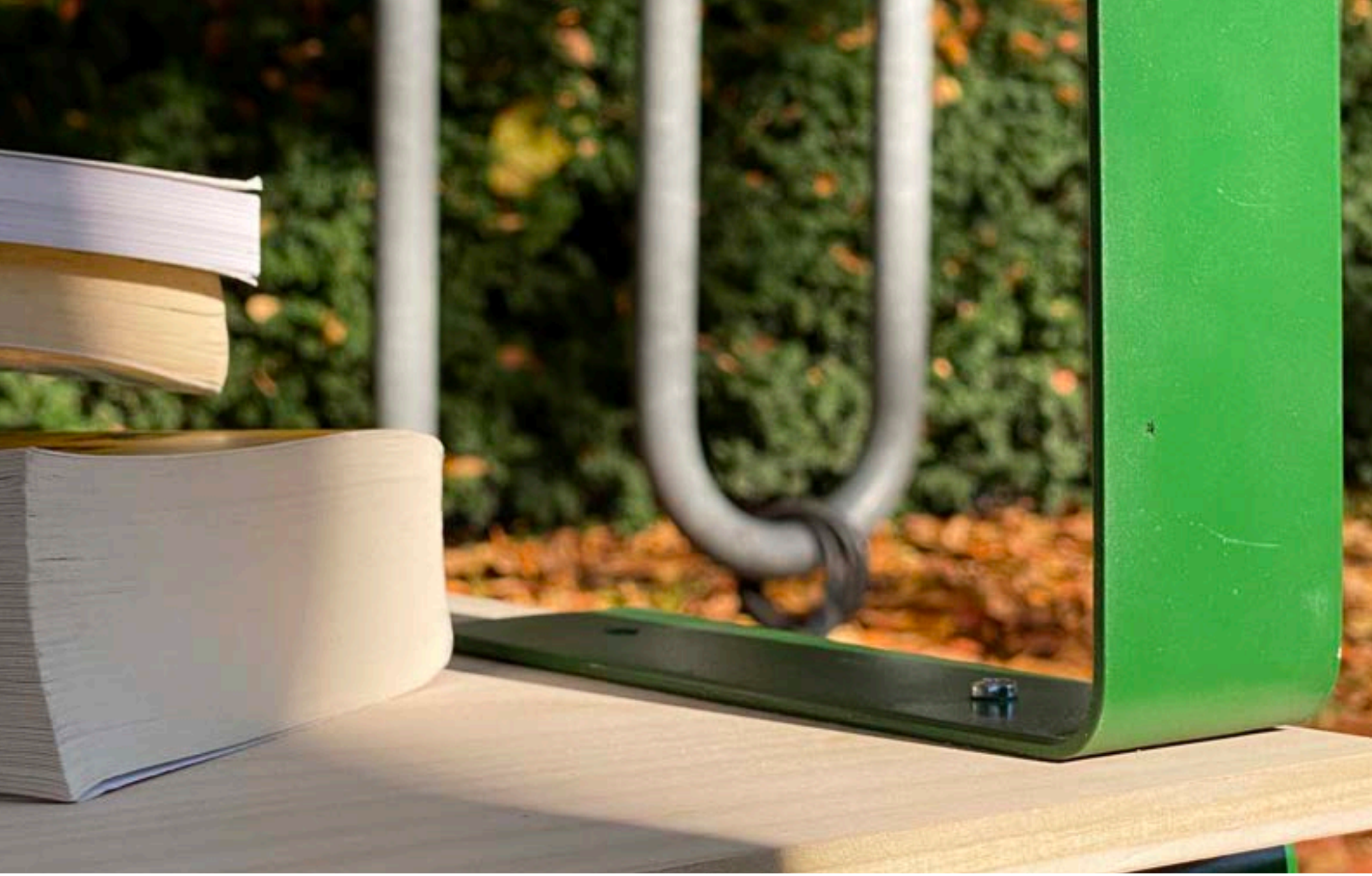
Dennis Siegert

Industrial Design

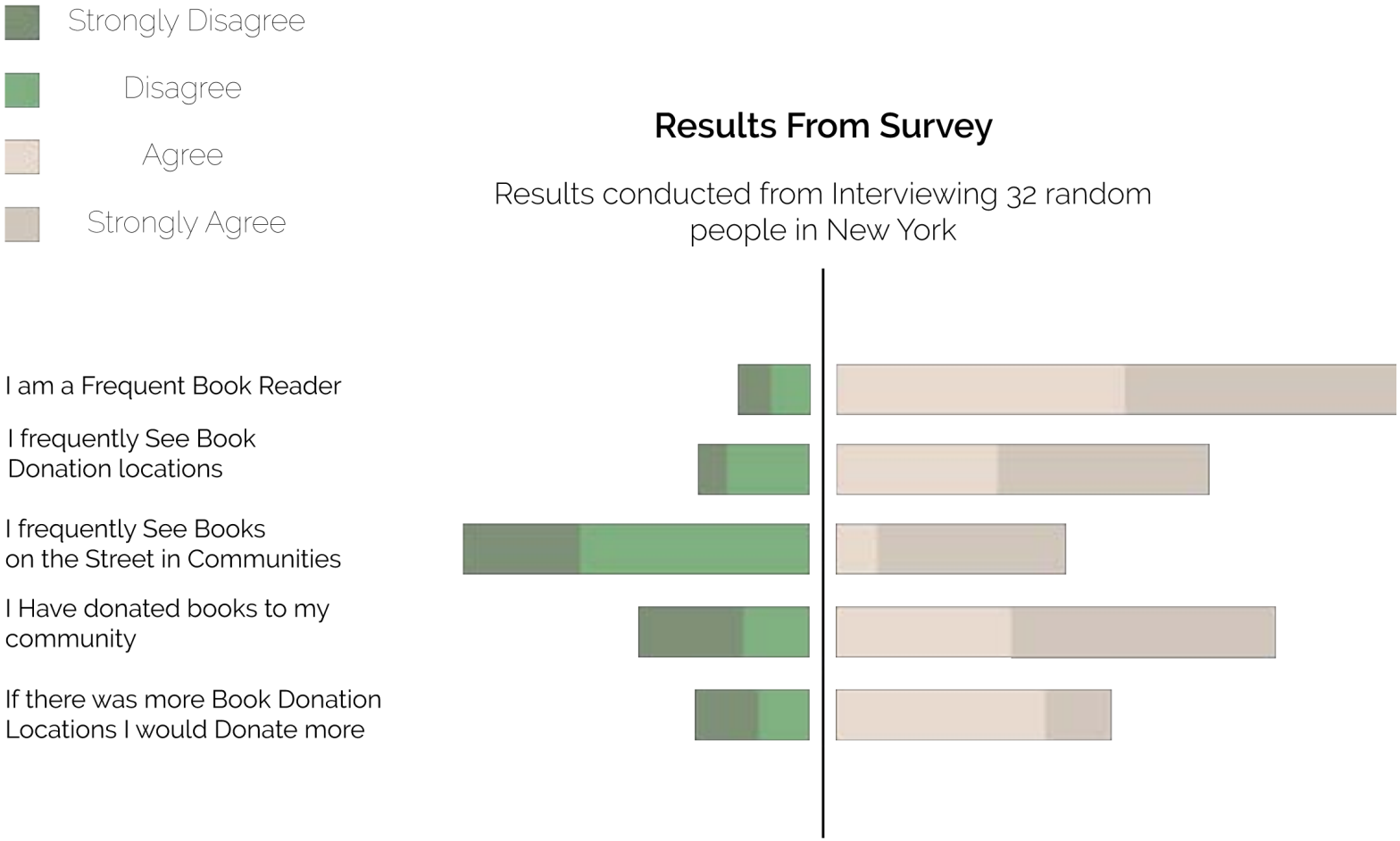
With a multicultural background that informs my critical process, my goal is to employ design to benefit people and create a better world.

