shapes were used to understand the best regions for button placements. A few directions were further 3D Printed to understand the most comfortable grip styles for both right handed users as well as left handed users - allowing us to understand which interface elements and placements worked, and which ones didn't.



**Slanted Top -**  
Primary Interface - Wheel on slanted top surface with click for selection. Power button on top.  
Diagonally opposite cut on the bottom edge to pull out cartridge.

Cons - Unstable upright stance without cartridge.



**Slider -**  
Primary Interface - Slider on side with click for selection. Power button on opposite side.  
Middle Section Cutaway for cartridge access.

Cons - Awkward stance without cartridge inserted.



**Side Wheel -**  
Primary Interface - Wheel on slanted side with click for selection. Power button on front.  
Middle Section Cutaway for cartridge access.

Cons - Awkward stance without cartridge inserted.

## The Directions



### Final Approved Concept

The final design approved by the client was a culmination of a lot of great ideas put together into one, refined and tweaked just enough to be able to create one solid solution, functionally and aesthetically.

Presenting the Djot Dispenser.

**Faceted Design Language** - A result of exploration of textures that shouldn't be too complex or 'iconic' but should be able to live harmoniously with different texture bands.



## Fidgetability

The Dispenser is chock-full of moments and features that provide fidget points - running your finger over the faceted edges, the slider button, the swappable grip bands, the cartridge slide cover, etc.

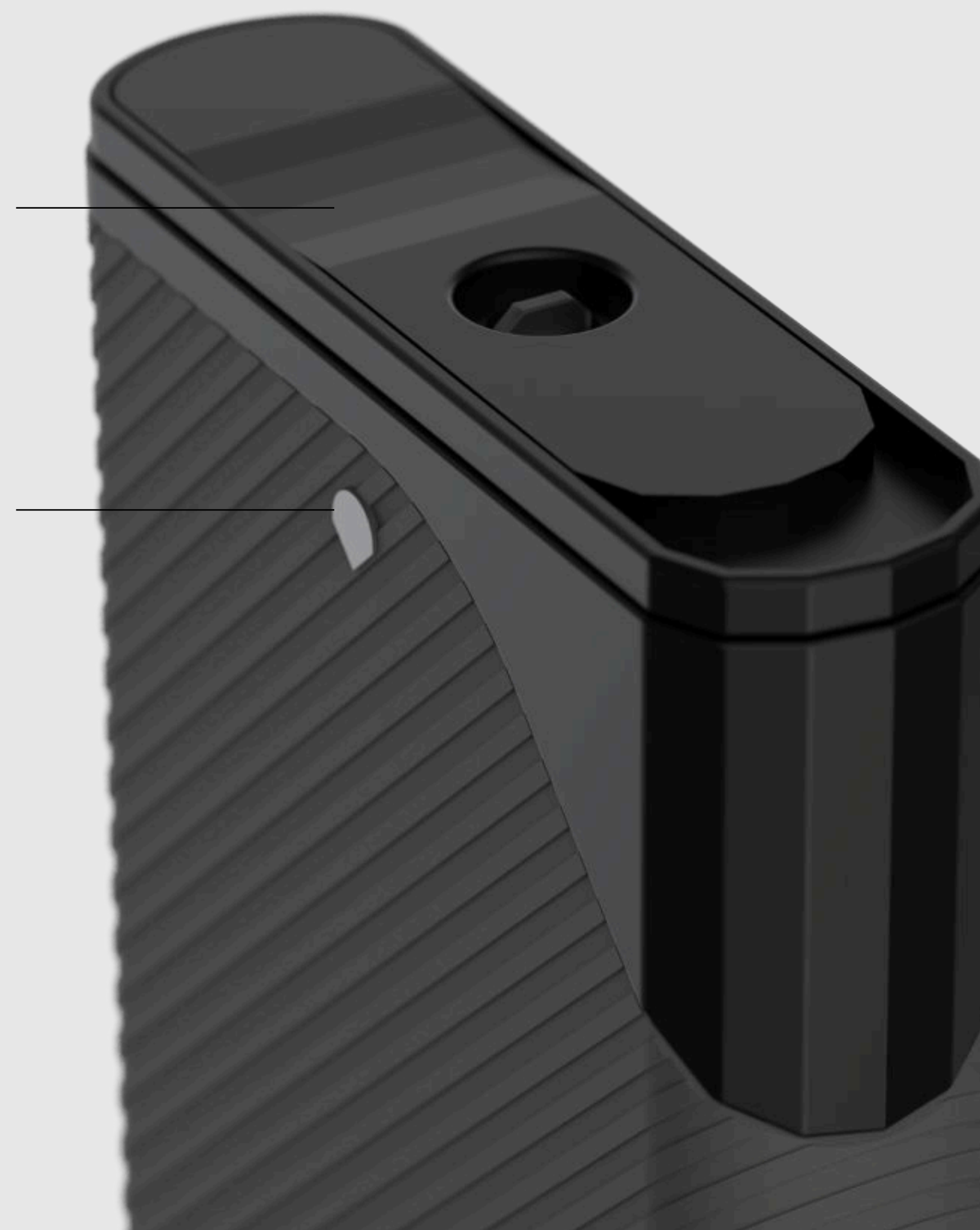


A small depression in the slider mechanism is present for some grip, and stays in line with the faceted design language.

**Djot Drop Indicator** - The icon is present in line with the nozzle at the bottom - allowing the user to be confident that their dispensing will go exactly where they want it to while holding the device upright.

## Leak Proofing

Each cartridge has a built-in slider mechanism that helps seal the valve when not in use. The slider itself plays into the fidget factor tremendously!



**Light-up logo** - Provides a very apparent branding cue, as well as an indicator light that can define various functions (i.e. pulsing could mean it's ready for dispensing, static light on could simply mean the device is on, etc)

**Power/Dispense Button** - The Djot logo provides a tactile cue of the button, and the function of dispensing using a button other than the primary slider interface provides a hierarchy of importance as compared to simply going through the menu.



## Brand Congruency

The Design features a few branding cues, some in your face, and some discreet. The overall look feels tailor-made for Djot - It's bold, young, and lively, just like the branding.



Back

4 ml

5 ml

12 doses left of **6 ml**

7 ml

8 ml

Amount to dispense?

NEBULA

## HOOKAH CONCEPT

Personal Project

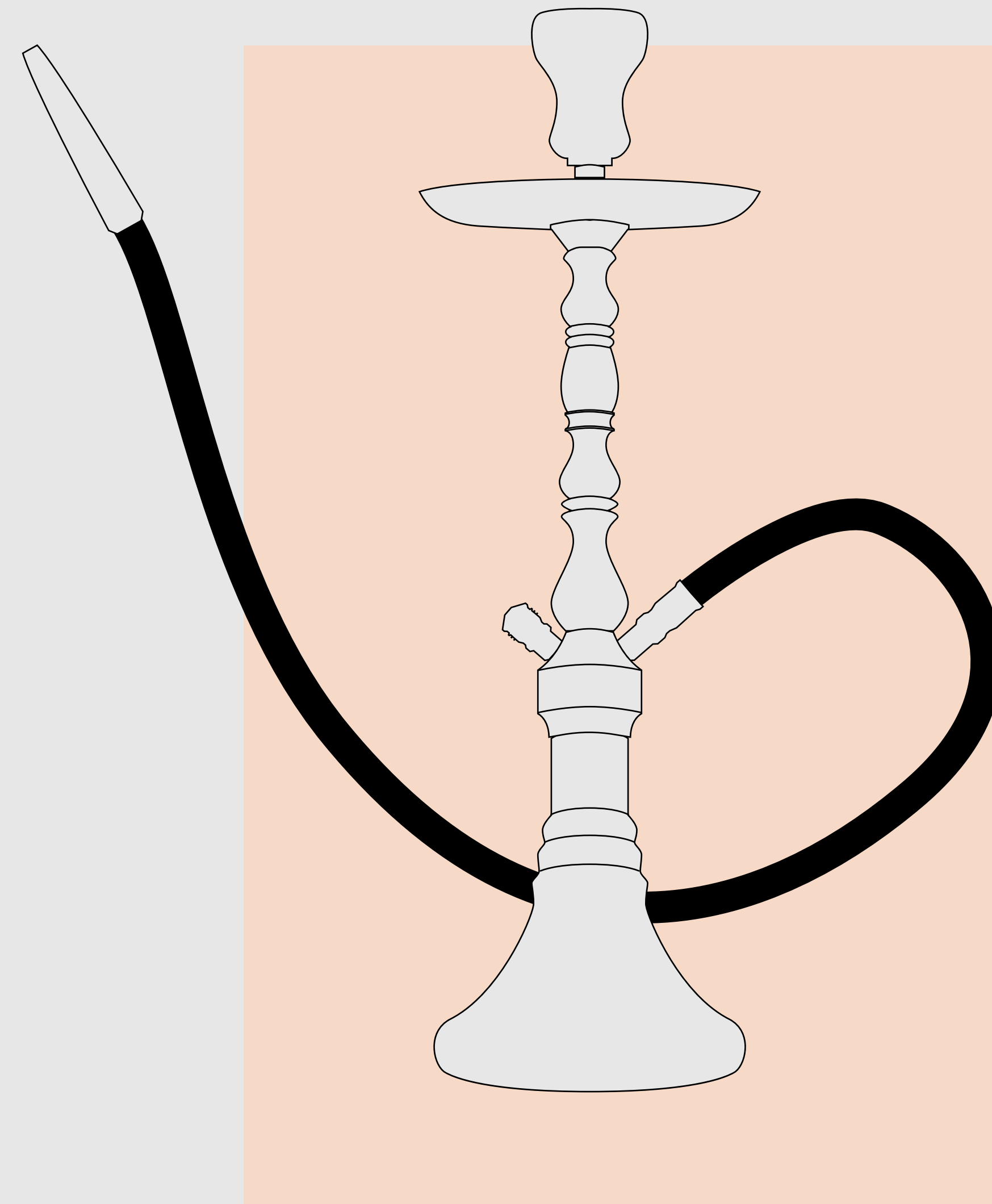
A modern take on the Hookah,  
with an emphasis on it's sharing  
functionality.



