

陳
夏
迎

Industrial Design Portfolio

Xiaying Chen



YAO XIAO 10.24.17
ASSIGNMENT 8

TEA-DOT

RUBBER

TEA BAG

EIGHTH-CRASH CURVE

RENE CHEN
SECTION A81
ASSIGNMENT A
007
24

CHOPPER
RE-design

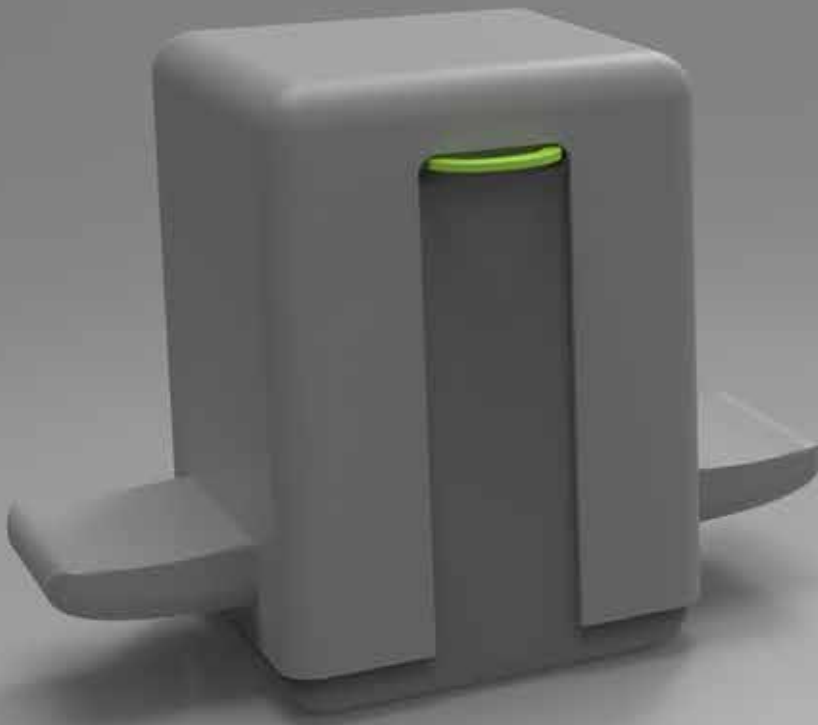
MEAL-
prep

LIGHT

OTHER

DAUQ

A reverse engineering project



Reverse Engineering

The goal for this project is to identify problems in existed products and provide a better solution.

Common chopper strategies:



pro: clean,
easy to use.
con: too small.



pro: effortless.
con: big and heavy.



pro: small,
easy to use.
con: limit shapes.



pro: clean,
easy to use.
con: relatively big.
needs effort

+ Research

process analysis

Prepare.



Press.

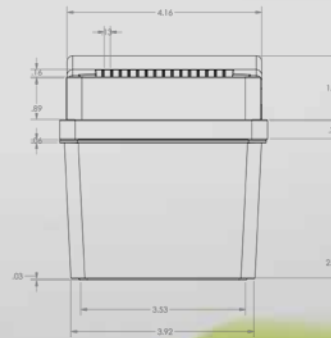
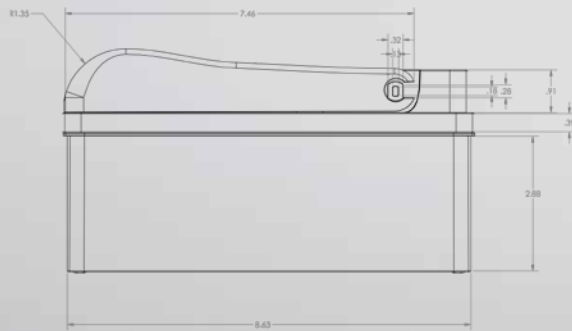
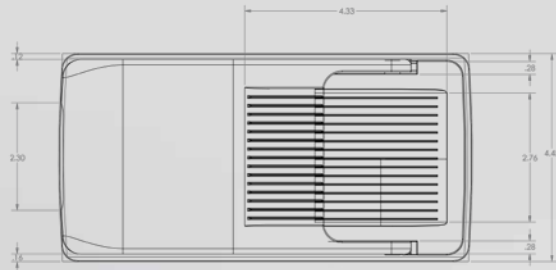


Clean out.