Table of Context:



BIBLIO / solo project

Background Research:



After living in New York for almost four years, books are often seen left out on the street given for people to take. They are often seen in a little box or just left on the street for the taking rather then donating them because of the limited number of locations you can donate books. Due to bad weather many of these books are often thrown out rather than donated to those who can use these books.

Observing Outside

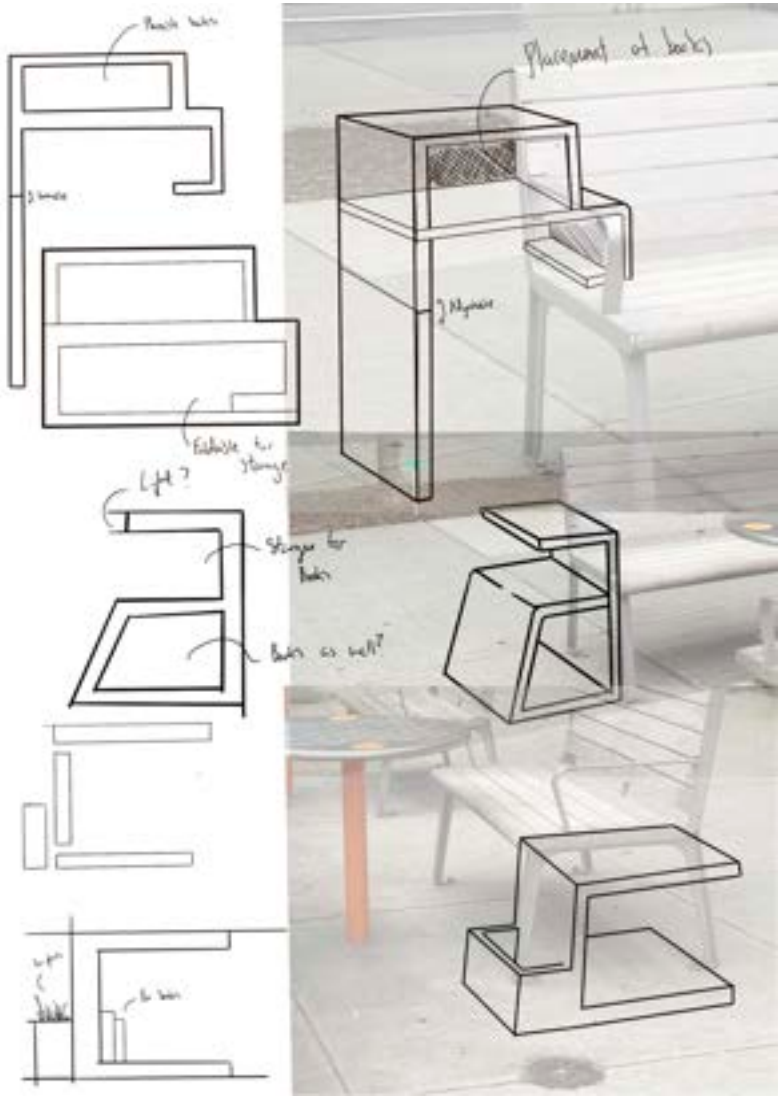
From looking at people reading outside and also seeing how books are left on the street, the direction of the project was to go into designing a public bench where people can sit, read books, and be able to donate books as well.

Precedence Studies

Project Stratagy

To create a small location where people can go and donate books, while being able to stay at the location and be able to sit and read there. This is to build a sense of community.

Ideations

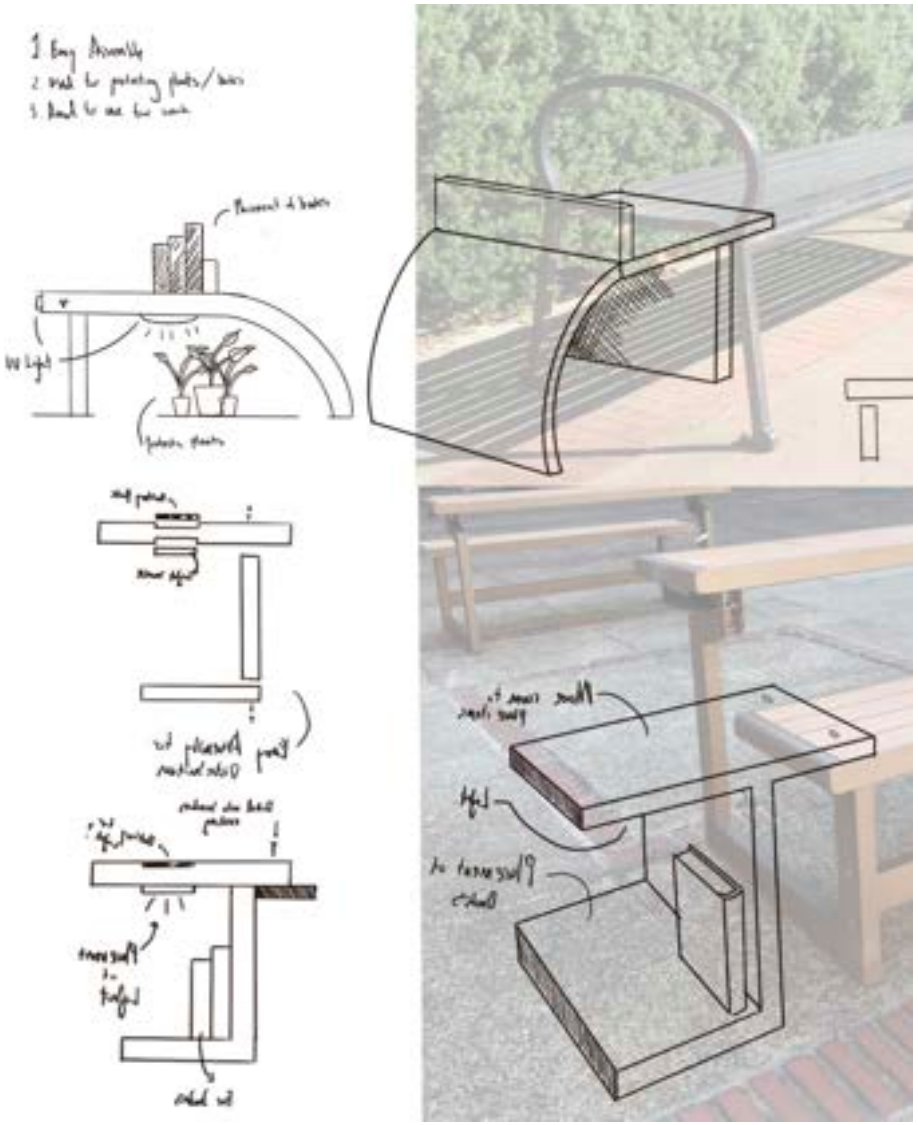


Phase 1:

Thinking of Attachments rather then designing a completely new bench

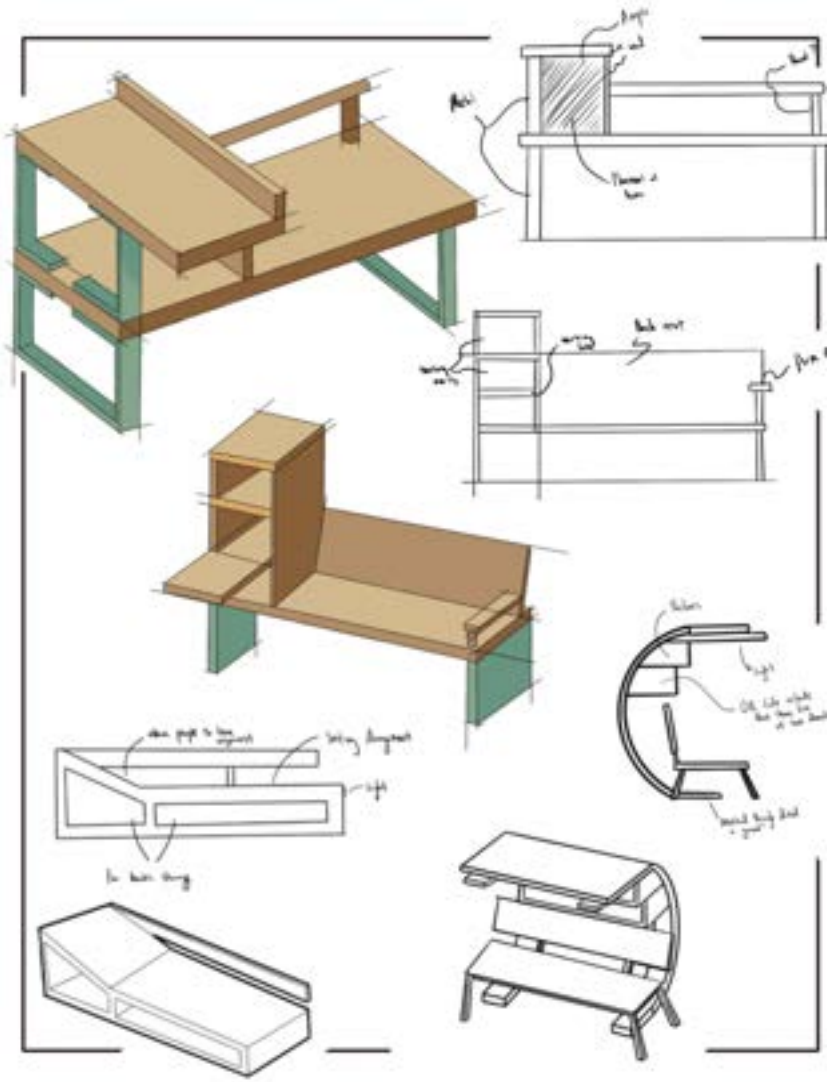
Phase 2:

Thinking of addition of other uses, possibility of using light or plant protector



Phase 3:

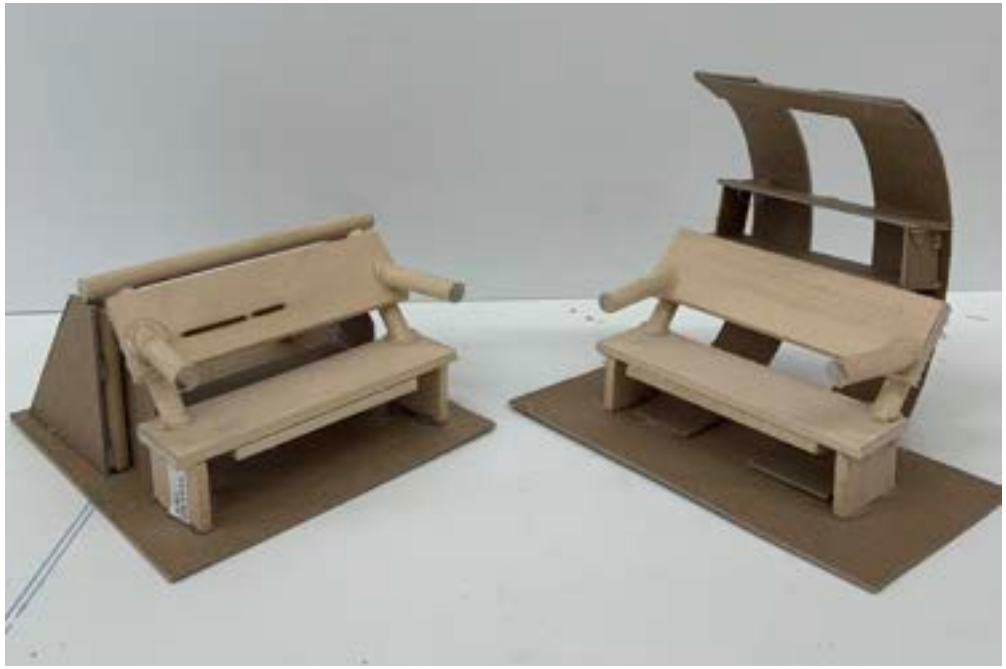
Thinking of the addition of working space. Focusing on single topic



Phase 4:

Focusing back on the main purpose of the product. Incoorporation of table, shelves and seating.

Early Prototypes



Phase 1:

Designing around the Bench. Finding our how to add on already existing benches

Phase 2:

Designing a working shelf to use in public space rather than the seating aspect.

Phase 3:

Focusing on the seating aspect in regards more towards the people and to initiate reactions among each other.

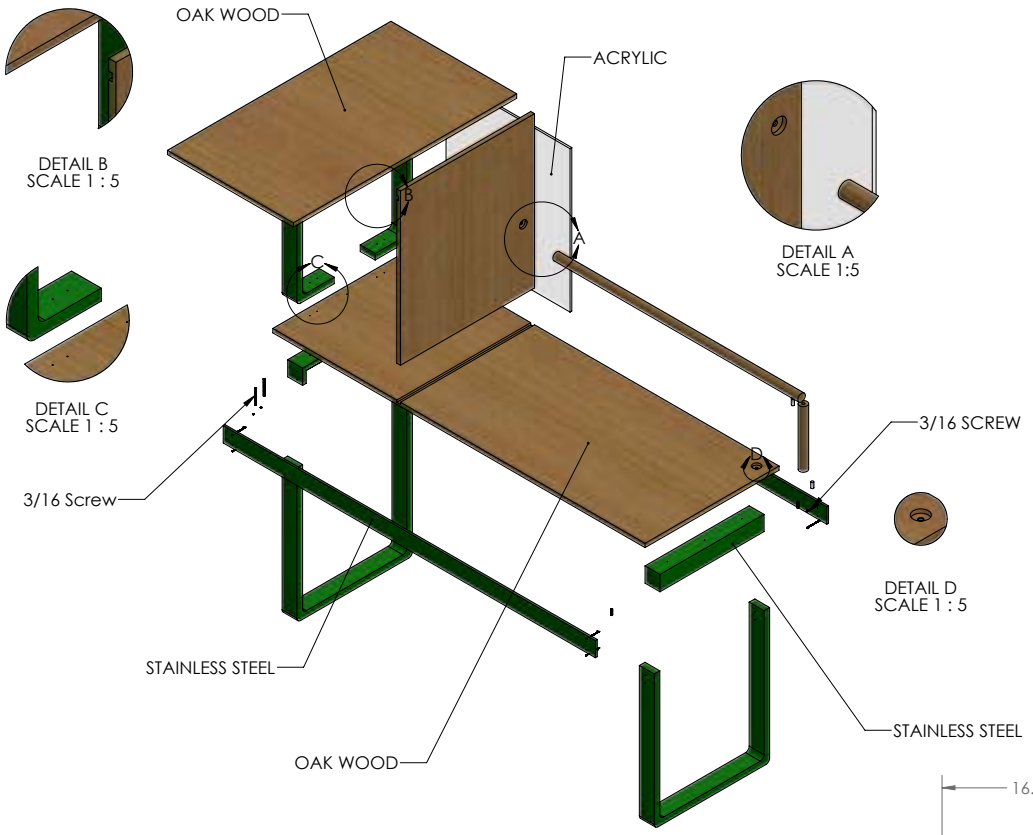
Phase 4:

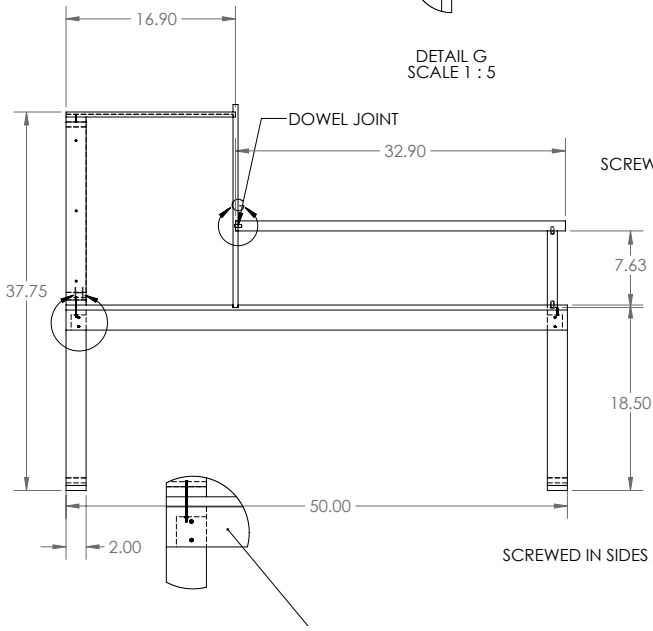
Focusing on the interaction aspect between people. Addition of a use of a table to help promote people to interact with the space.

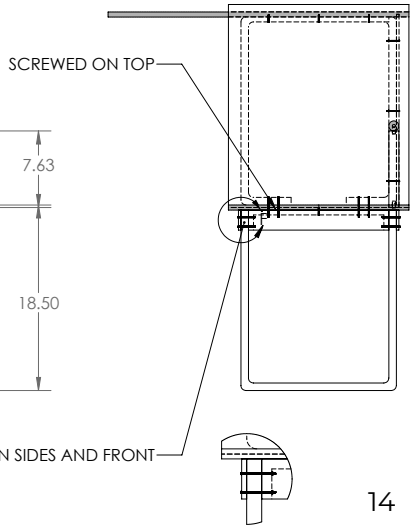
Cardboard Prototype

Making a full scale prototype our of cardboard to fully understand the scale and size. From early prototypes, it was further developed as people working on the table was able to interact with those who are sitting on the bench.

Final







Technical Drawings

Process

Step 1:

Bending Metal to Become support for the Bench

Step 2:

Drilling Holes into the metal to connect everything together with machine screws

Step 3:

Base combination of the bent metal with the addition of the Support.

Marketing Research:

Common Website, ECOM, ETSY:

Average Cost: $19-25 Dollars

Material: Standard Industrial Felt to leather

Customer Focus: Durablity, Travel Friendly

Amazon:

Average Cost: $80-100

Material: Standard Industrial Felt to Leather

Customer Focus: Craftmanship, durablity, travel Friendly

Kickstarter:

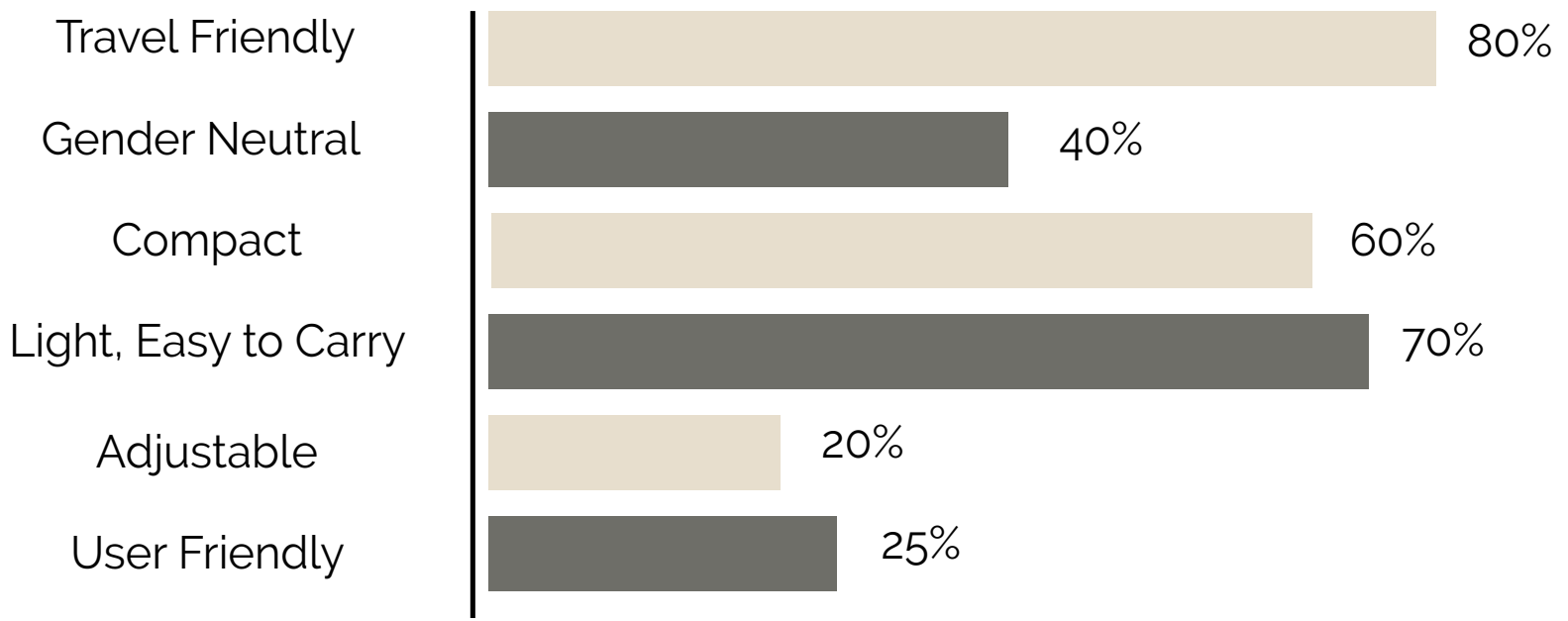
Average Cost: $85

Material: Generally Felt or leather

Customer Focus: Travel Friendly, durablity

Customer Research:

Based on 36 People



Research:

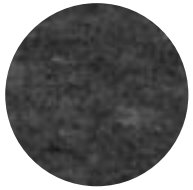
Based on research, customers wanted a bag that was more travel friendly because of the anxiety of travel. Based on anxiety from security, the goal was to help reduce the stress and make the bag compact and organized

Material Cost:

Webbing

$7.50 per 10 yards

Industrial Felt



$21 per sheet (54x54)