## What is a Hookah?

The activity of smoking from a Hookah has been around for centuries, used by Emperors all the way to their current use in modern lounges.

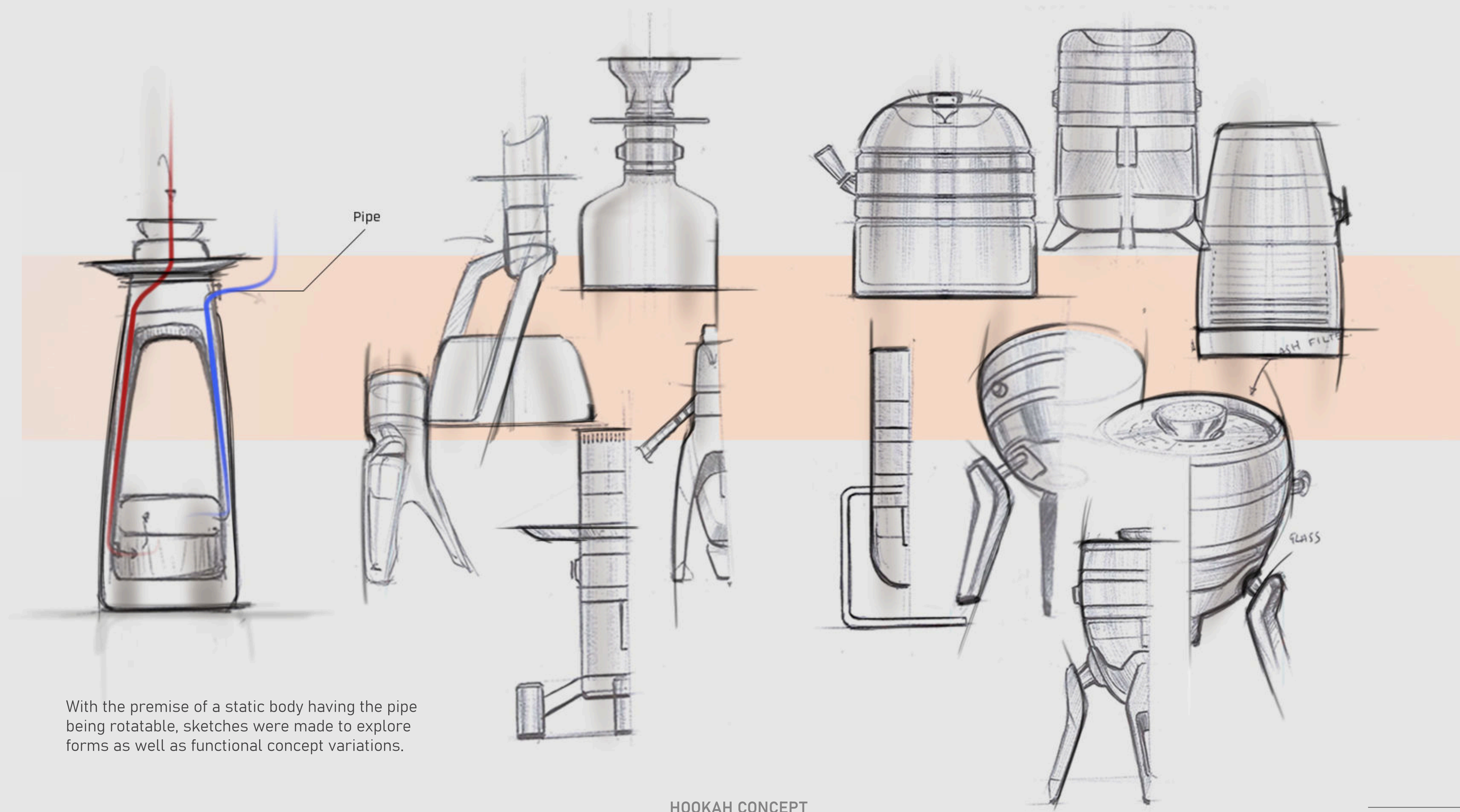
A 'Chillum' of flavoured molasses is heated by coal, to emit smoke. The smoke passes through a base of water which filters out larger particulates from the smoke before being inhaled by the smoker.



A hookah with a black body and gold accents sits on a wooden table in an outdoor setting. The hookah has a long, flexible hose that is tangled around its own body. The background shows a grassy area with trees and a building, suggesting a park or outdoor cafe. The lighting is warm, indicating late afternoon or early morning.

## Problem Statement

Passing a standard Hookah pipe around ends up with the pipe tangling around the body of the Hookah itself.



With the premise of a static body having the pipe being rotatable, sketches were made to explore forms as well as functional concept variations.

HOOKAH CONCEPT



## The Final Concept

Nebula is a sleek, modern progression of the classic hookah architecture, bringing forth an evolution of form as well as functionality.





## Functionality

The Hookah concept features a segment of the body that can swivel independently, allowing the pipe to swing around as required.

נִבְיָוֹת

נִבְיָוֹת

Definition - A cloud of gas in outer space.

Comes from the Latin word **nebula**, meaning "mist, vapor, fog, smoke, exhalation."