+ Original Product

identify problems



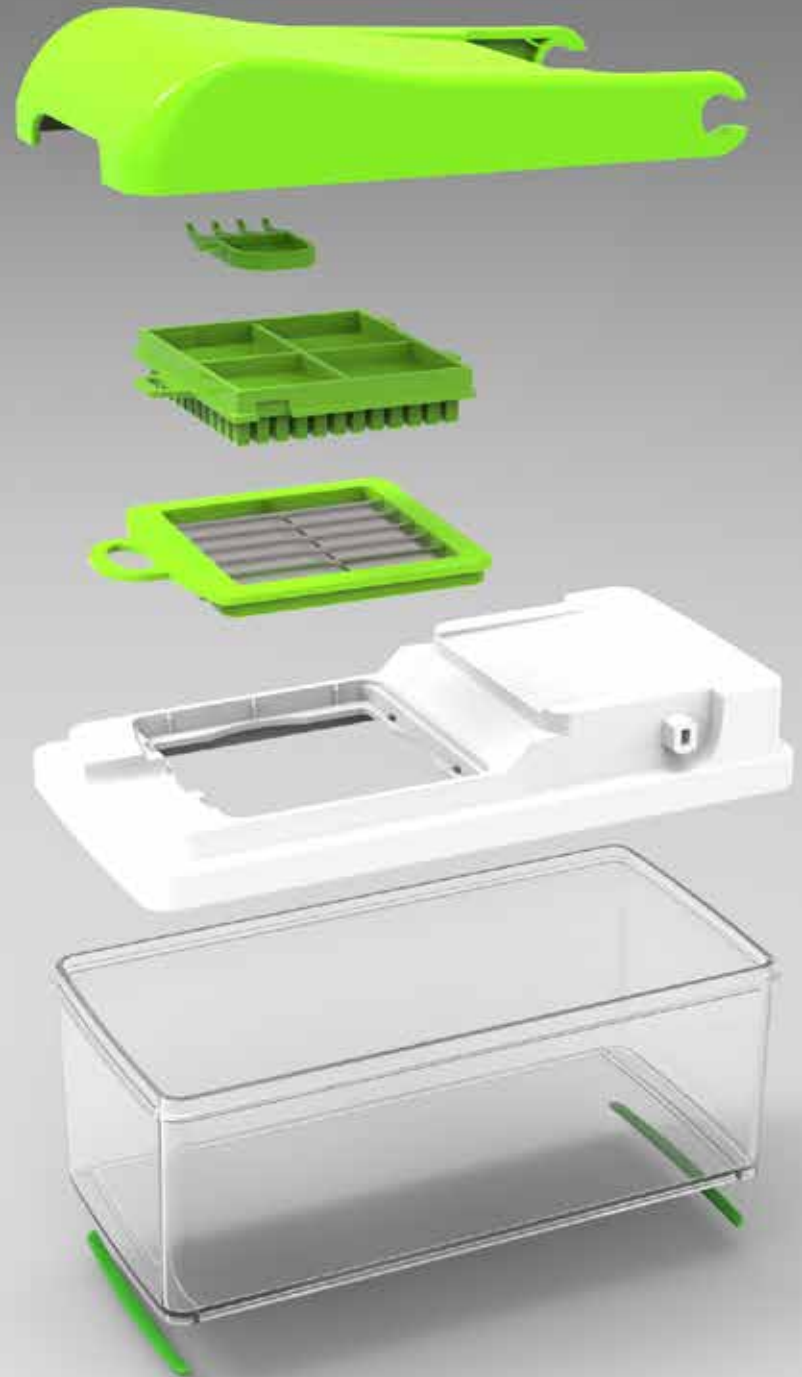
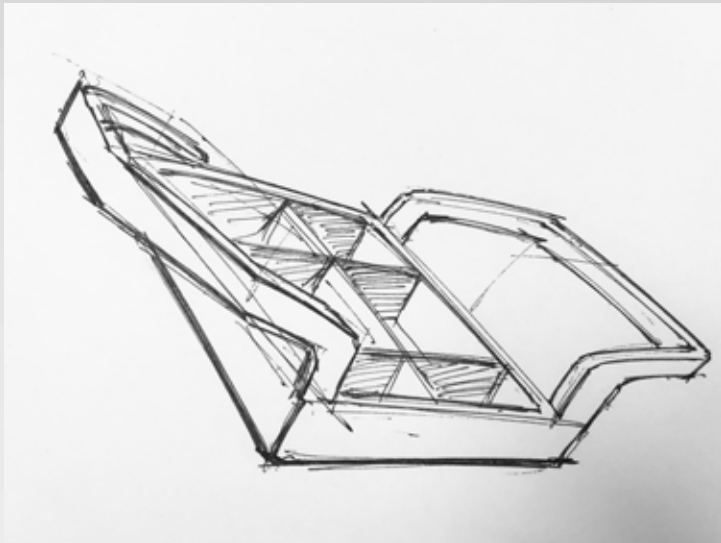
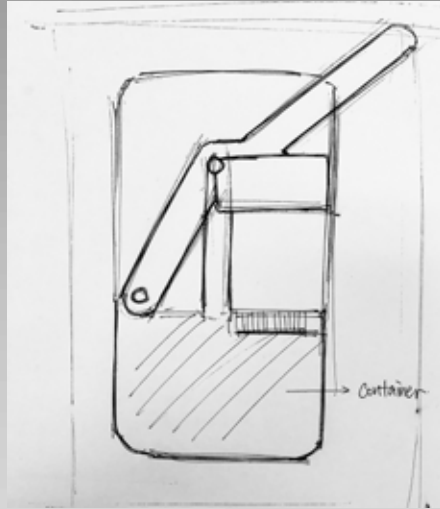
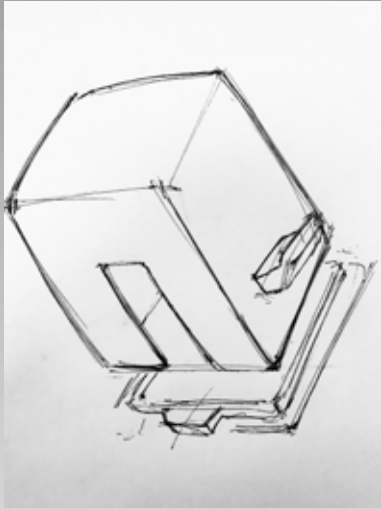
When pressing down the lid with hands, it takes a lot of effort. The elongated design isn't working well.