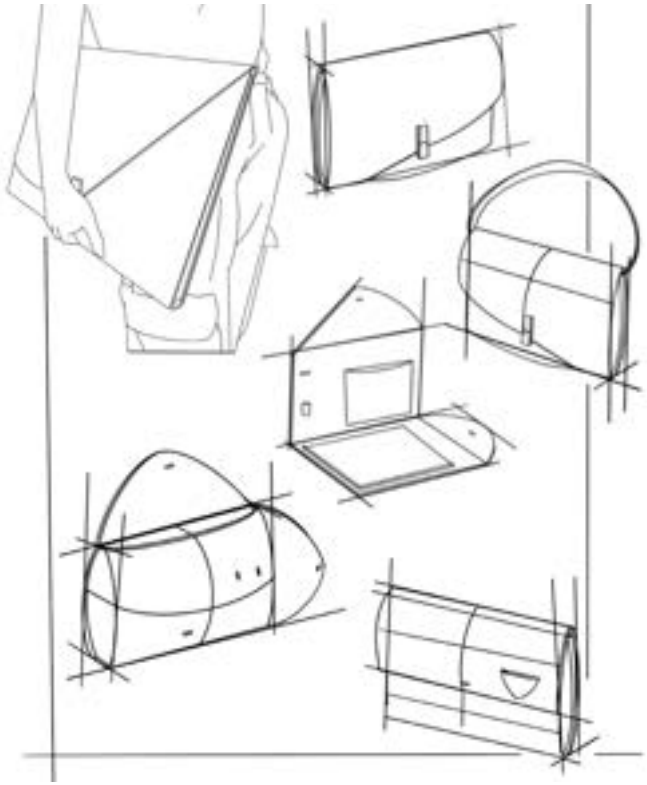
Vegetable Tanned Leather

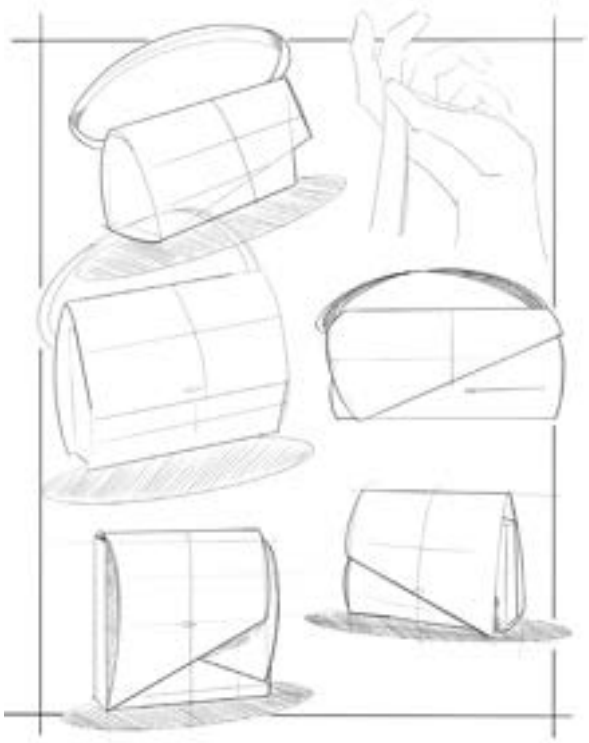
$20 per sheet (54x54)

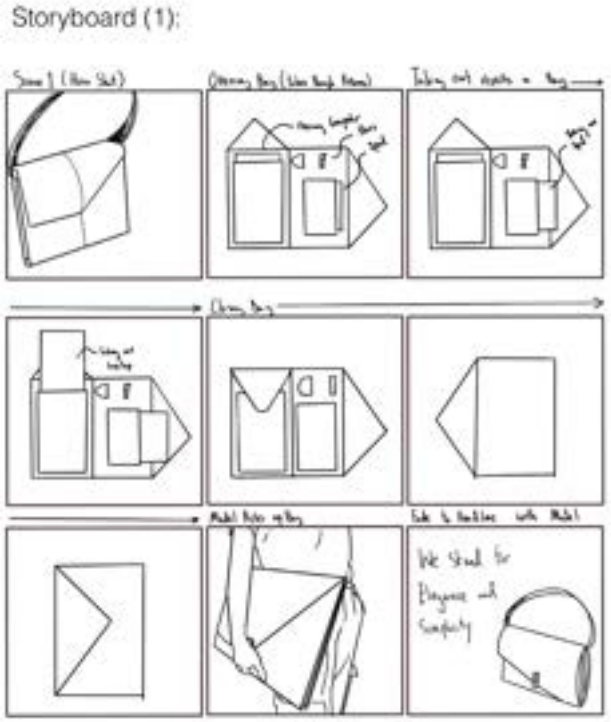
Metal Buckle

$5 per Piece

Ideations







Sketching Concepts that aims towards the style that we want in the design. Depictions of how we want the bag to open, as well as how we want it to be carried.

Final

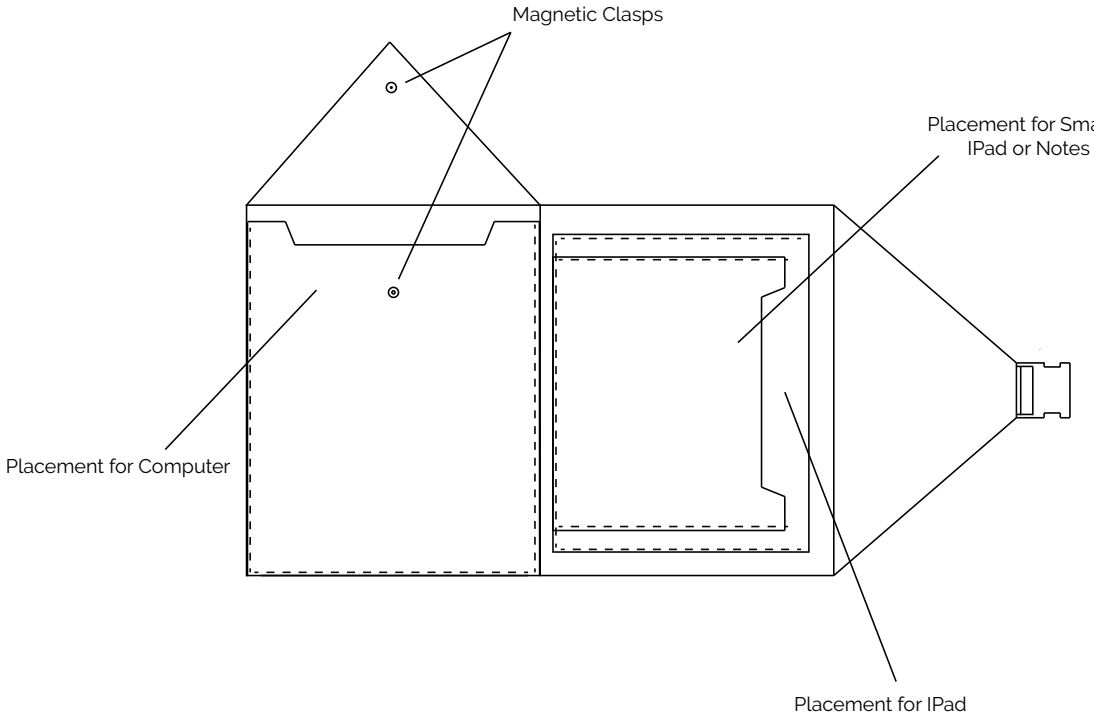
Inside:

Compatible with all MacBook and iPad Sizes

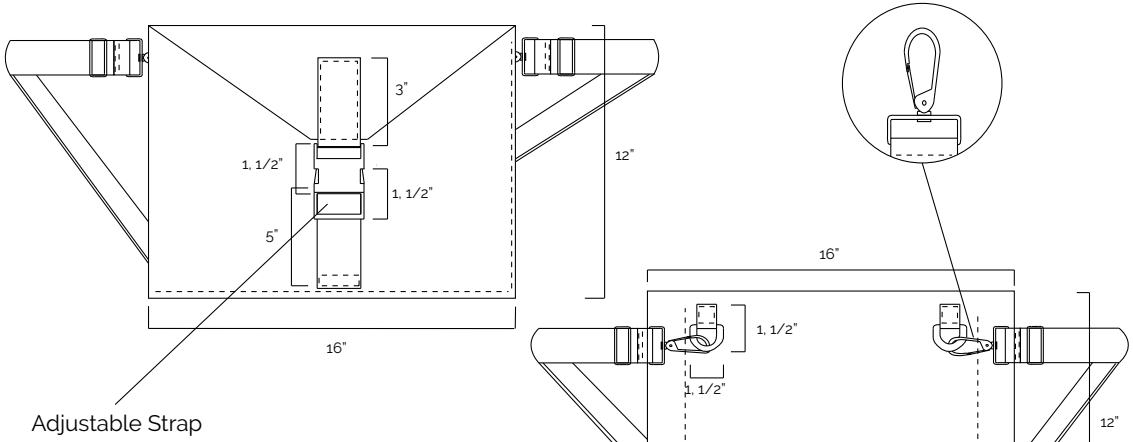
Adjustable to Wear:

Giving customers the ability to wear the bag however they want to

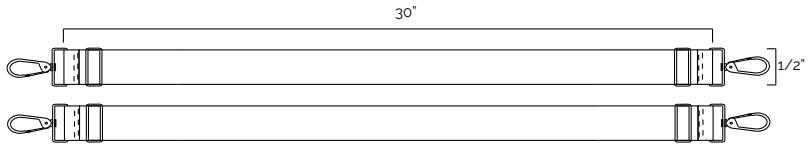
Open View



Outside Dimentions



Technical Drawings



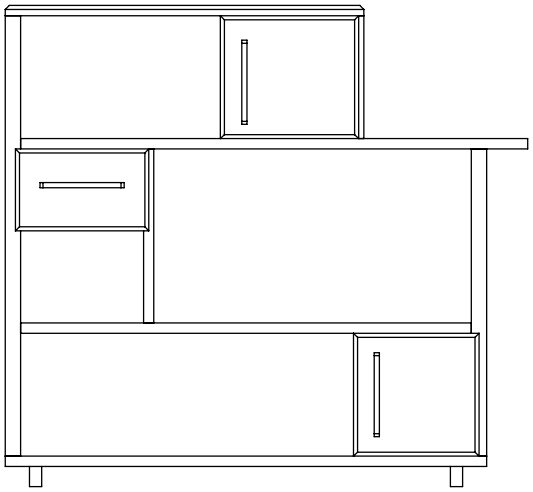
TRADITION / Solo Project

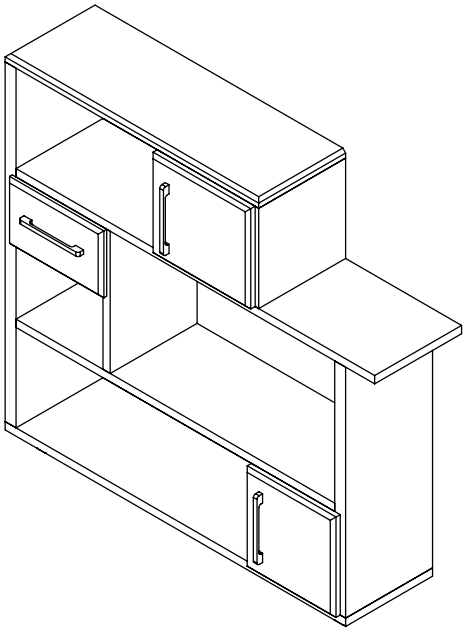
Goals:

- Simplicity

- Geometric Fluidity

- Implementation of Space and Form





Since young reading has been a hobby of mine and it has been a tradition of buying and collecting books. Creating the traditional mindset of how shelves were built, the design is made to create a sense of space.

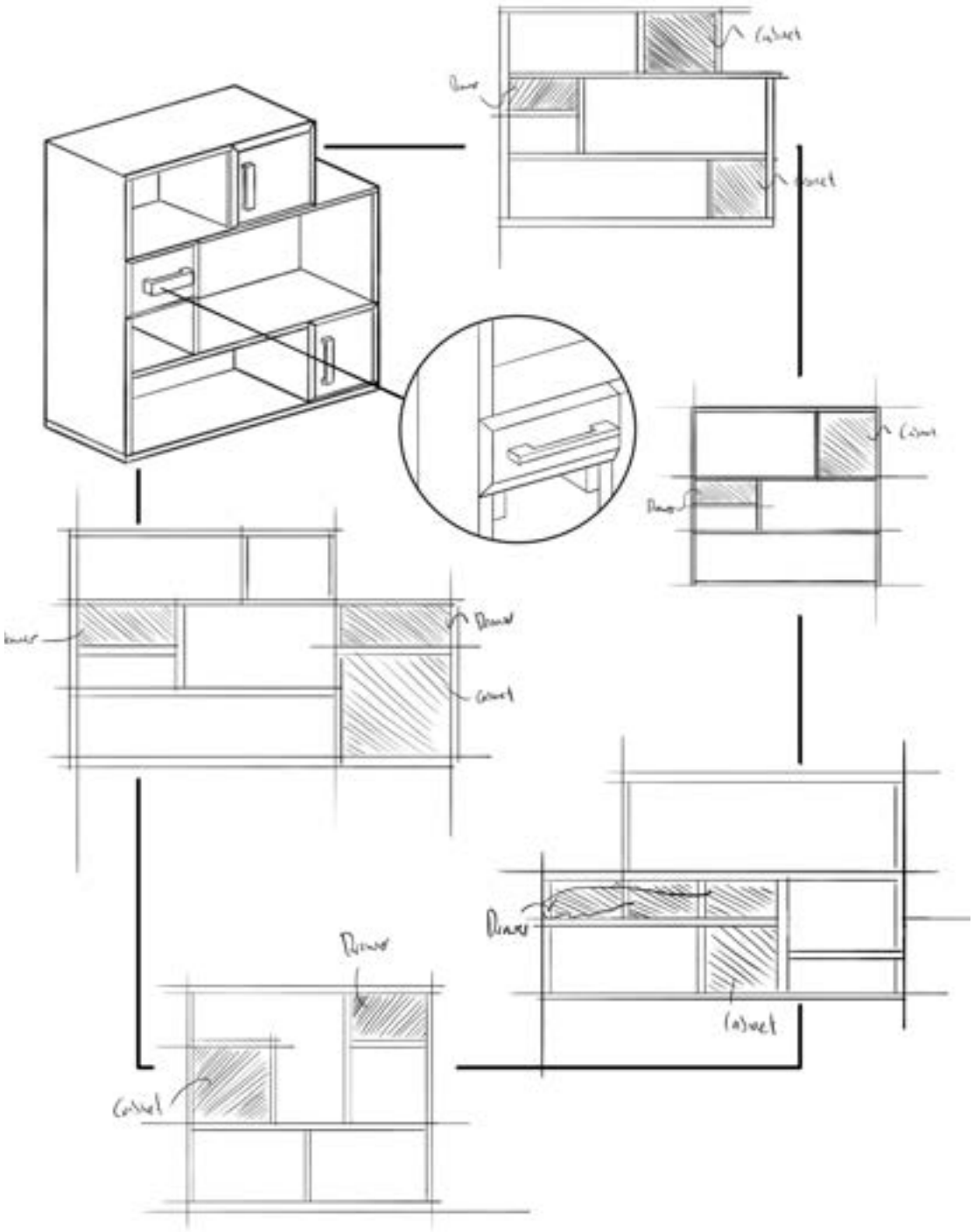
Final


11:53
THE CIVIL WAR
STEPHEN KING
THE SHINING


11:53
DRACULA
DAN BROWN

Ideations

Observing traditional ways of how a shelf is made and through that create ideations of shelves into a more modern perspective.



Process

Using Cherry wood, I cut each one to the dimensions that I wanted according to my drawing, sanded each one and used wooden dowel joints to set them together. I then used natural wood oil to show the naturalness of the wood.

