

NOVEMBER 2, 2023

INDS - ASSIGNMENT #4

METAPHOR CHAIR

A chair constructed from cardboard boxes is the central focus. The chair has a high backrest and a seat, both made of stacked boxes. Metal chains are draped over the chair, with padlocks attached to the cardboard structure. The background is a dark, textured surface, possibly a wall or a large piece of fabric, which adds to the industrial and metaphorical theme of the image.

Industrial Design Foundations

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Assignment #4 Project Process



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INDS-1007 - ASSIGNMENT #1

METAPHOR CHAIR PROJECT

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PROJECT OVERVIEW

THE TASK

This assignment required students to design a chair which makes metaphorical representation of our “client’s” most defining characteristics

MY “CLIENT”

CLIENT NAME :



OVERALL CLIENT TRAITS / CHARACTERISTICS

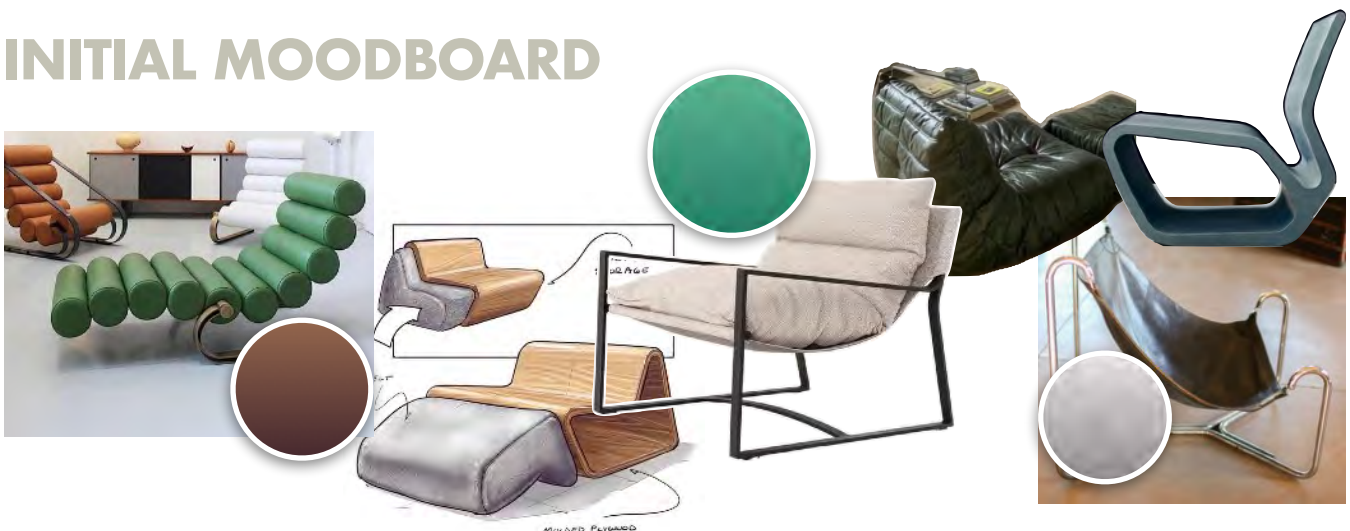
***BOLDED** = SELECTED TRAITS

- **Creative**
- Funny
- Witty
- **Persevering**
- Thoughtful
- **Considerate**

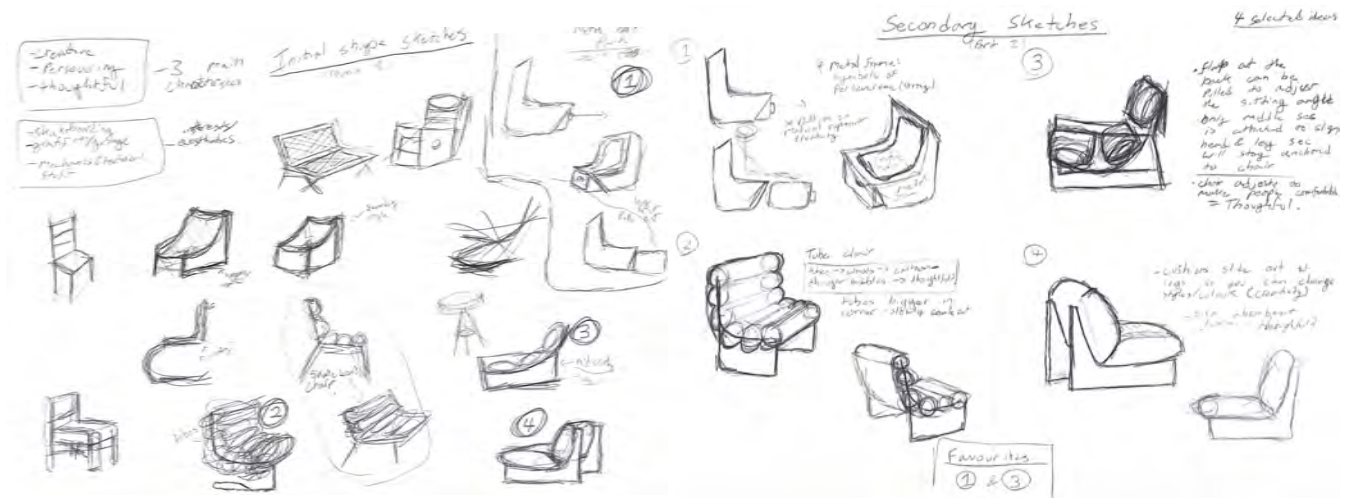
ADDITIONAL INFORMATION

- Likes Skateboarding
- Music
 - Plays Guitar
 - Listens to anything
- Likes art
- Hands on stuff like fixing cars bikes etc.