Problem 2

Problem 1

The chopper measures 10.8 x 5.1 x 5.3 inches, which takes a lot of space in a limited space.

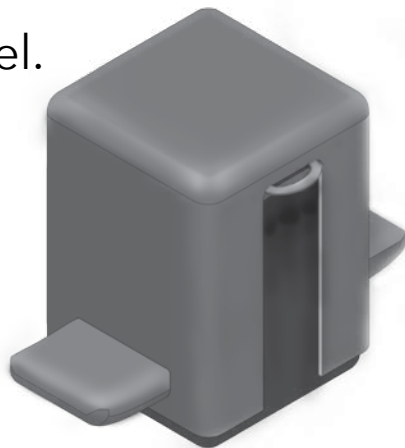






- Used the second strategy mentioned.
- Although it makes pressing easier, the structure is too complicated to fit in daily use

- Used the first strategy mentioned.
- Figured out the method to make the final model.

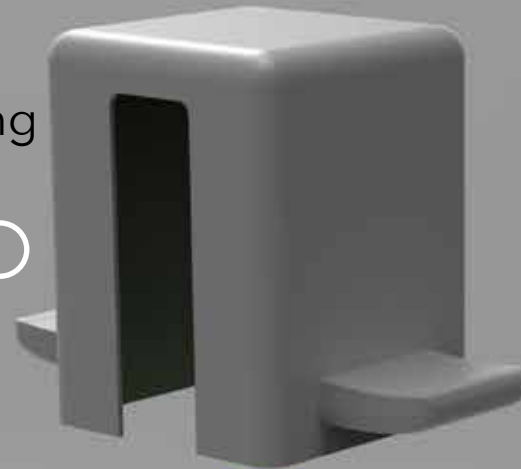
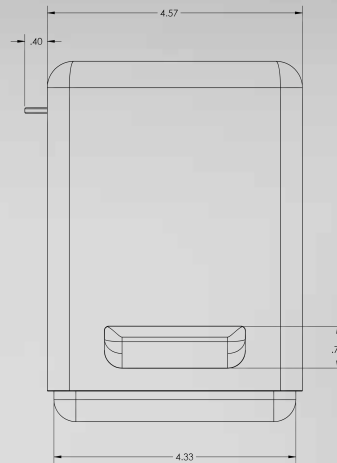
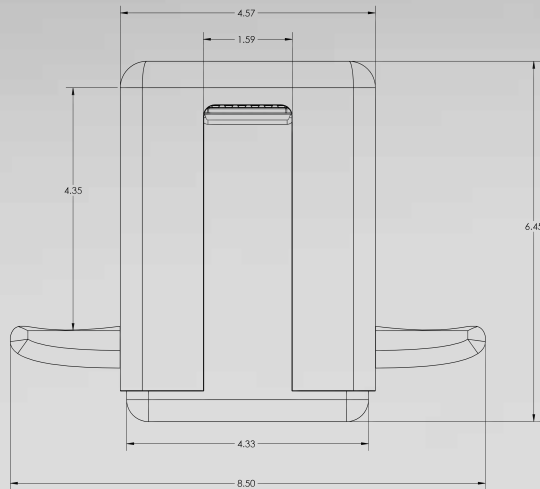
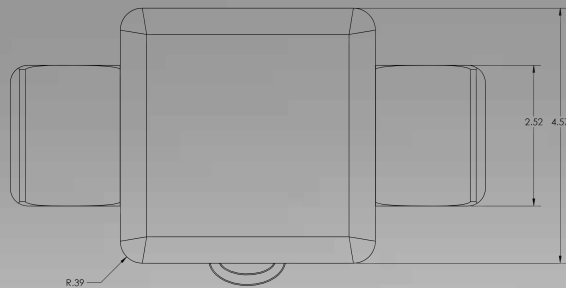


+ Redesigned Product

Design features

Change in direction of using the product.