# המלטז בקשה

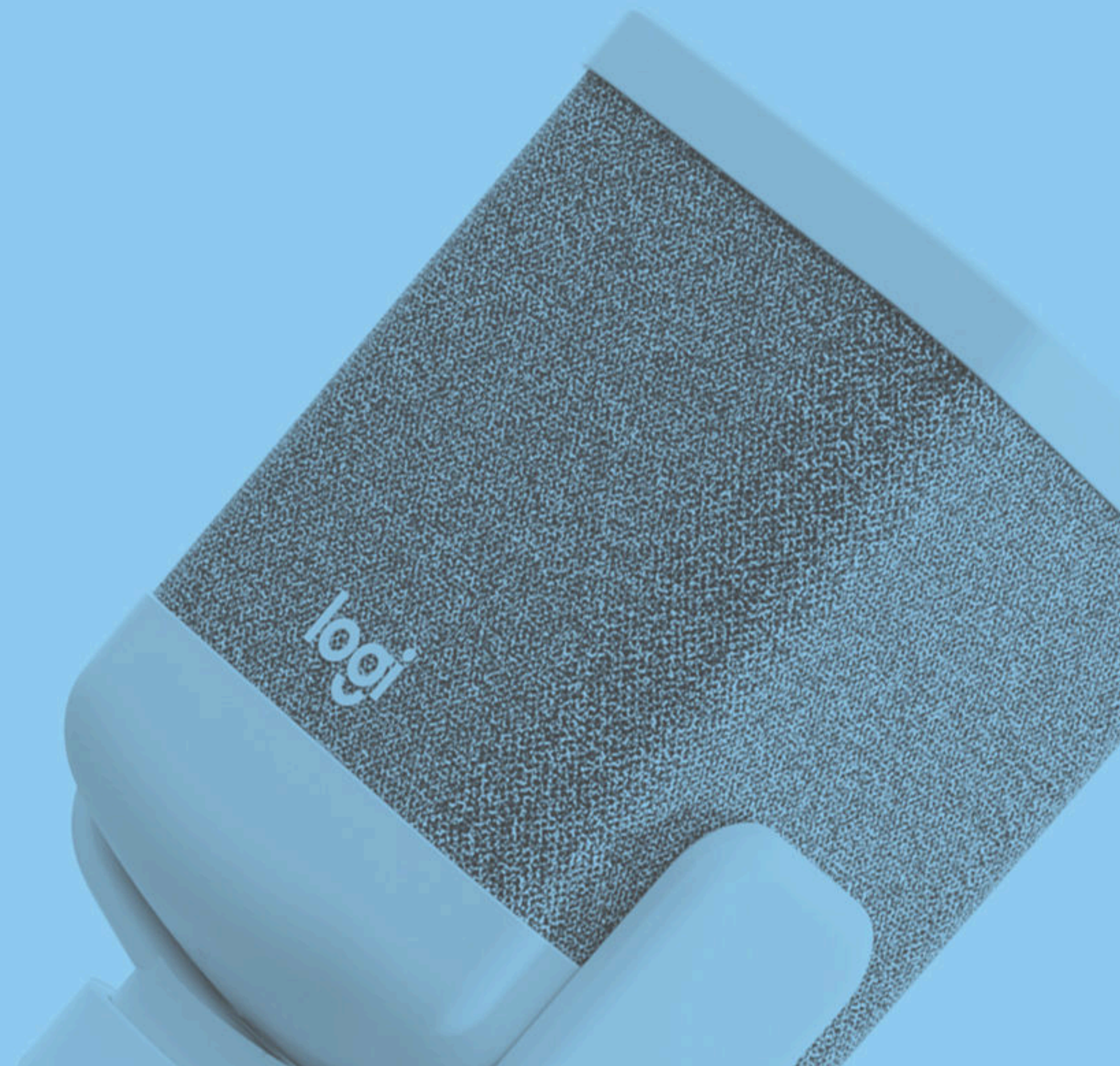


logi

## DESKTOP MIC CONCEPT

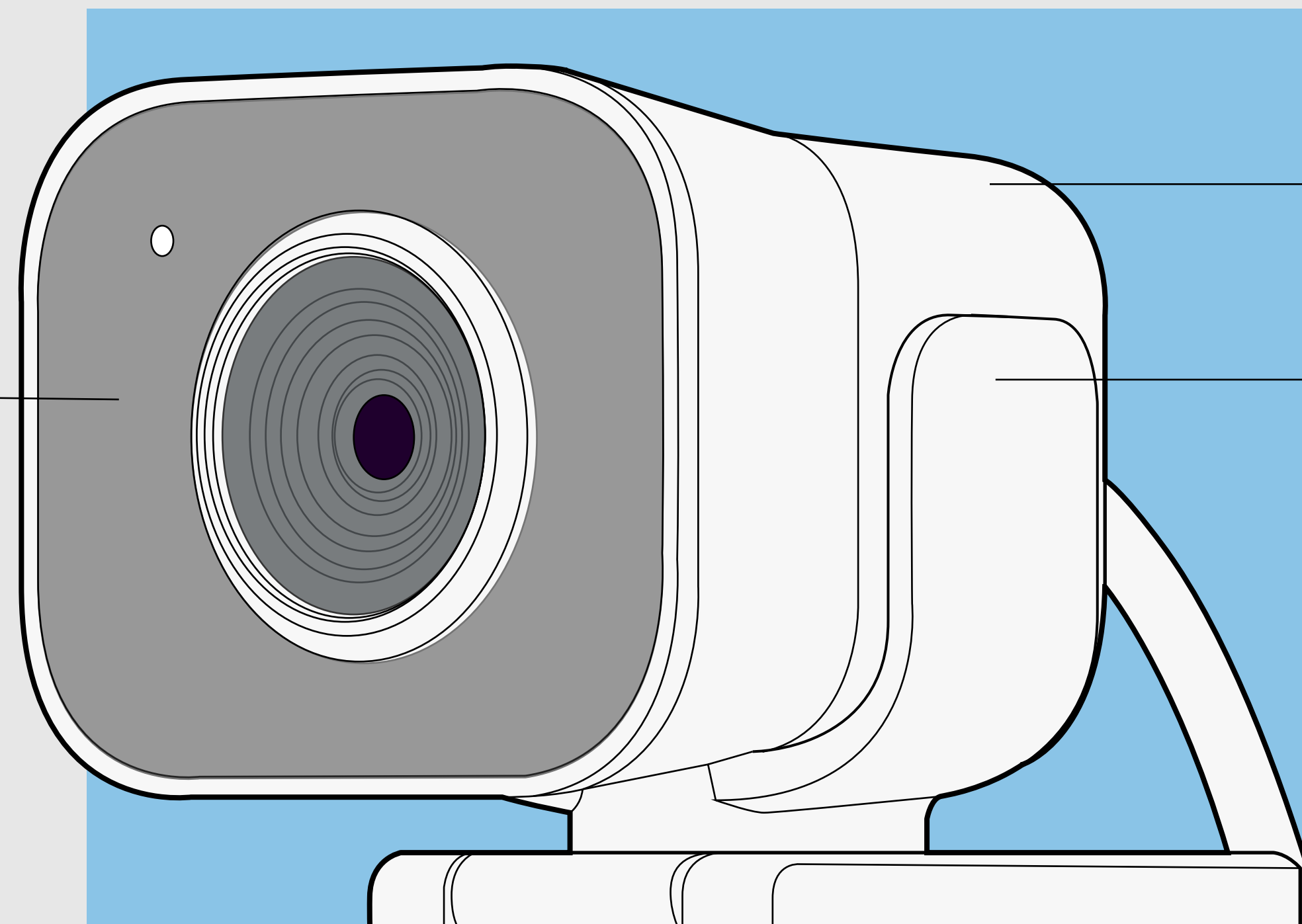
Personal Project

A conceptual design inspired by the existing Logitech StreamCam's design language and ease of use.



LOGITECH STREAMCAM  
DESIGN LANGUAGE

Black and white  
weaved fabric

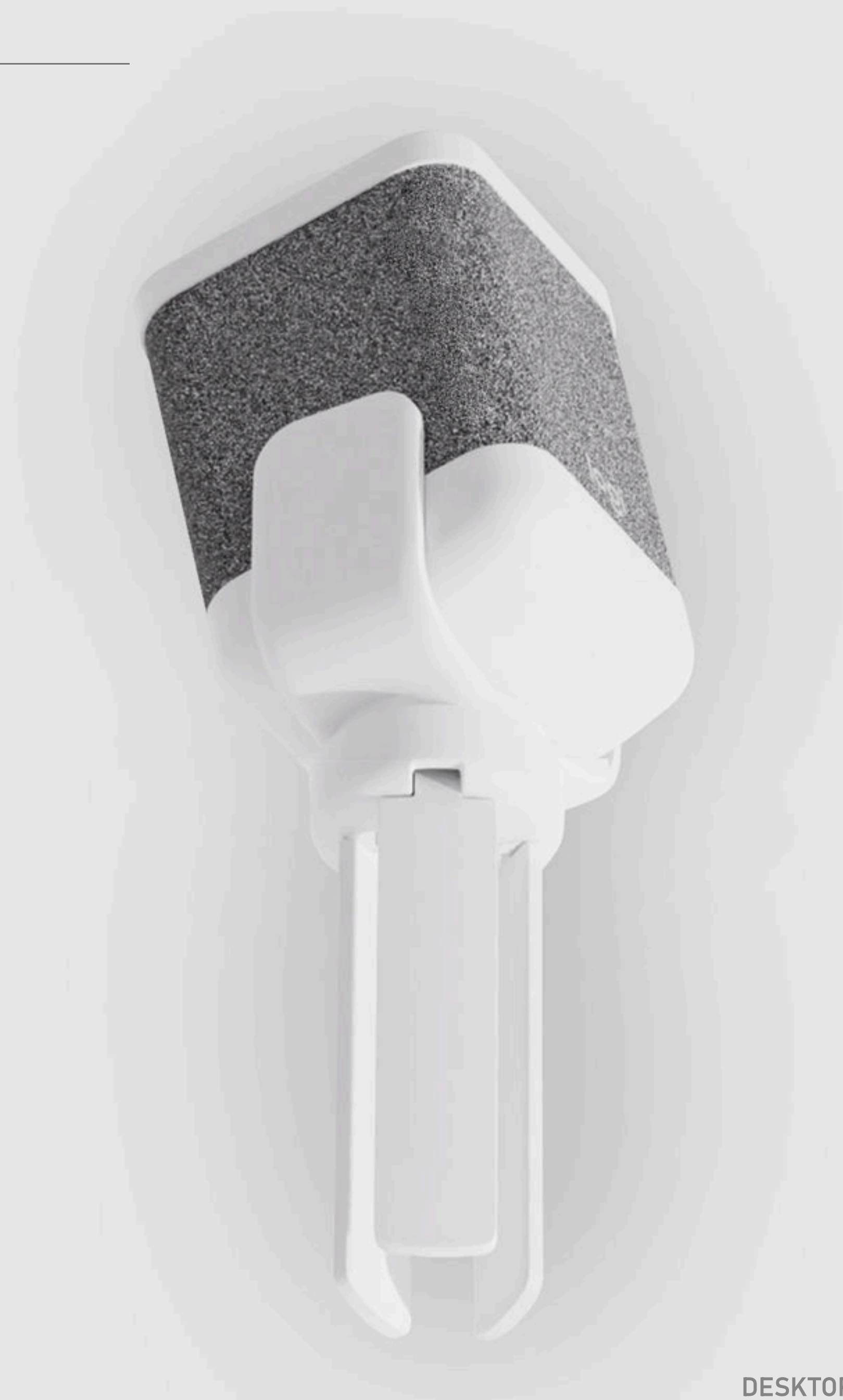


White plastic body  
with smooth edges and corners

U-shaped Clip



The Logitech StreamMic follows the design principle of the StreamCam - it's form is inspired by the classic microphone icon.



## Form and Function

The StreamMic stays true to the StreamCam aesthetic - utilizing soft, inviting fabric and a monochrome body. The Mic comes with a tripod with pivoting legs, while the mic itself can also tilt forward and back.





## **Modularity**

The StreamMic's provided tripod stand can be unscrewed, enabling the StreamMic to be attached to a standard mic arm.



DESKTOP MIC PROJECT



Just like the StreamCam,  
the StreamMic comes in Black and White.