INITIAL MOODBOARD



INITIAL CONCEPTS



PROPOSAL

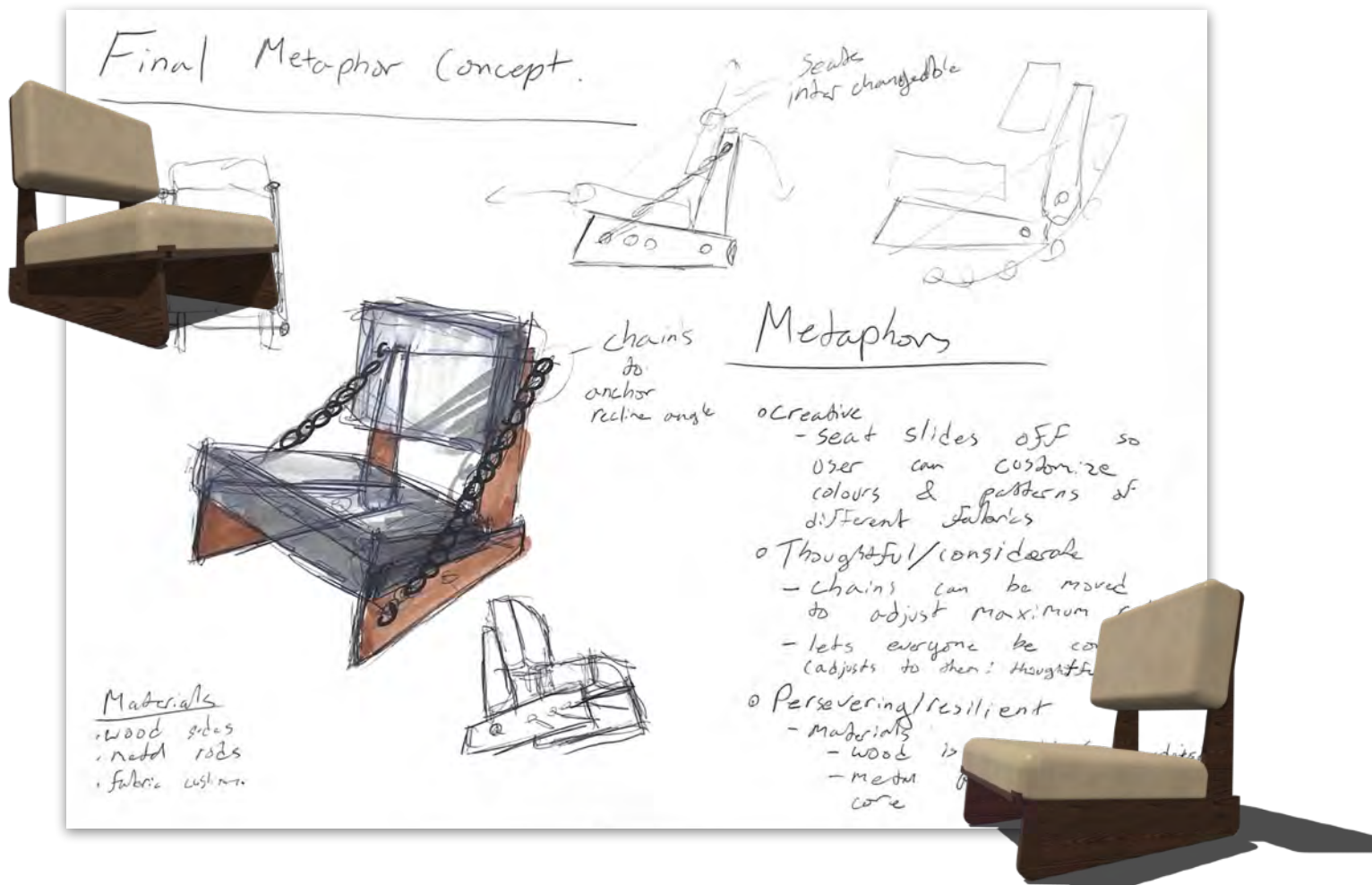
After speaking to my partner  and reviewing his main characteristics, interests and aesthetics, I selected 3 that I would be able to most effectively represent; **creativity, perseverance, and thoughtfulness**. I also asked him about his interests, hobbies and aesthetics which include **skateboarding, mechanical work** (taking apart cars & bikes), **music** (plays guitar), and **skateboarder / grunge / y2k style** (could be shown through concrete, exposed metal, graffiti style graphics, etc.)