Adding handles to make it easier to grab and press.



The holder to help hold the food.

Blades remain unchanged.



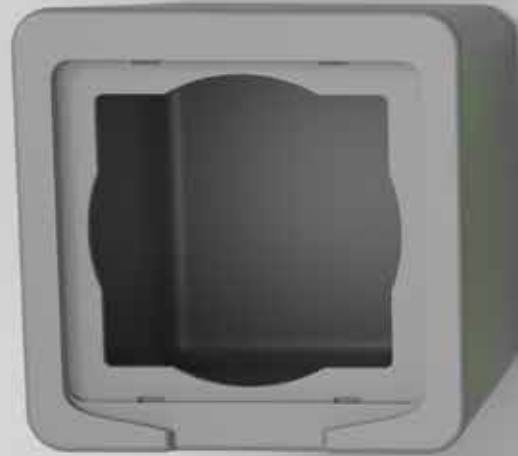
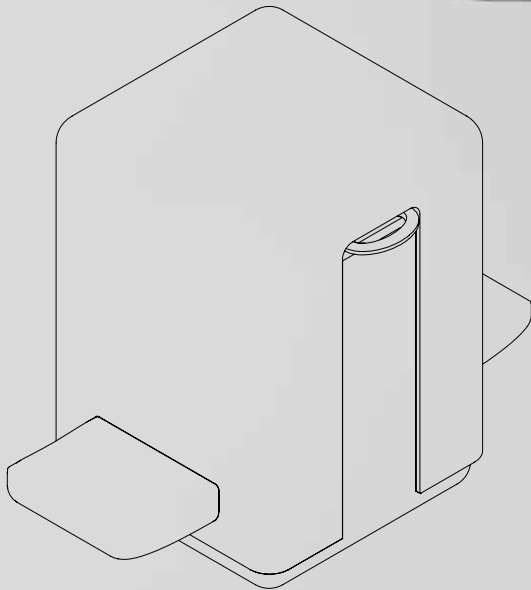
A simpler structure

Takes less space and is easier to grab with hands.

+Redesigned Product

Rough surface designed for the convenience of grabbing.

Different blades for different foods.



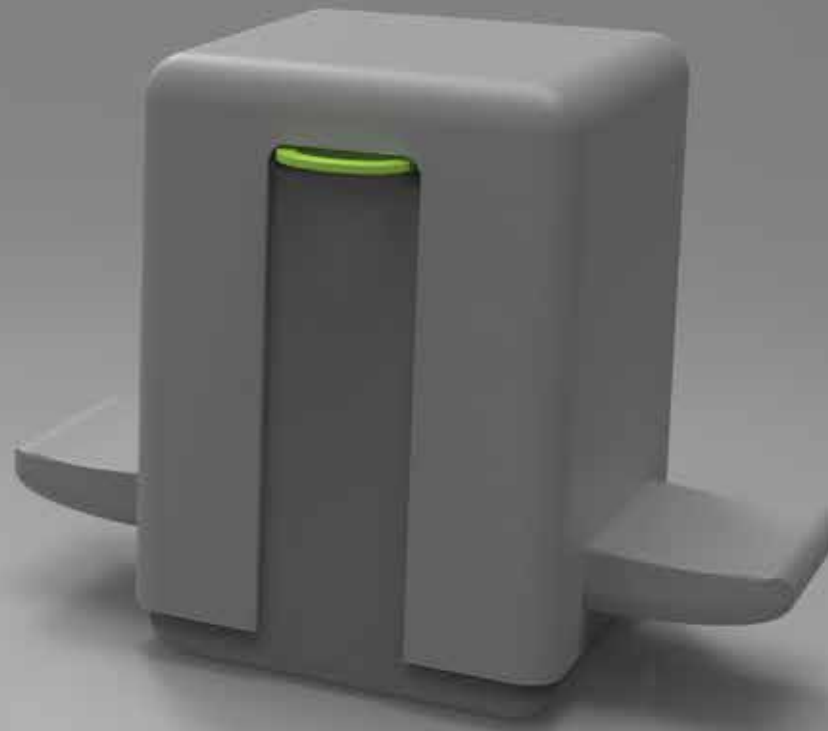
A bright color adds vitality to your kitchen.







Simple,
Useful.



Momon

A special meal prep container



Authentic Human Behavior

The goal for this project is to identify a problem through observing human behaviors. The problems caused by unconscious human behaviors in daily life create opportunities for better designs.