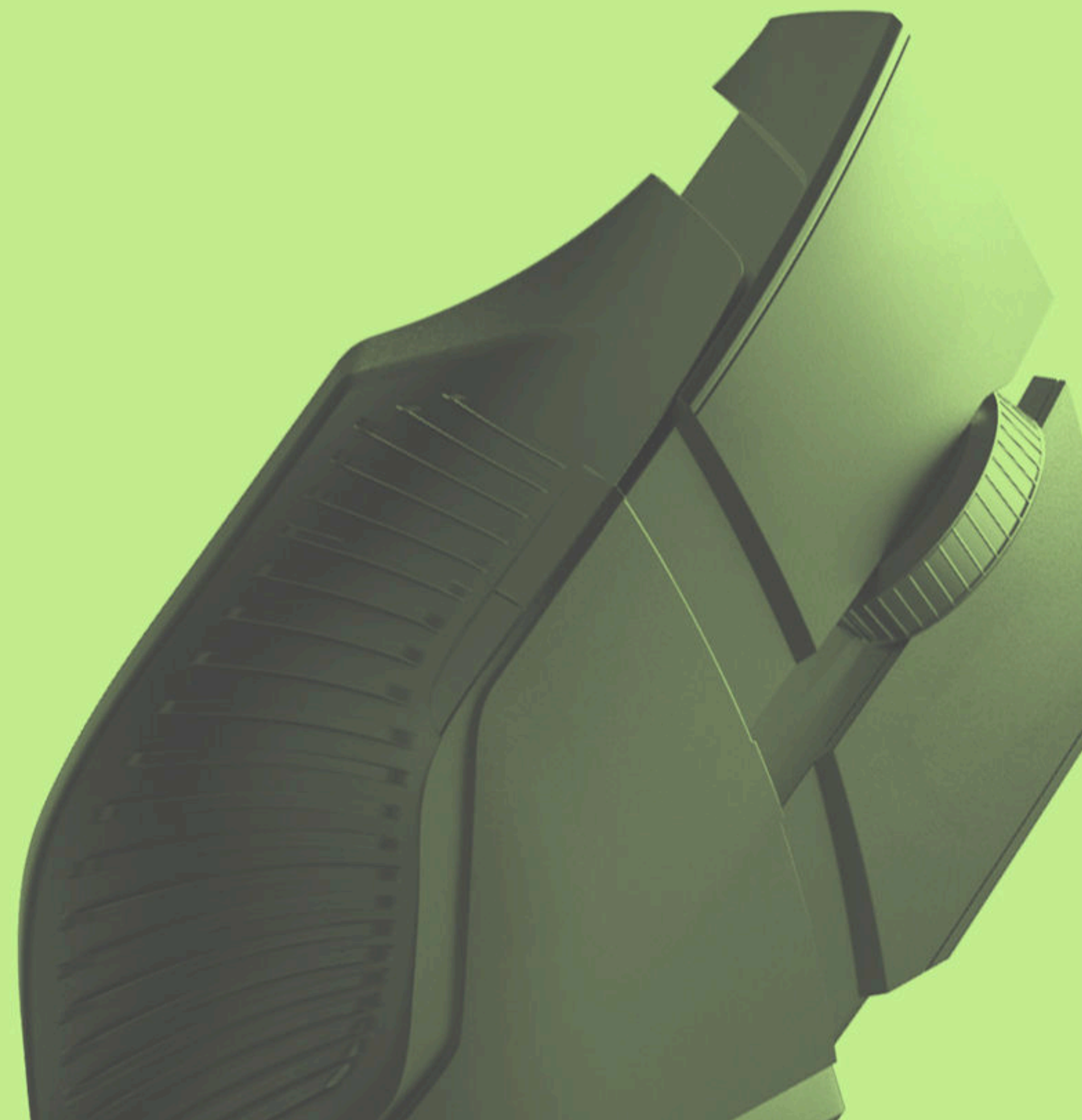


# Claw.

## GAMING MOUSE CONCEPT

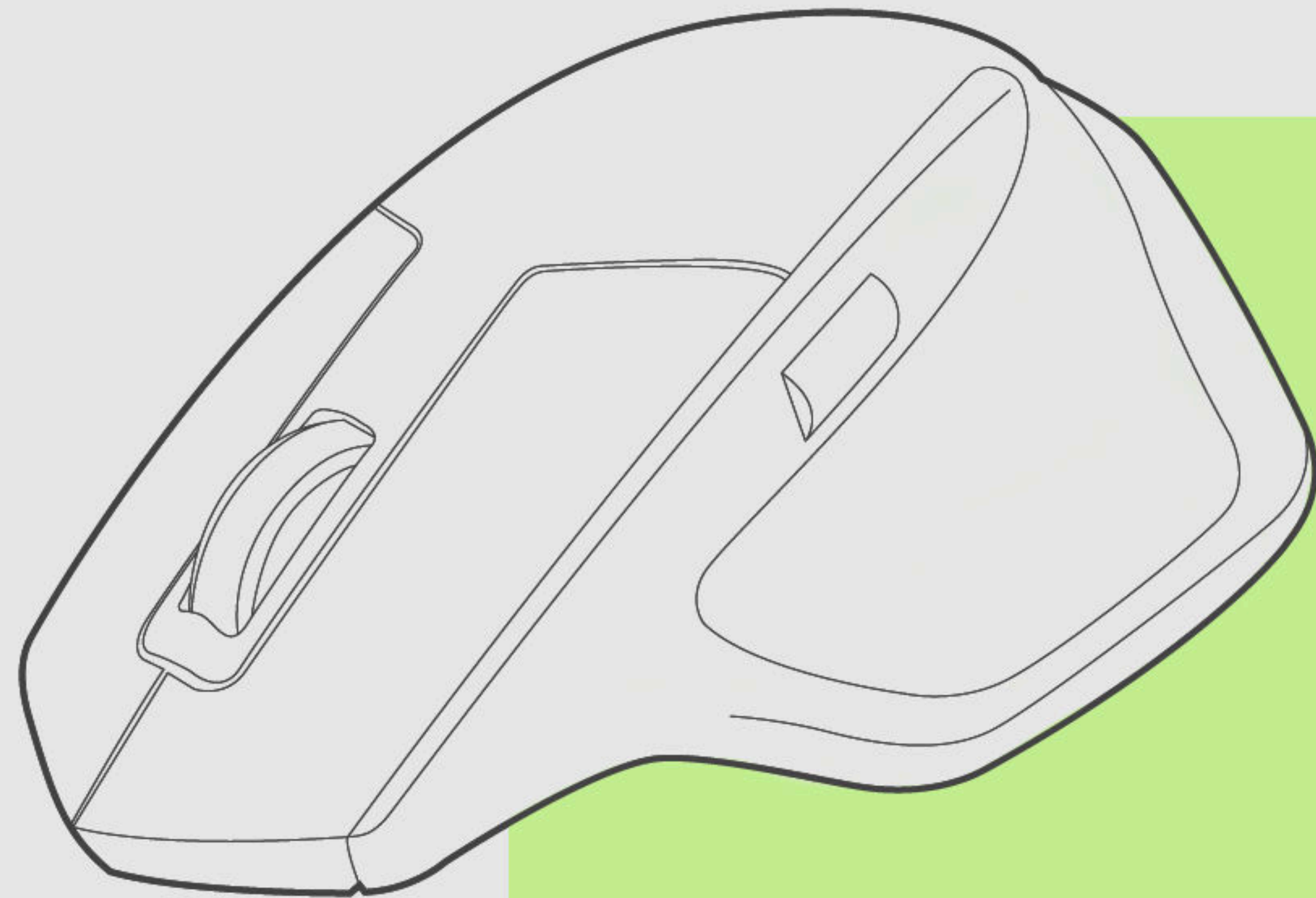
Personal Project

A Gaming Mouse allowing customization  
for different hand sizes and grip styles.



## Problem Statement

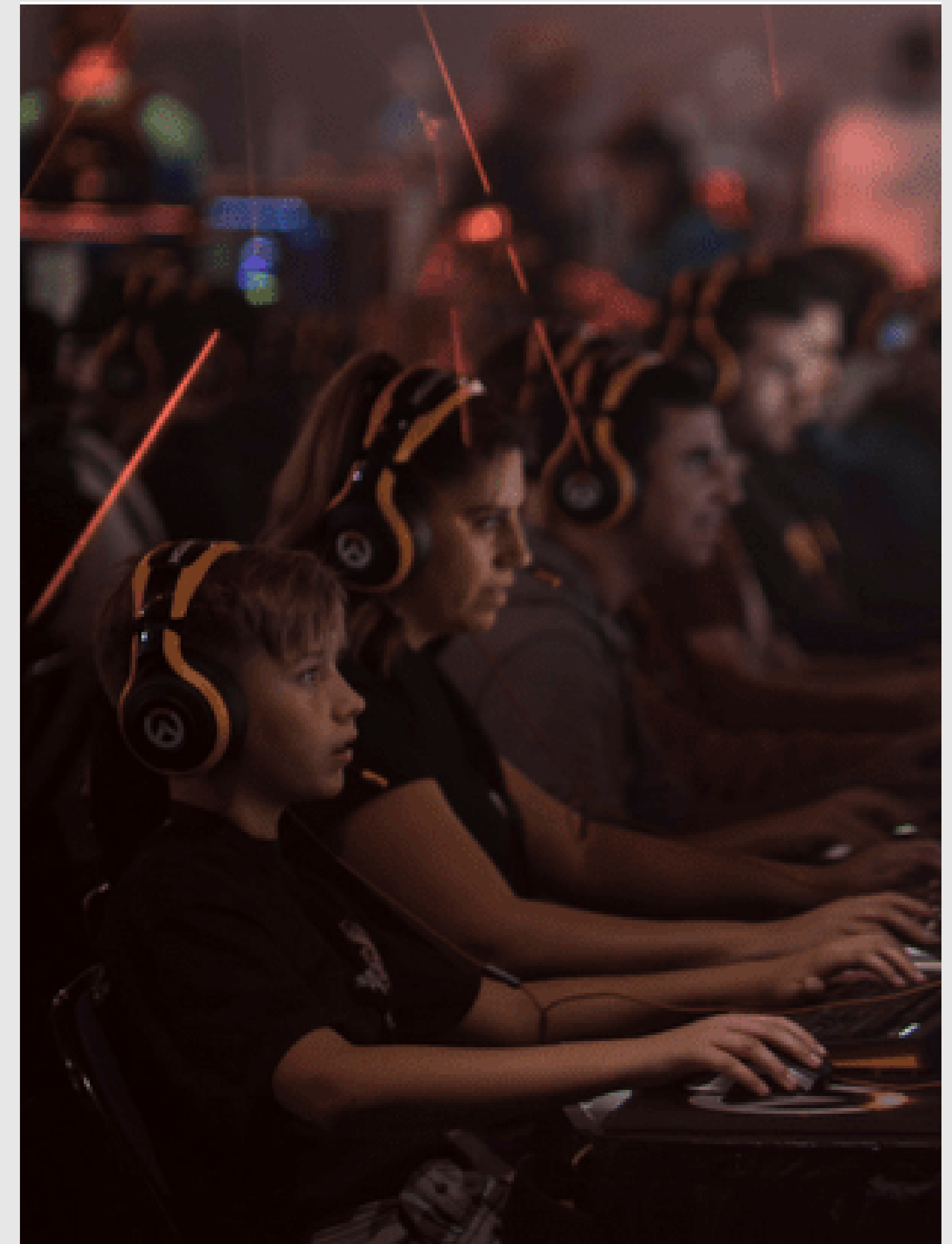
To create a Gaming mouse that provides comfort and customizability to a wider range of hand sizes, keeping in mind the various grip types that are used while maintaining focus on ergonomics and functionality.