COLOURS AND MATERIALS

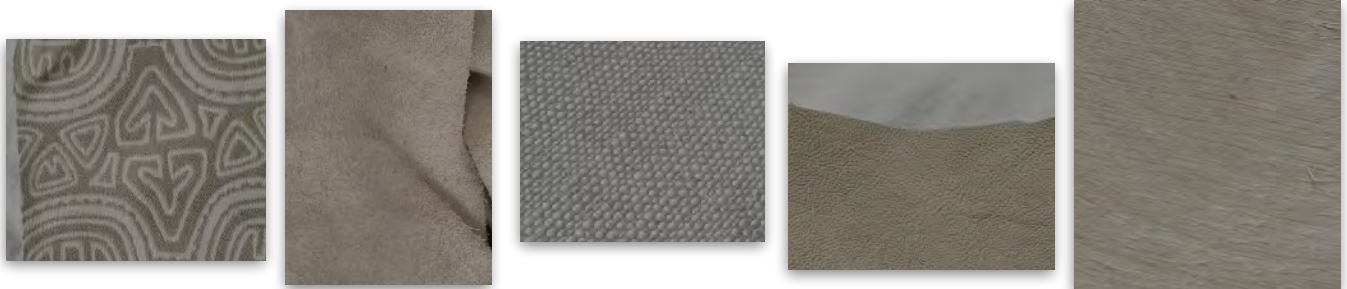
- Materials
 - Metal or wooden frame to represent strength / resilience / perseverance.
 - The secondary material could be felt or leather
 - Felt would allow for greater representation of creativity - patterns & colours
 - Leather makes for a cleaner aesthetic, and is more durable
- Colours
 - black / natural steel
 - Lighter brown from leather or wood
 - Light grey felt / fabric, with will a variety of colours to represent graffiti/ grunge.