Possible targets:



The place to put wet kitchen gloves



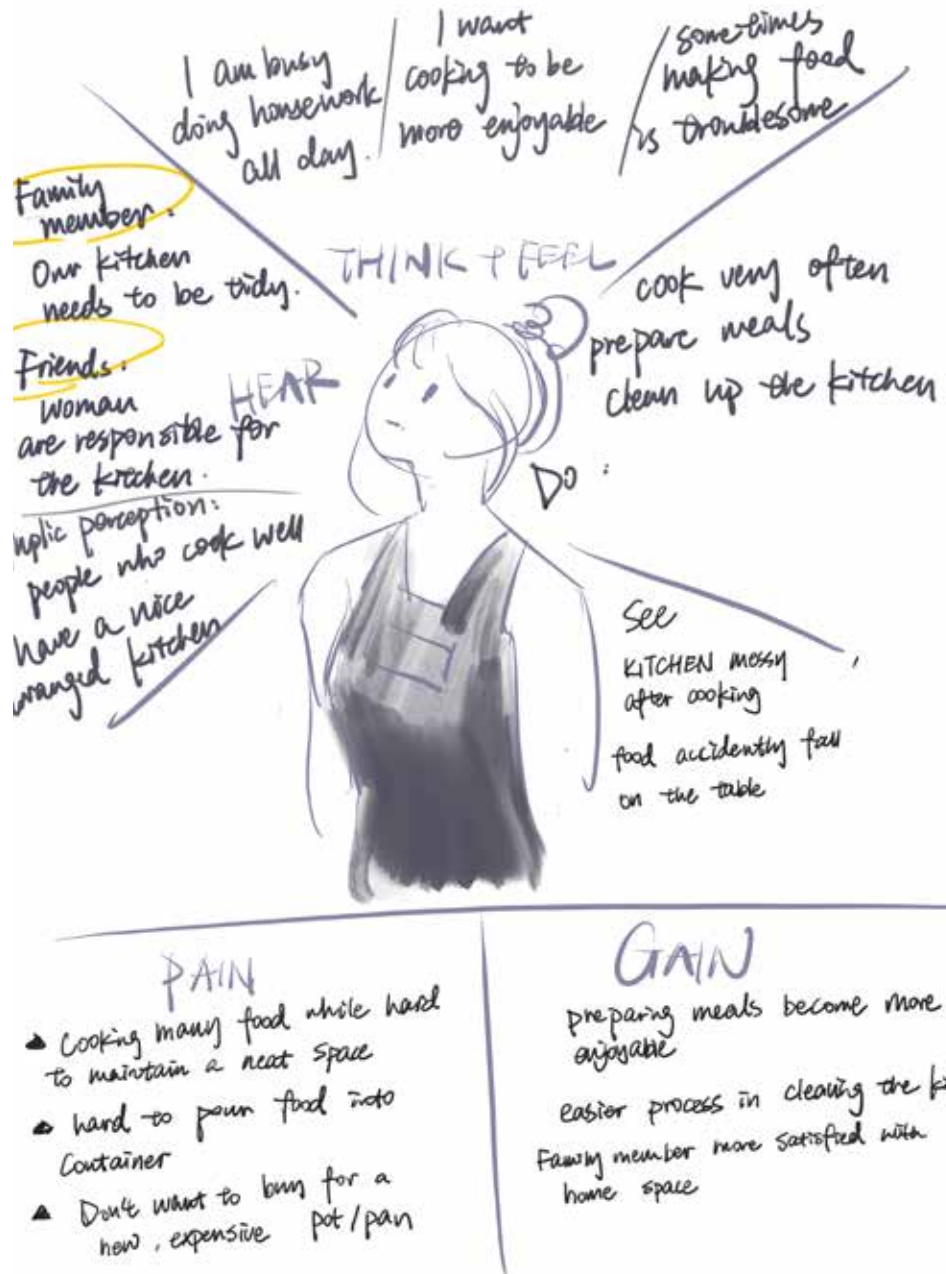
The scoring when flipping the pages



Pouring food out of a pan



Tearing a piece of tissue



Kitchen is a place where interactions between human and objects are constantly happening.

Target user:

People who usually need meal preparations.

Specifically home makers and people who work everyday and live alone.

Persona:

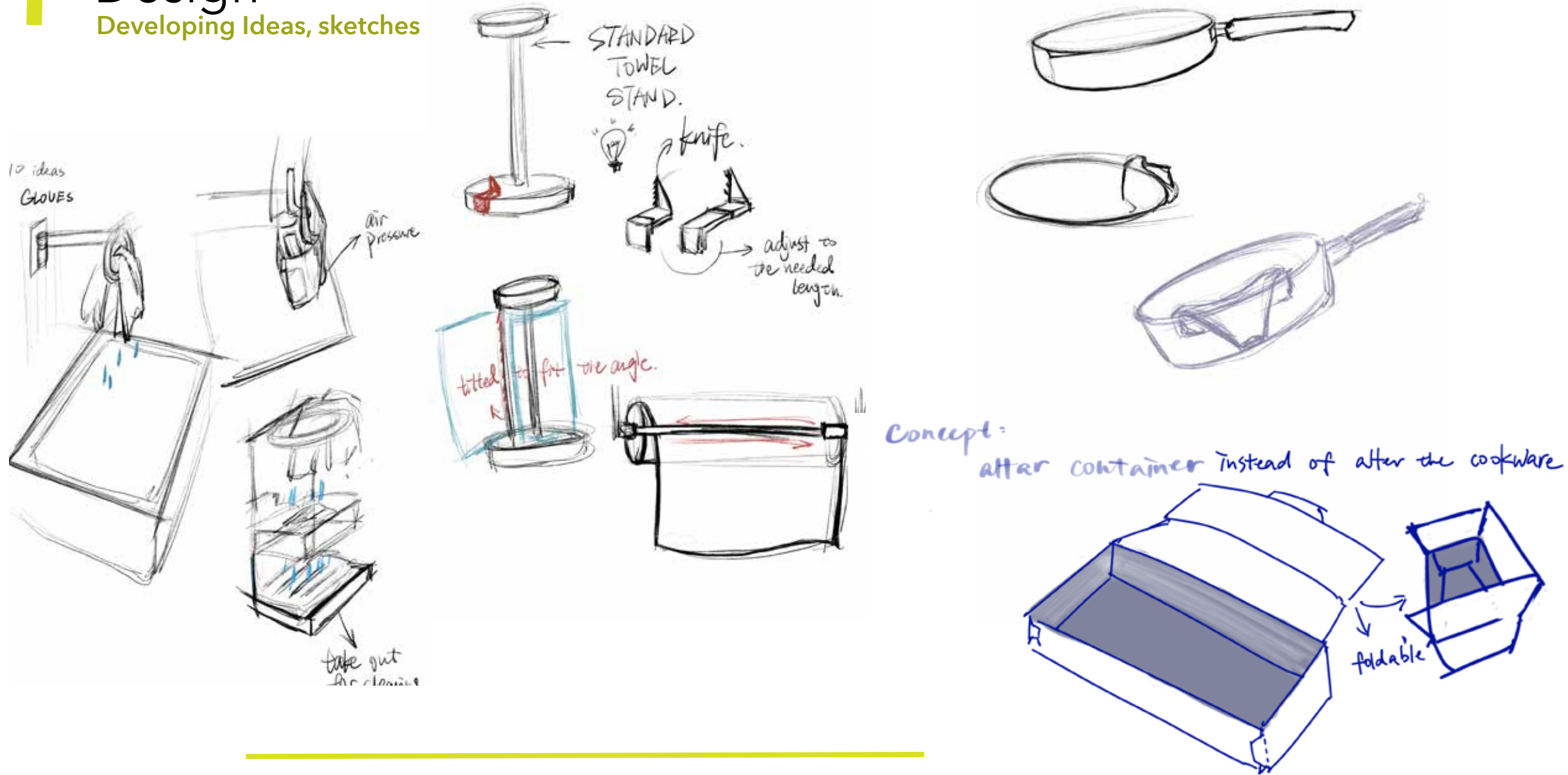
Jane

30 years old with 2 children

Needs to prepare meals for her family

Has her own career

Has limited time to cook



After sketching out a few ideas, I decide to go further with the meal-prep container. It is more unique comparing with other ideas.

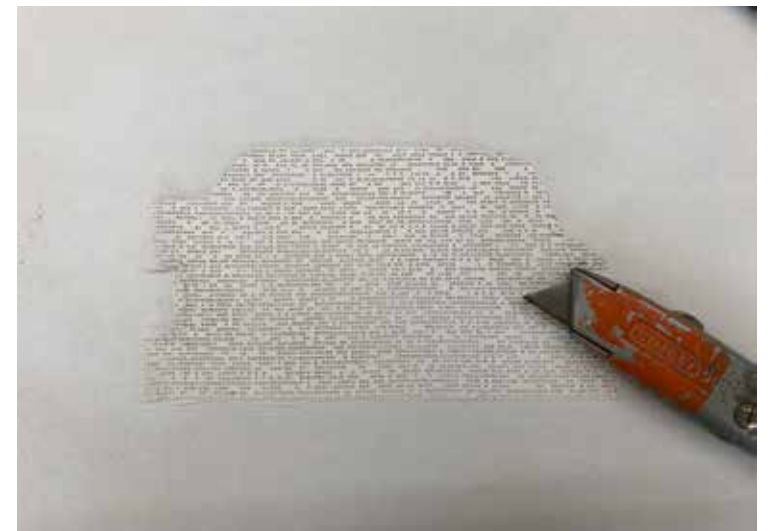
STORYBOARD



Building the storyboard while thinking about the entire process of people interacting with it.