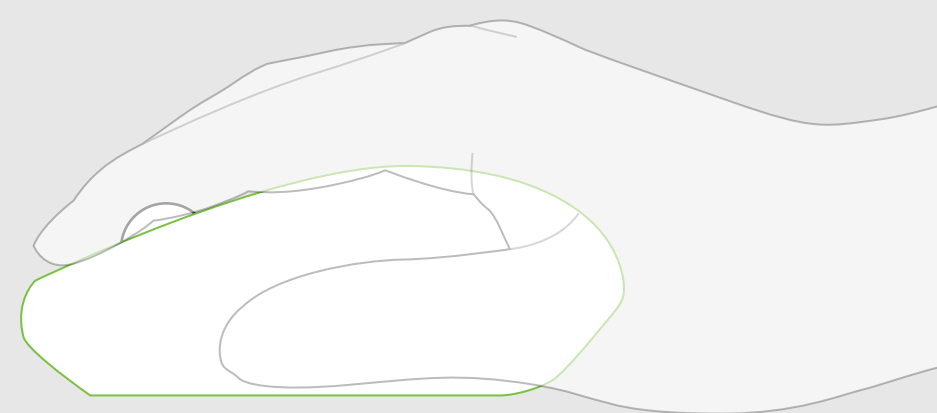


## Target Audience

The gamer community puts personalisation at a very high priority. Each gamer has a unique style of play based on their comfort and different anthropometric measurements. This style generally even differs among games as well.

Customization generally takes the form of programmable extra buttons, swappable parts like thumbrests, and even small modular weights to make tiny changes in weight as per the user's comfort.





### **Palm Grip**

Palm and fingers rest on mouse

Probably most common grip style



### **Claw Grip**

Thumb-Ring-Pinky + base of Palm  
control the mouse movement

Only tips of index and middle finger  
rest on mouse buttons



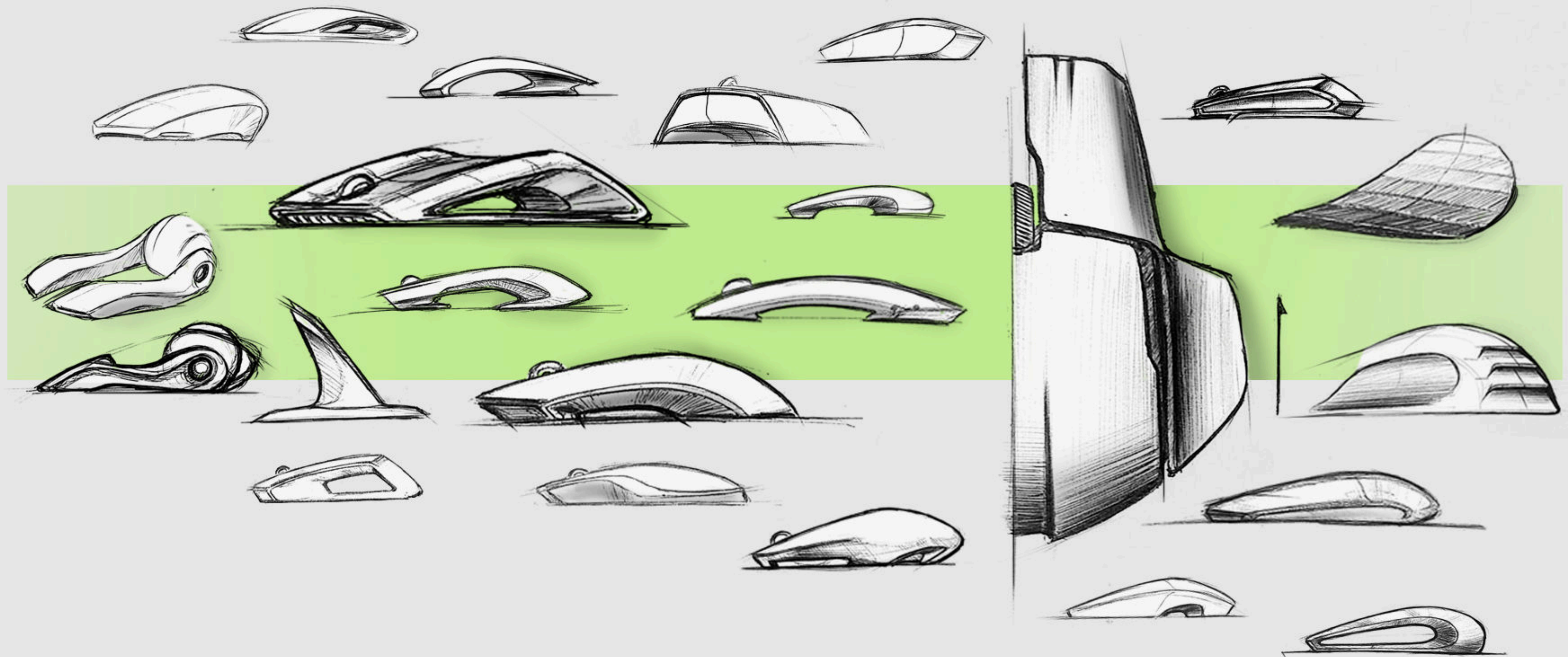
### **Fingertip Grip**

Only finger tips control the mouse  
movement

Generally used with mice that are  
small for the user's hand

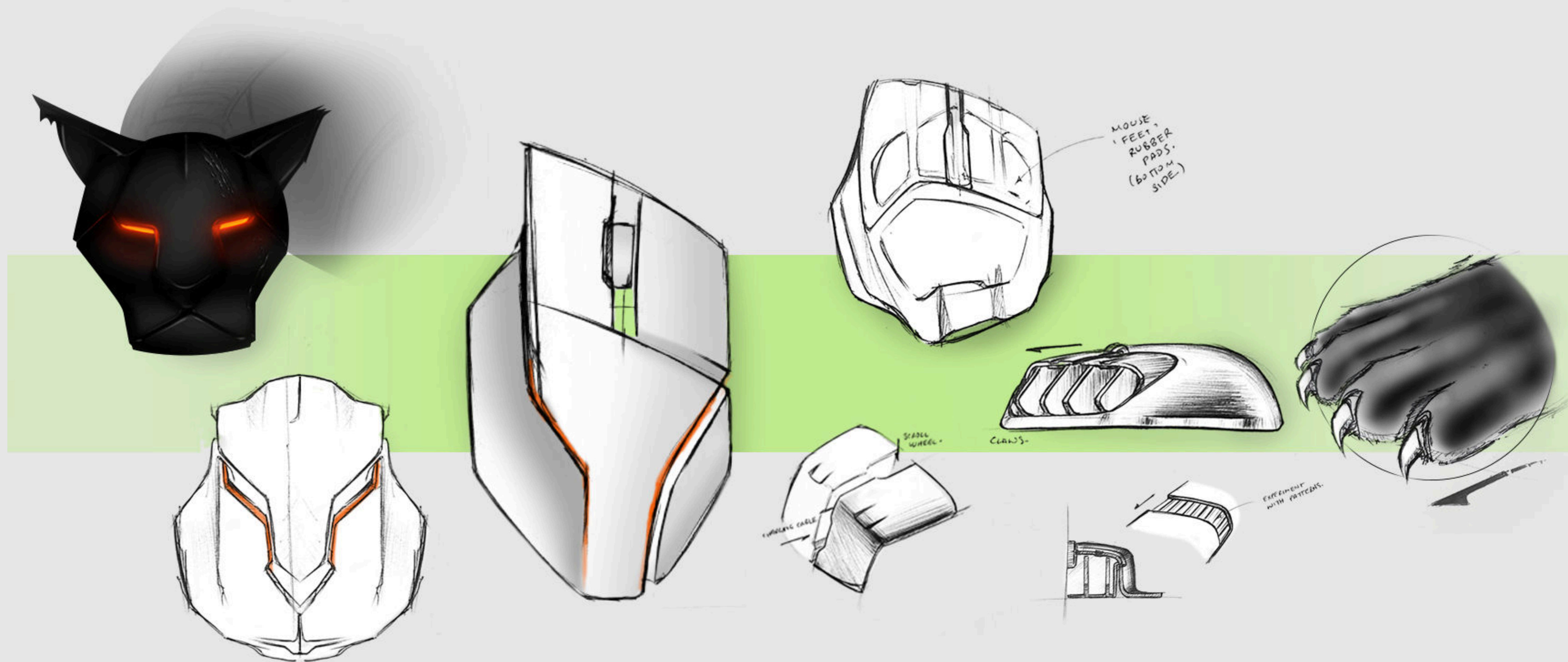
Despite the individual styles of each gamer, some styles have emerged popular and largely adopted. These are small changes in how the mouse is held and how each or both mouse buttons are pressed.





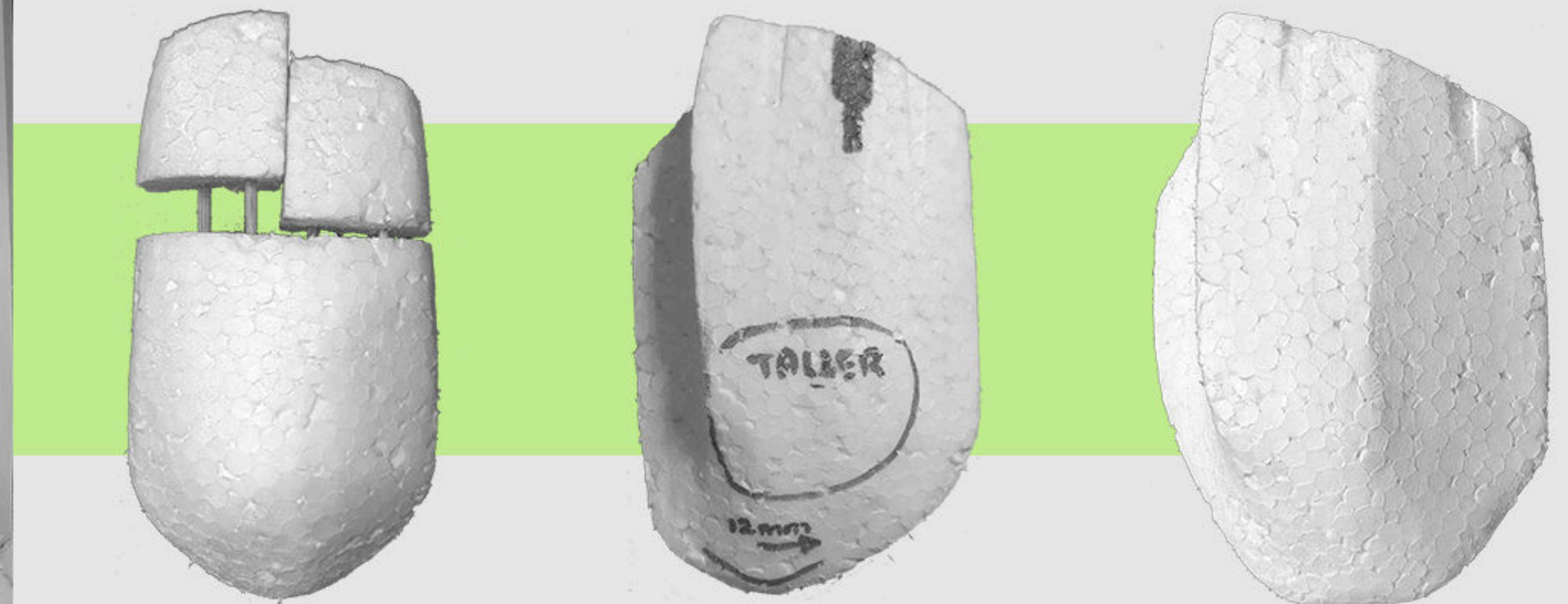
Initially ideated on forms and features to allow exploration without set constraints.