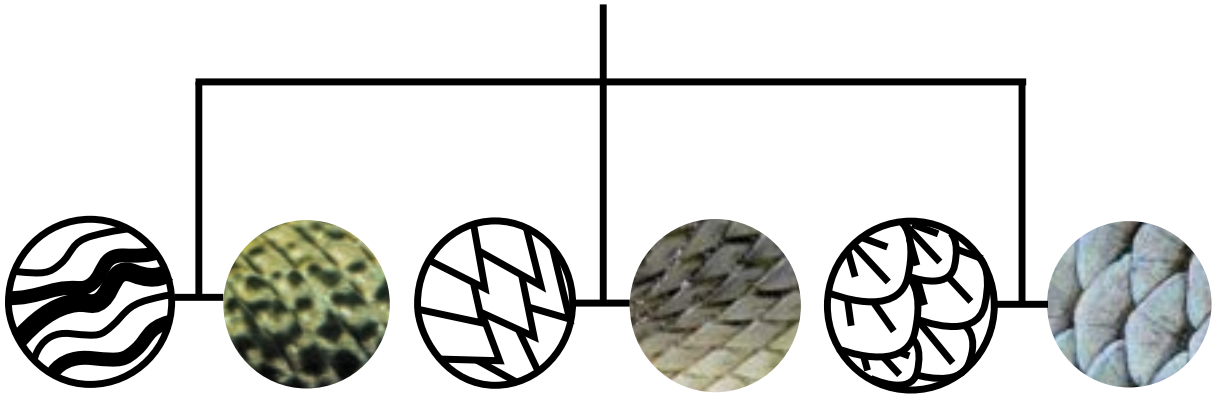
SHUTZ

Protective Glove, solo project

Background Research:

Research of Scales as forms of protection due to the architectural forms as well as the patterns it creates.

Viewing Scales Within Design



Gar Scales:

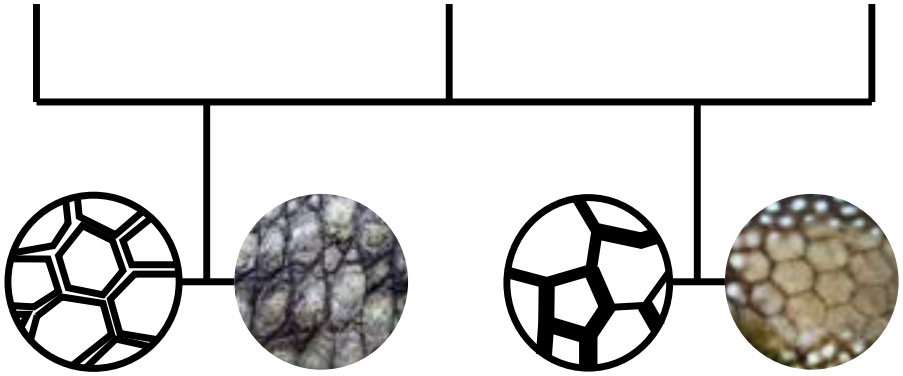
Unique Wavy Design, curved scales that go along the body of the fish

Snake Scales:

Overlapping pattern ,Able to move fluently.

Cycloid Scales:

leaf like pattern with scales that are layored on top of each other.



Alligator Scales:

Pentagonal Geometry, close together and overlapping.

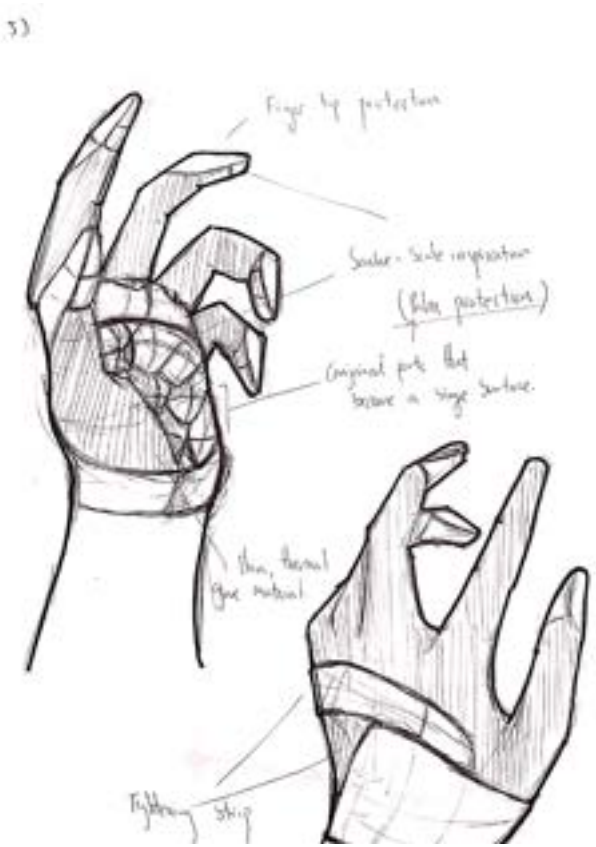
Trunk Fish Scales:

Hexagonal Geometry, Irregular patterning. Strong architecture.

Ideations

Goals:

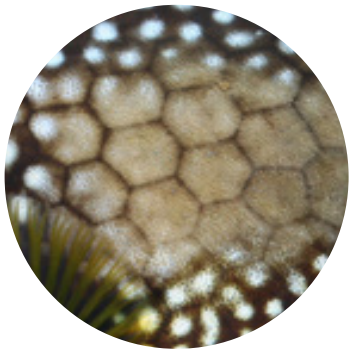
To create a glove designed for extreme sports such as skatebaorders and snowboarders that has a simple and natural design. From experience, the user uses the palms as a way to help prevent the fall



Goals:

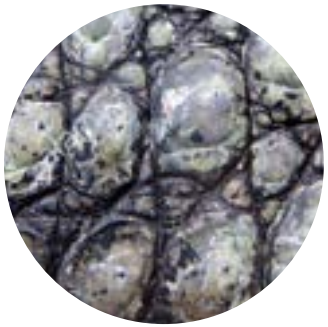
Ideation phase was used to observe the ways of applying the scales on the glove. This also gives questions such as how can they be applyed to create the best protection while mainting a light feel.

Prototyping



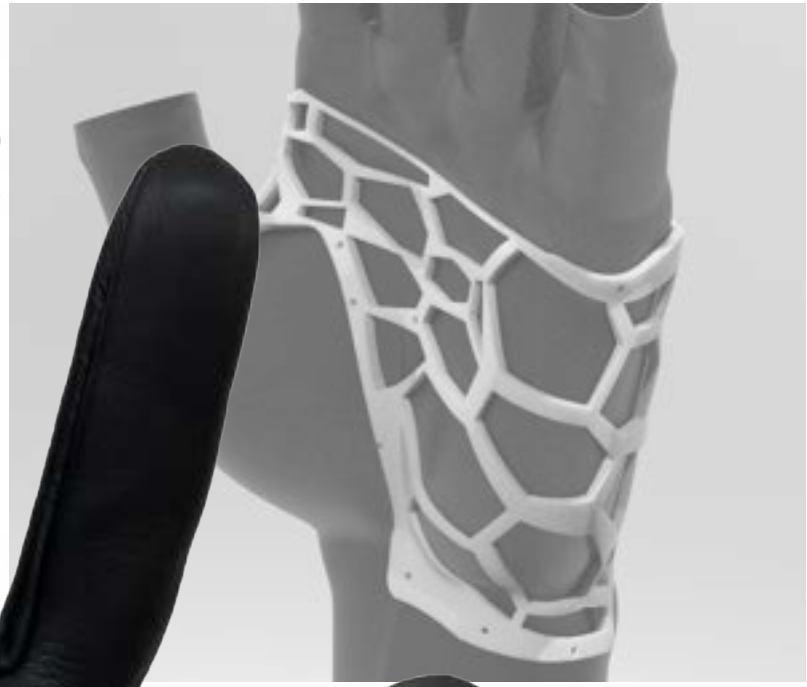
Prototype 1:

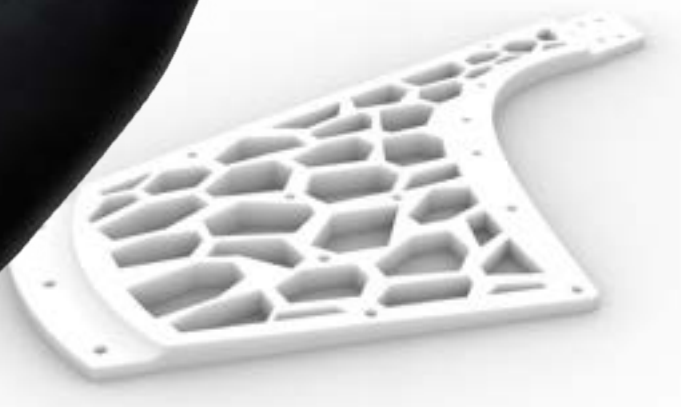
Exploring the Negative Space of the scales of the Trunk Fish. Develop them into plating that folds and crosses to the back.



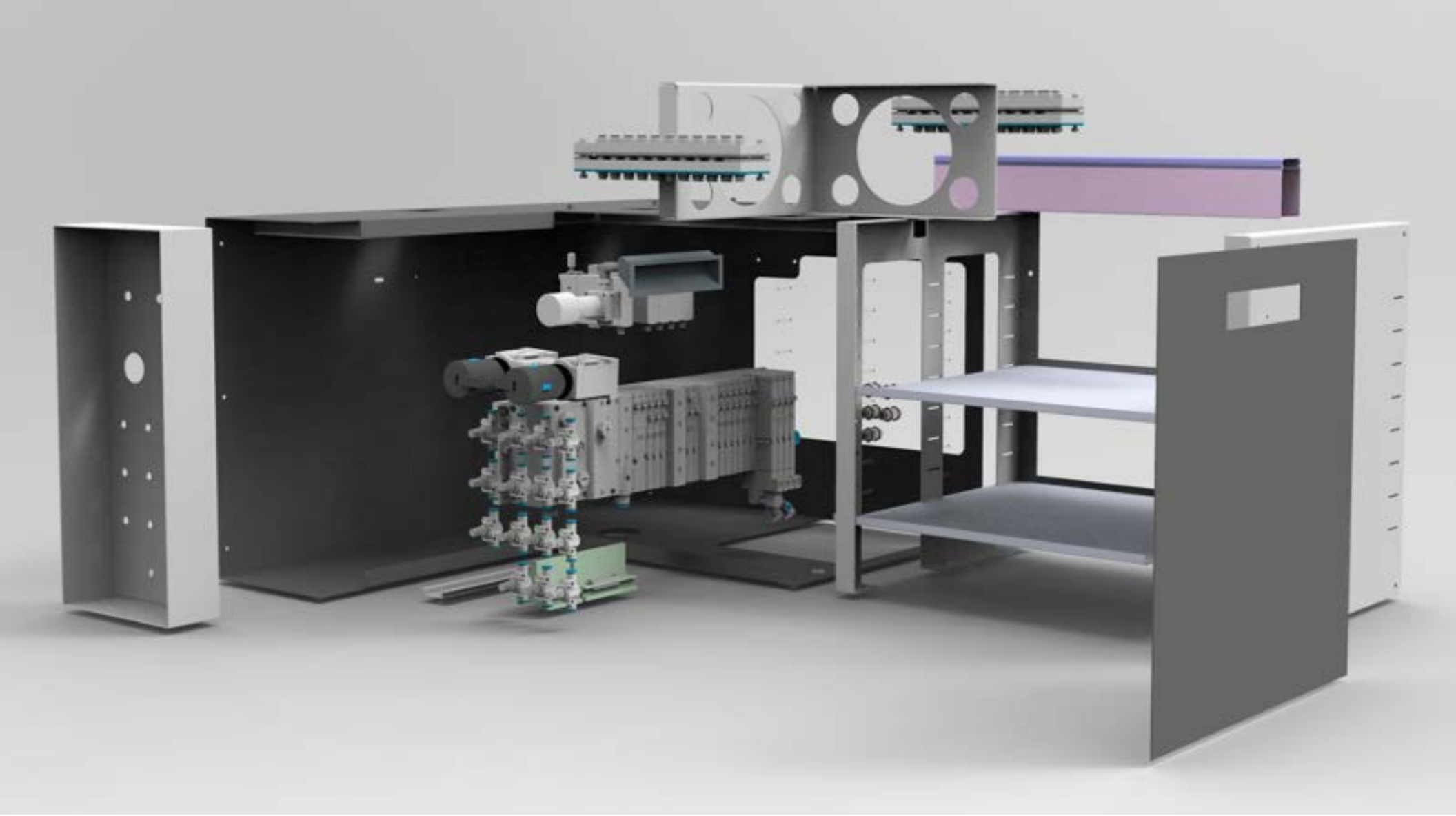
Prototype 2:

Exploring the Postive Space from Alligator Scales and developing them into plating that is swen on



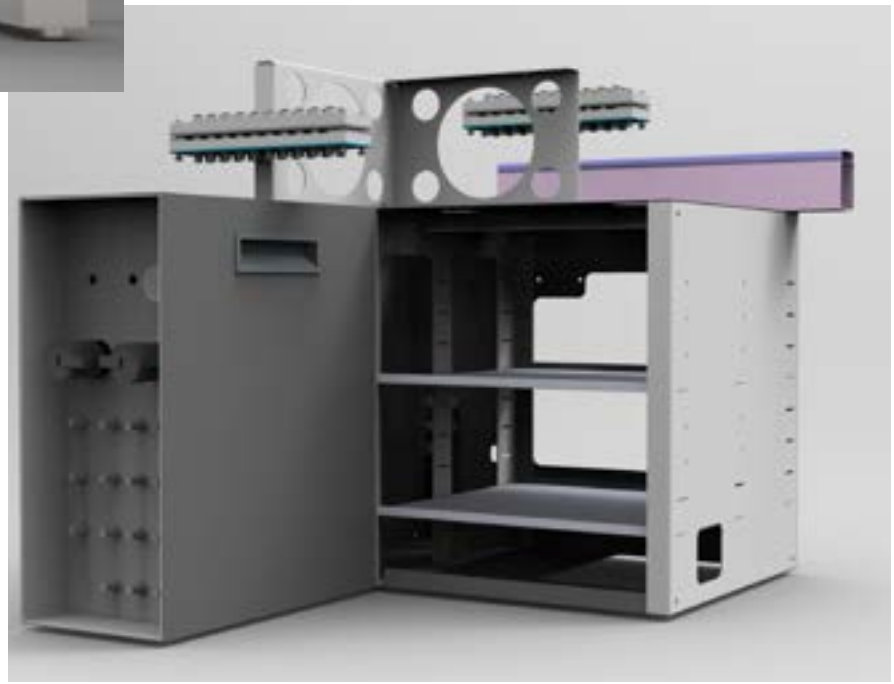


Final Prototype



Description:

Work for SUSS Microtech, which included the development of a Monitor stand and a pneumatic unit.



Achievements:

1. Cooperation in the of a pneumatic cabinet according to the specifications of the project manager

2. Creation of Production drawings

3. Creation of assembly drawings

4. Cooperation in the conception of an HMI (Human-Machine-Interface) taking into account aesthetics, ergonomics, costs, and production