+ Modeling

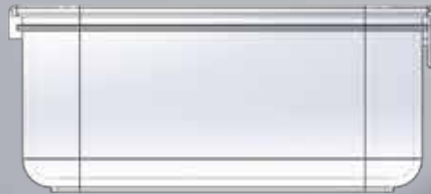
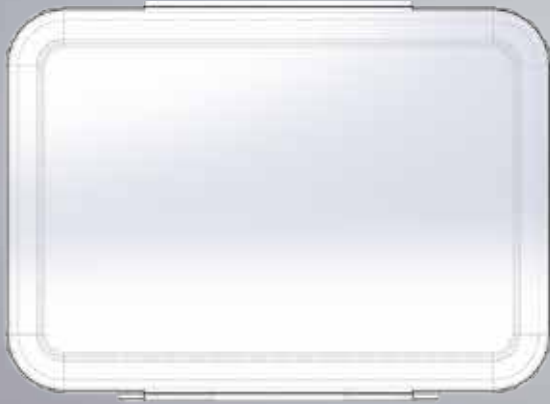
Prototyping



I went through paper models, functional models..etc.
The methods for making the final model change through the process.

+ Modeling

Final model



A clean appearance that conveys the idea that cooking should always be simple and easy.



They prevent food from leaking out when people pour food into the container.



The two sectors connecting the lid automatically expand out when people opening the container.

Two hard tabs are built inside the soft material to provide support.

Open it with the joy of making food,
without the worry of messing the kitchen.