GAMING MOUSE CONCEPT



To be able to provide a solution that can fit smaller and larger hand/finger sizes, we'd need to be able to extend and retract the overall length of the mouse. This reminded me of the way cats can extend/retract their claws.

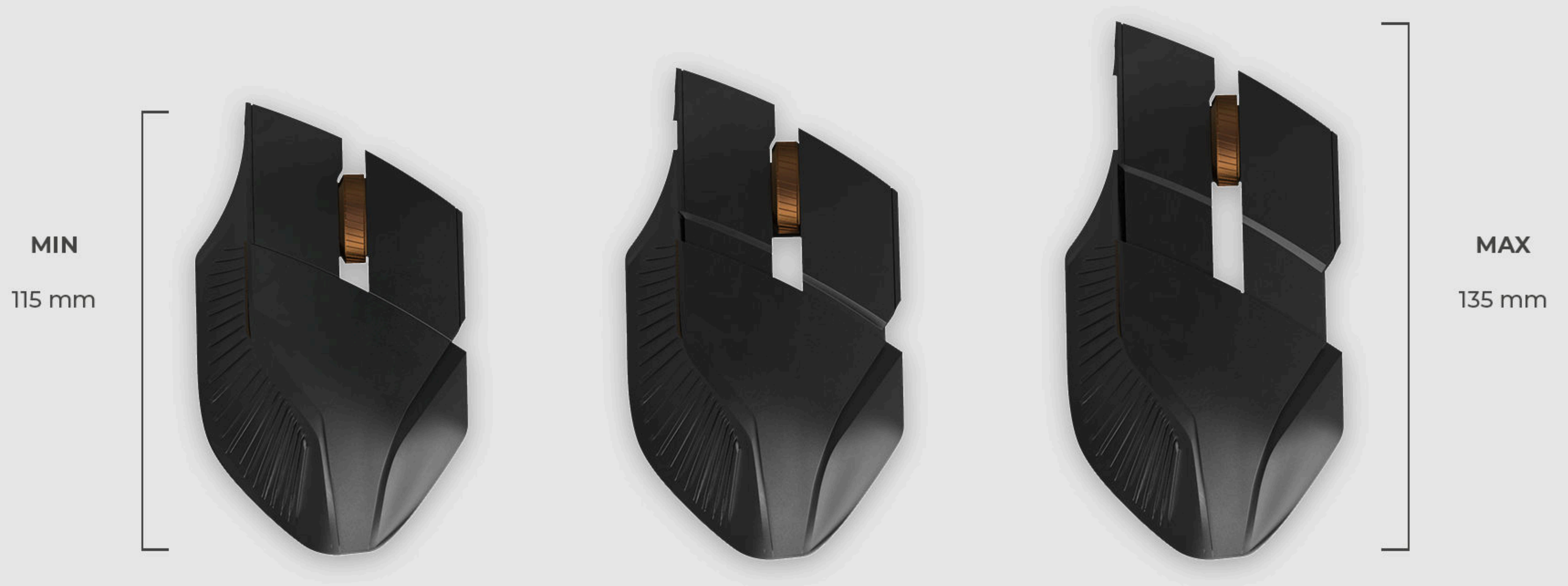
GAMING MOUSE CONCEPT



The first prototype was made to test the basic mechanism. The inference obtained from making it was that the split point between the body and the two mouse buttons must be flat to avoid abrupt steps/lack of curvature continuity when the buttons are extended.

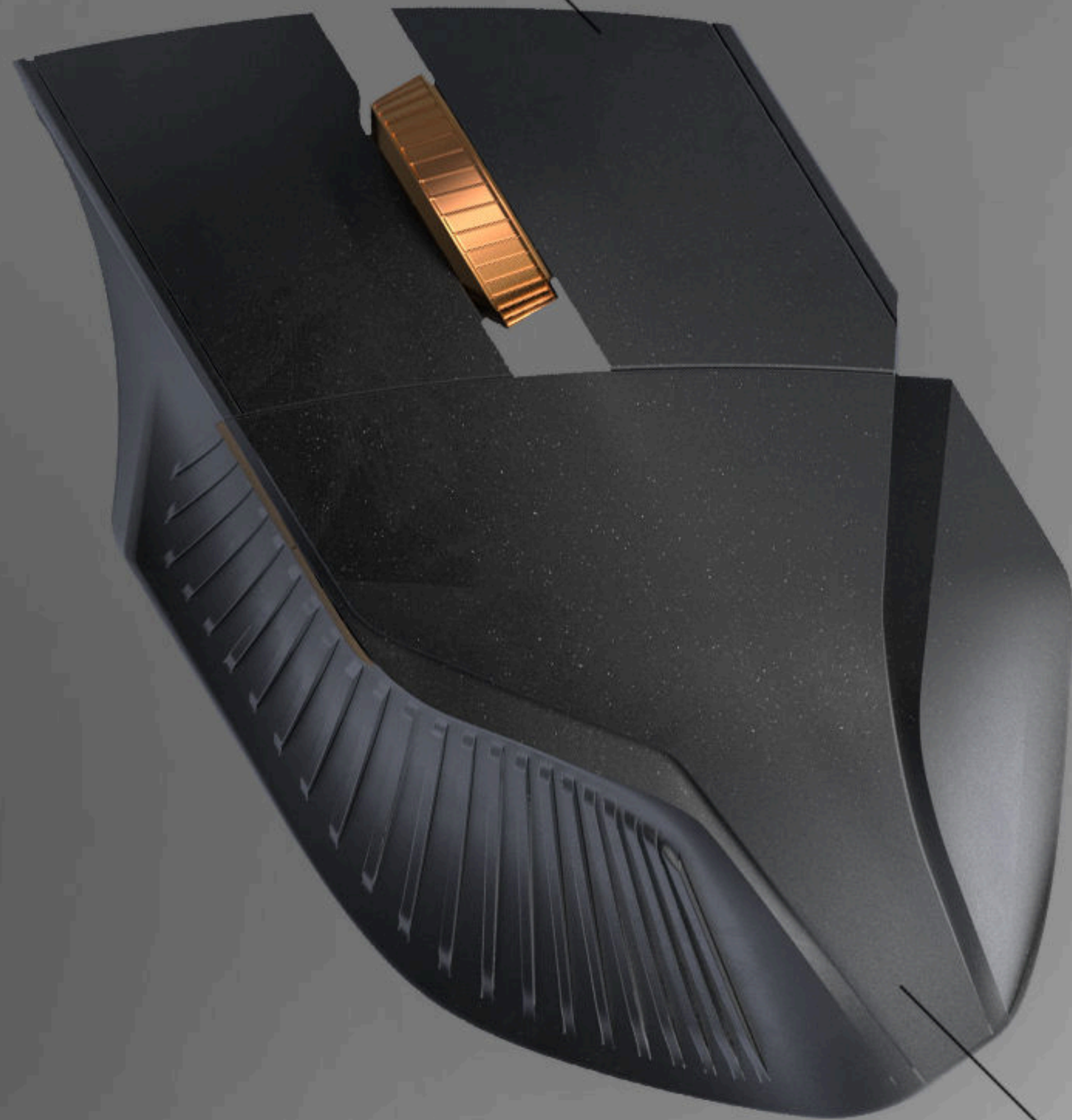
The second and third prototypes were for grip testing and dimensioning.





The mouse buttons can be extended and retracted independently of each other (A maximum of ~20 mm each), providing a new level of modifiability for comfort.