BUILDING UPON THE SKETCHES ABOVE, AND COMBINING THEM WITH NEW METAPHOR CONCEPTS, I CREATED BY FINAL RENDERING FOR MY DESIGN.

FINAL CONCEPT



MATERIALS SAMPLES



The final concept is a lounge style chair made with a wooden frame, that is reinforced and decorated with steel rods. The chair also has two cushions, that can be interchanged to allow the user full customization in regards to colours, patterns, and overall style.



FINAL PRODUCT

Overall I am happy with the final outcome of this project. Although the design is somewhat simple, the dynamic aspects like the changeable fabrics, and adjustable chain add a lot of visual interest.

CHANGES I WOULD MAKE

If given the opportunity to develop this project further, I would consider staining the wood and testing better ways to make the pillows / cushions that would look cleaning. Additionally, I would like to add the ability to change the back rest pillow patterns. This was a part of the original design, but unfortunately I couldn't come up with a solution that would keep it both secure and removable at the same time, especially at this scale.

METAPHORS

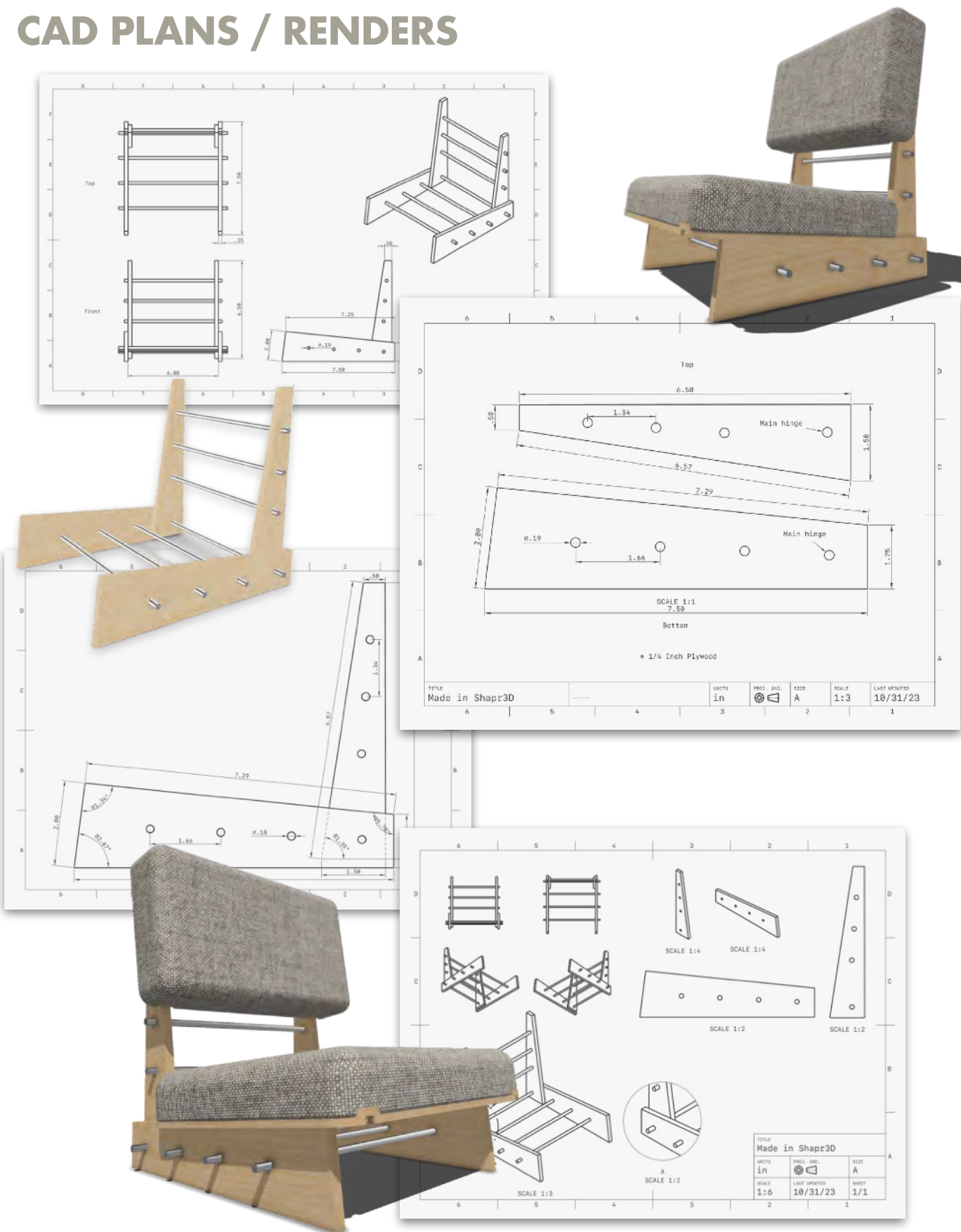
- ▶ Creativity
 - ▶ Represented in the user's ability to swap out cushions for greater control over patterns colours styles etc.
- ▶ Thoughtful / Considerate
 - ▶ Chains anchored on two opposite points support the backrest of chair. When move along the 3 anchor points, the user can adjust the maximum recline angle
 - ▶ This represents consideration as it allows everyone to be comfortable
- ▶ Perseverance / Resilience
 - ▶ As opposed to strong / solid, perseverance means that you adapt and overcome. This chair was built with a similar concept to the one that lets skyscrapers sway in the wind, rather than just fight it
 - ▶ The wood acts as more adaptable / flexible whereas the metal rods reinforce its core to keep it strong.