The extending claw of cats were the inspiration for the extending buttons



The pads on the underside of cat paws inspired the form and placement of the mouse's rubber skates



Cat's eyebrow to nose ridge was taken as inspiration for the palm rest

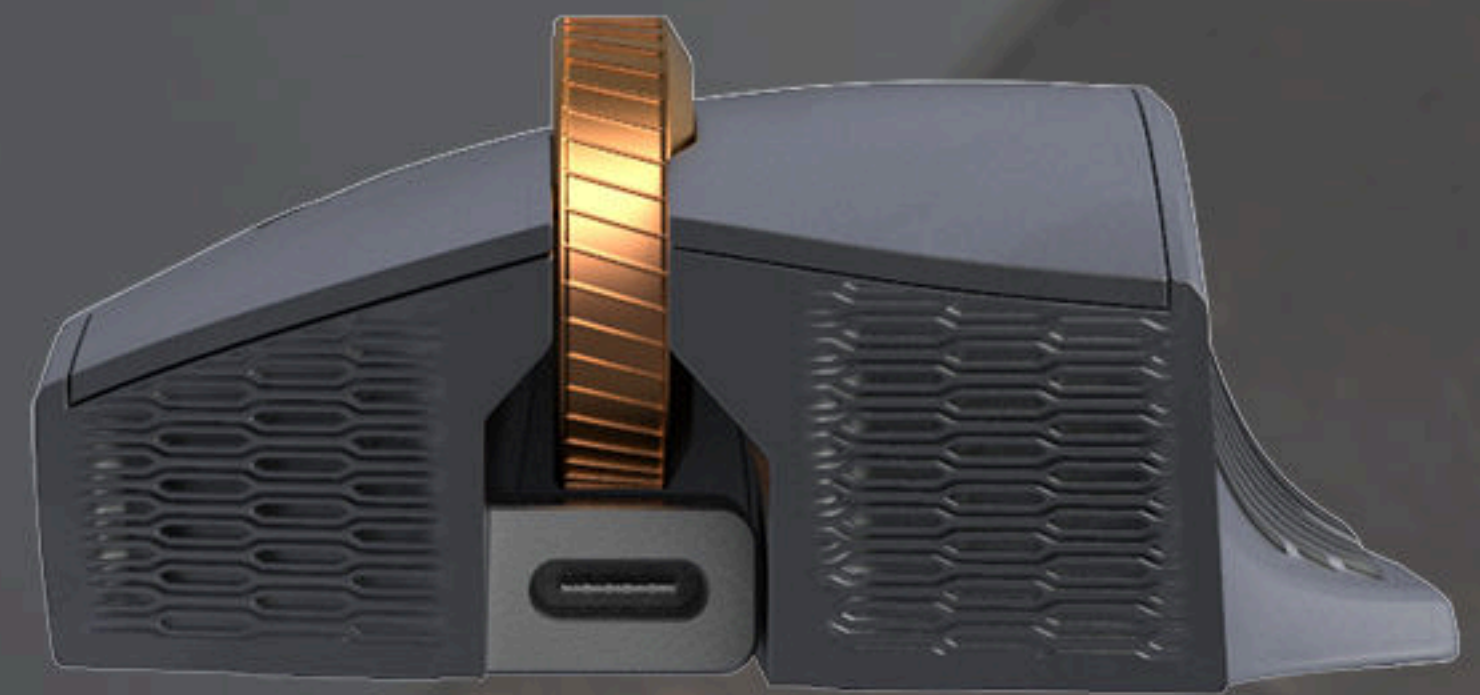
A close-up photograph of a dark, curved surface, likely a piece of machinery or a tool. The surface is characterized by a series of parallel, raised ridges that curve along its length. The lighting is dramatic, highlighting the texture and depth of the ridges against a dark background. The overall appearance is sleek and industrial.

The ridges provide a surface for the thumb to rest on and also provide grip.



Bottom of mouse contains power button, light sensor, and buttons for the extension/retraction of each mouse button.





Mouse can be charged while in use with the help of a Type-C port located just underneath the scroll wheel.



# POETIC

## PHONE CASES DNA

Client Project

Redesigning Poetic's entire line of Phone Cases to adapt to aesthetic trends.

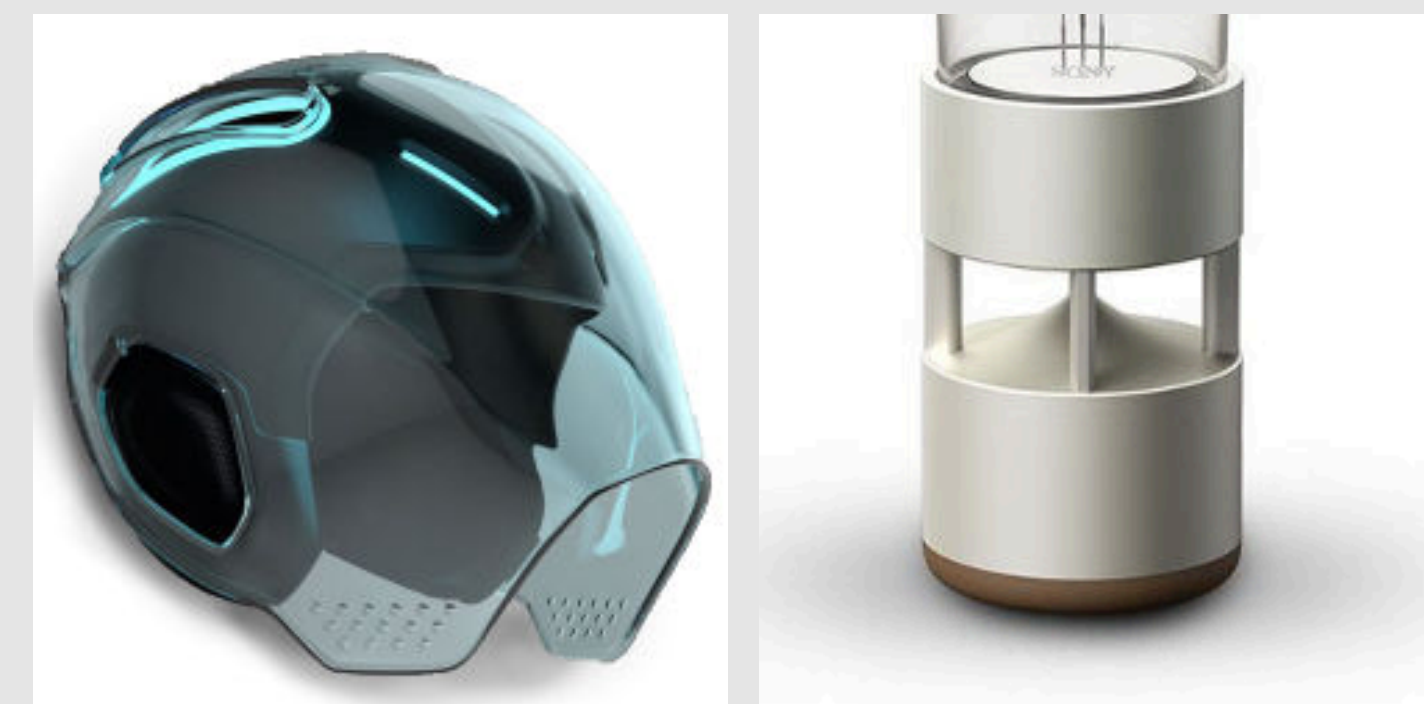
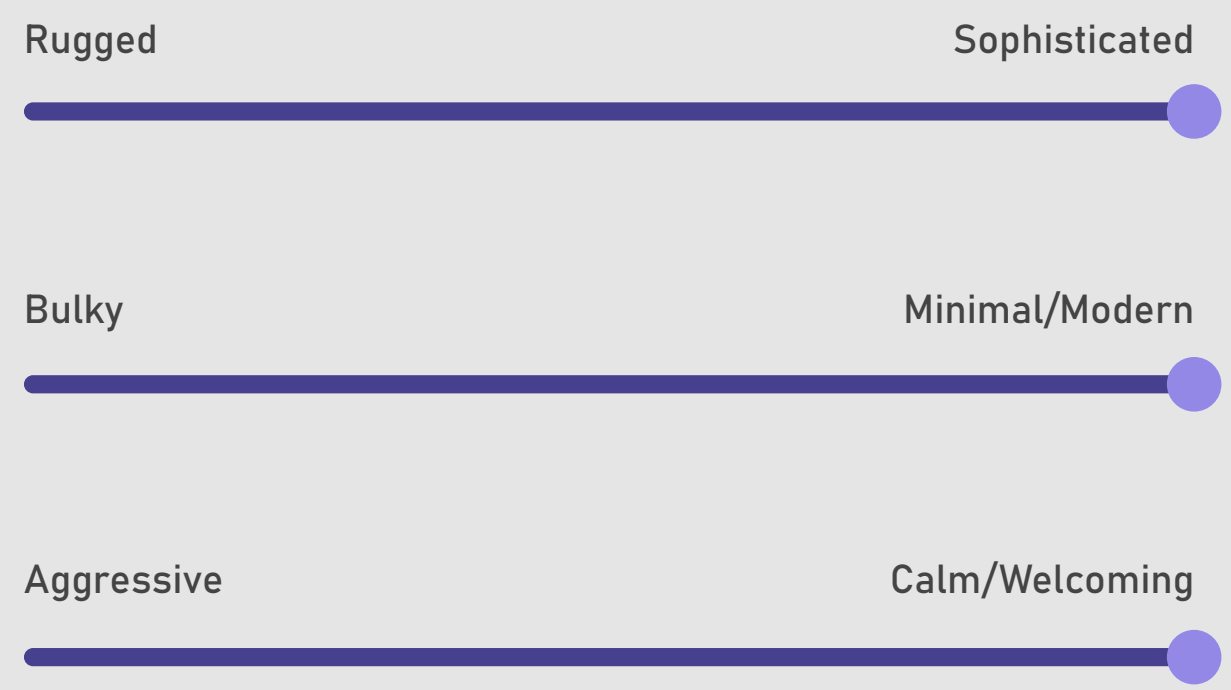


## Problem Statement

Poetic Cases, a firm based in San Francisco, California, was looking for a facelift of their lineup of phone cases.

They already had fairly successful cases in the market, but wanted a look that would appeal as a more sophisticated range of cases rather than a bulky, rugged aesthetic like the older cases possessed.