ISSUES / PROBLEMS

- One mistake I made with this project was trying to make sketches first, and add in the metaphors later. My second and final concepts were much stronger than my initial ideas because I designed around the metaphor, rather than made a metaphor around my design.
- Another issue was that I could not make the top part of the chair removable, and sturdy at the same time, so for this concept only the bottom fabric is interchangeable.

CAD PLANS / RENDERS



PROCESS

WOODEN FRAME

- ▶ Designed the frame and its measurements in CAD
- ▶ transferred the design onto 1/4" birch plywood
- ▶ used the bandsaw to cut to shape (In ID studio)
- ▶ Once I had the 4 pieces (2 seat 2 back), I drilled in the main joint, and loosely attached using a 3/8" steel rod and some bolts

METAL RODS

- ▶ After the main beam was secured, I added an additional rod at the top of the backrest, allowing me to attach the chain and test where i'd want the anchors to be placed
- ▶ after some trial and error I decided that 3 holes one inch apart would add sufficient variety
- ▶ I marked out the holes, and drilled into both bottom pieces of wood
- ▶ afterwards i screwed in the inner bolts and washers, then fit the wood on it
- ▶ I did my best to centre the chair on the rods, then attached and tightened the outer rods

SEAT / FABRIC

- ▶ Attached multiple thin wooden sheets from Dollarama together to make base
- ▶ Pinned fabric around a foam base from Micheals
- ▶ Glued foam & fabric to base
- ▶ For bottom base, I cut tracks that allow it to glide along armrests while switching materials

MATERIALS LIST

- 1/4" birch plywood
- 3 different fabrics
- 3/8" steel rods
- Washers & bolts
- Mid density foam
- Glue
- Fabric pins