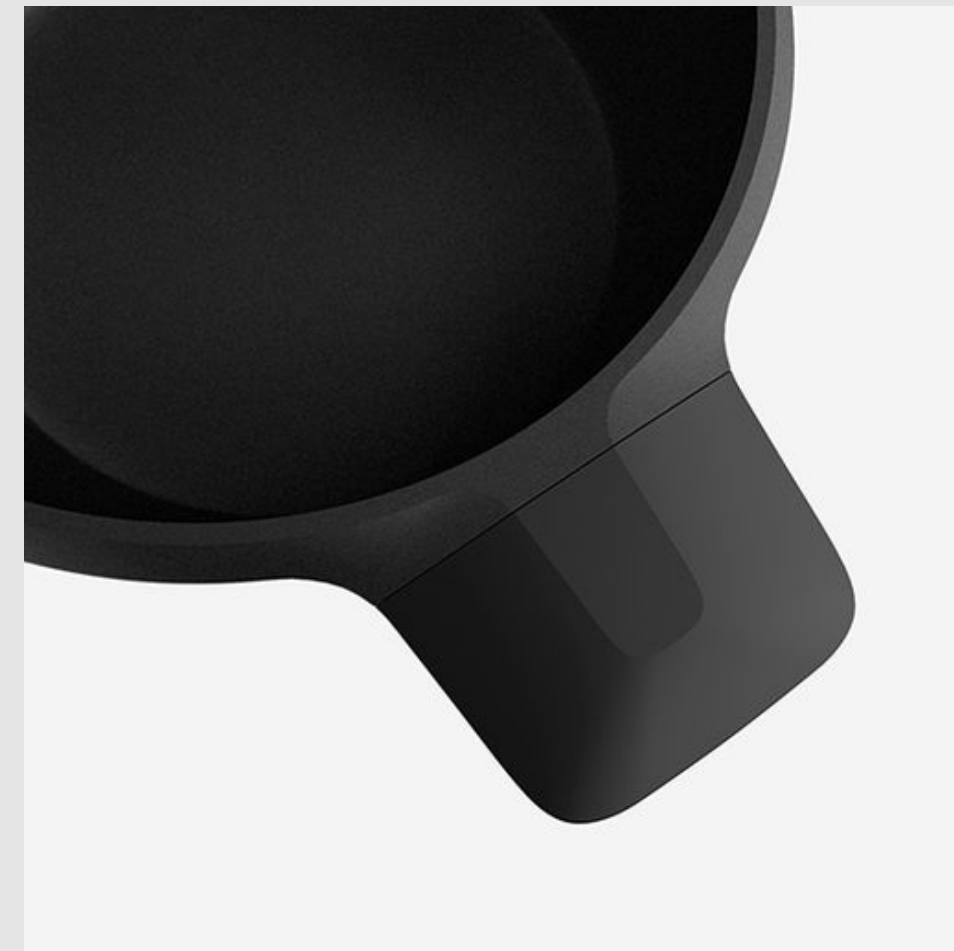


## Old X-Form

## New Y-Form

Without losing the original visual and functional protection of the previous design language, called 'X-Form', we wanted to see certain parameters evolve to keep up with the changing trends.

This brought us to developing Y-Form, the new iteration in Poetic's look and feel.



Variable Chamfers



Clarity



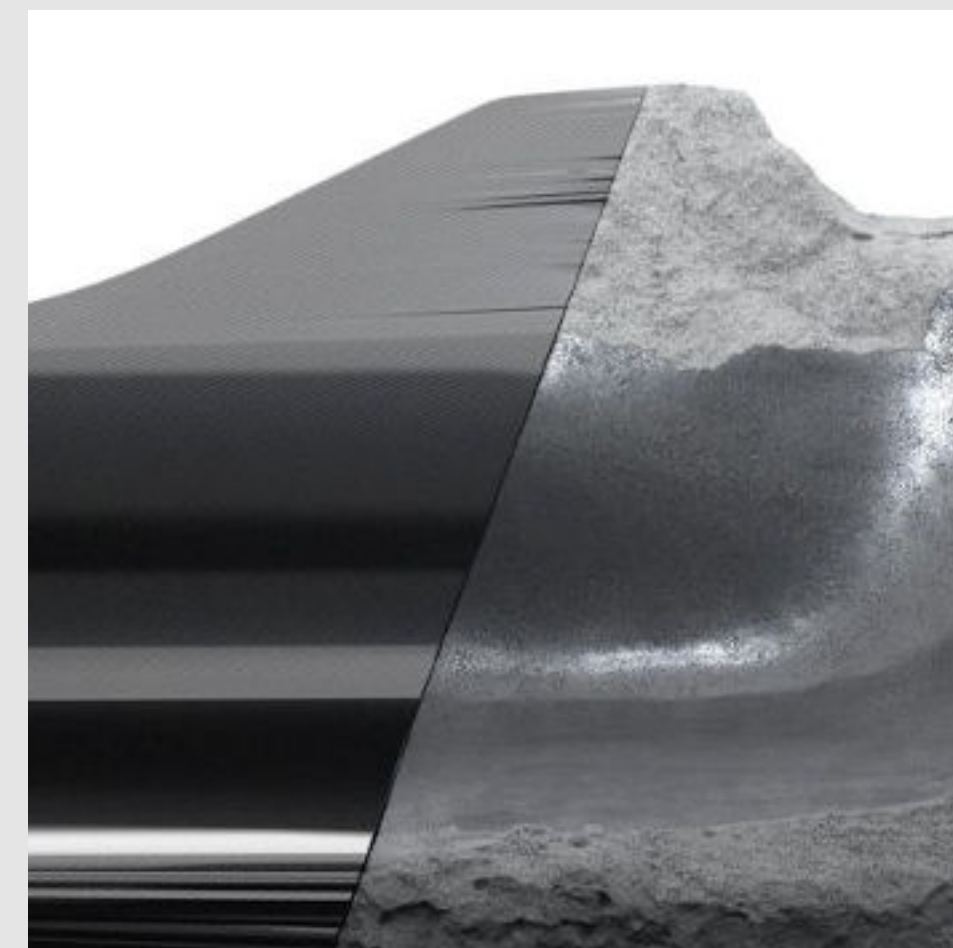
Y-Prong Design

## Y-Form Design Language

These few principles were used to develop and ideate numerous looks and details for the new line of cases.



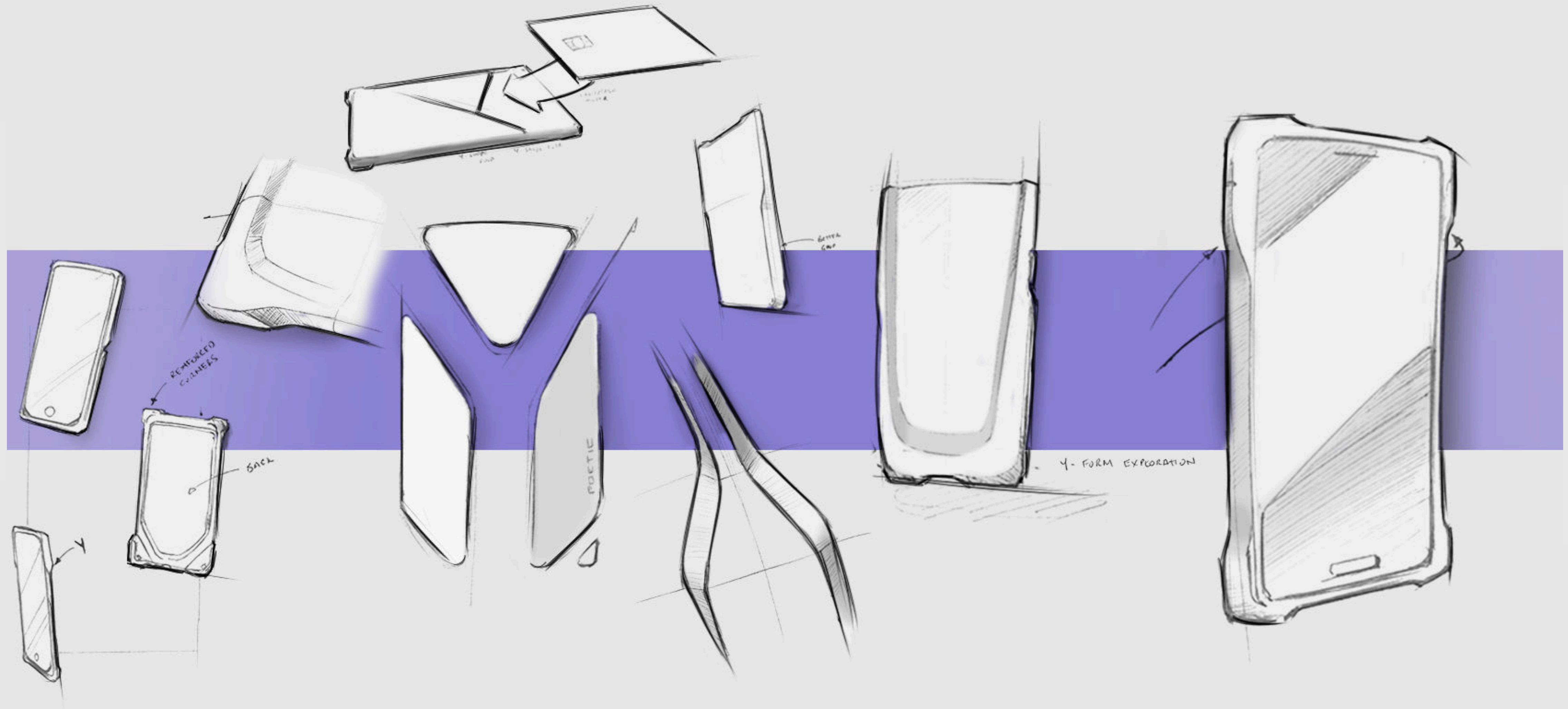
Discreet Protection



Material Duality



Reinforced Corners



After some initial forms and details were made on paper, the majority of form development and iterations were created on Illustrator, providing us and the client with enough options to choose a few and refine them.



Illustrator proved to be a very useful tool in making quick iterations of design concepts.



## Final Line-up



### Poetic Guardian

2-piece case with built-in screen guard  
PC+TPE construction  
Ports have openable flaps



### Poetic Revolution

2-piece case with built-in screen guard  
PC+TPE construction  
Ports have openable flaps



### Poetic Karbon Shield

Single piece case  
PC+TPE construction  
Textured back



### Poetic Lucent

Single piece case  
PC+TPE construction



# GUARDIAN

The Poetic Guardian was featured on IGN, AndroidCentral, and Heavy. - and also became Poetic's best-selling phone case.