TOPAZ

A smart home light solution



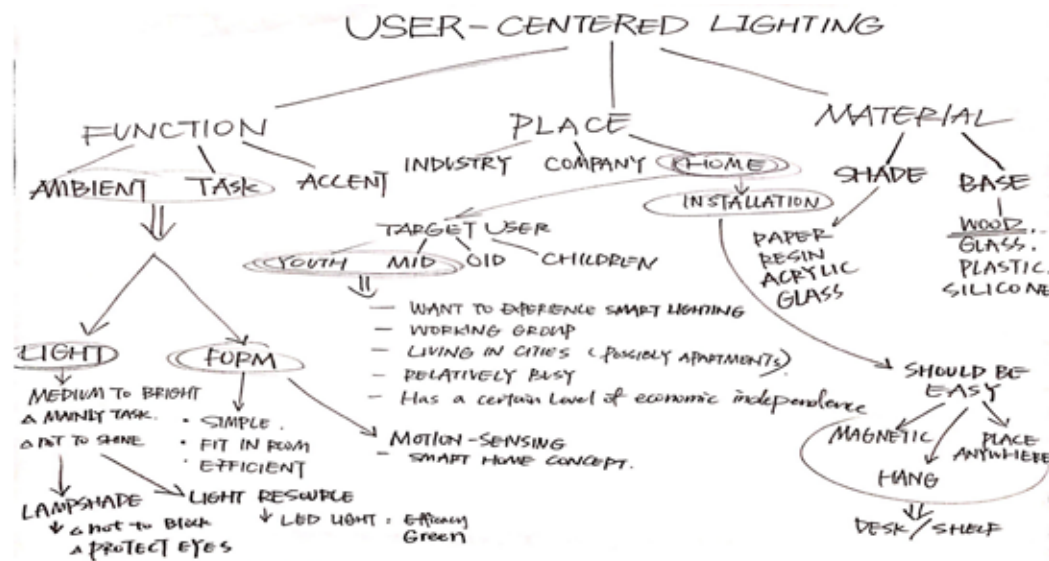
+ Research

Interviews, mindmapping & observations

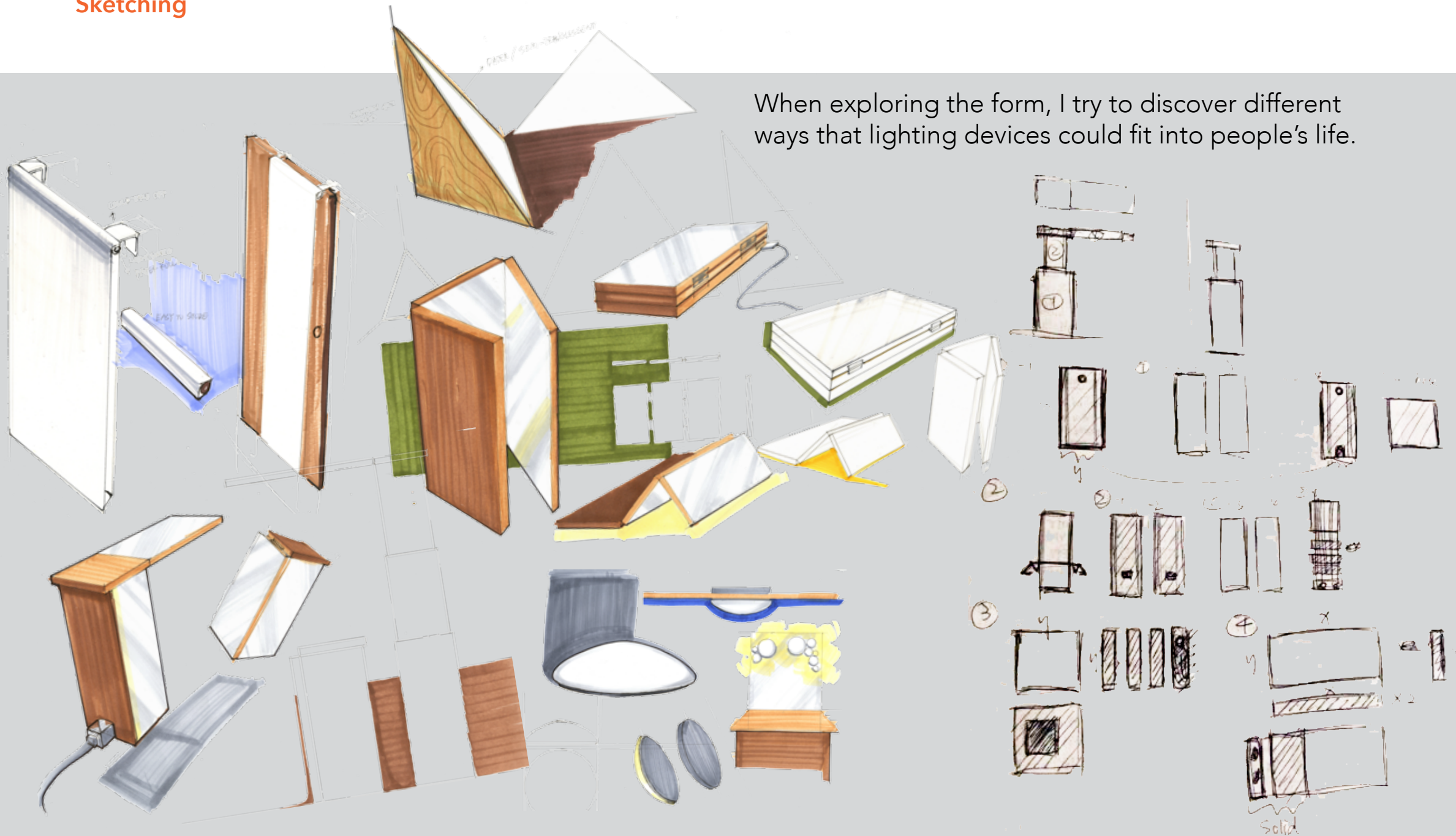
This project aims to design a lighting device based on users' experience.



- Energy-saving
- Smart-living
- Appearance
- Luminance
- Direct light
- Hard-to-find switch
- No adjustment

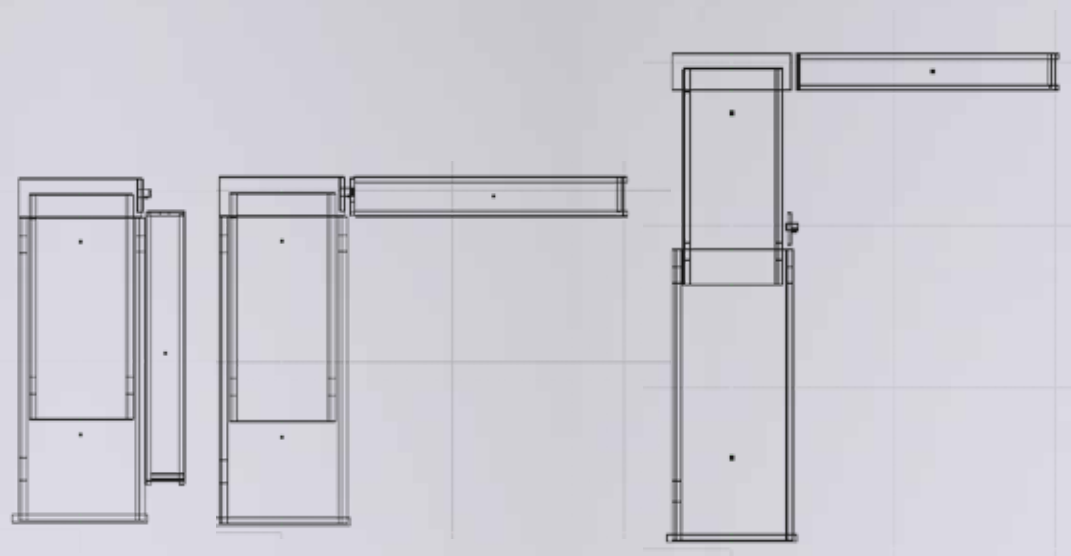


When exploring the form, I try to discover different ways that lighting devices could fit into people's life.





+ Design



Designed for people who live in a limited space, this design has an emphasis on the flexibility.

Foldable panel

Space-saving / reading & ambience light

Joint Bayonet

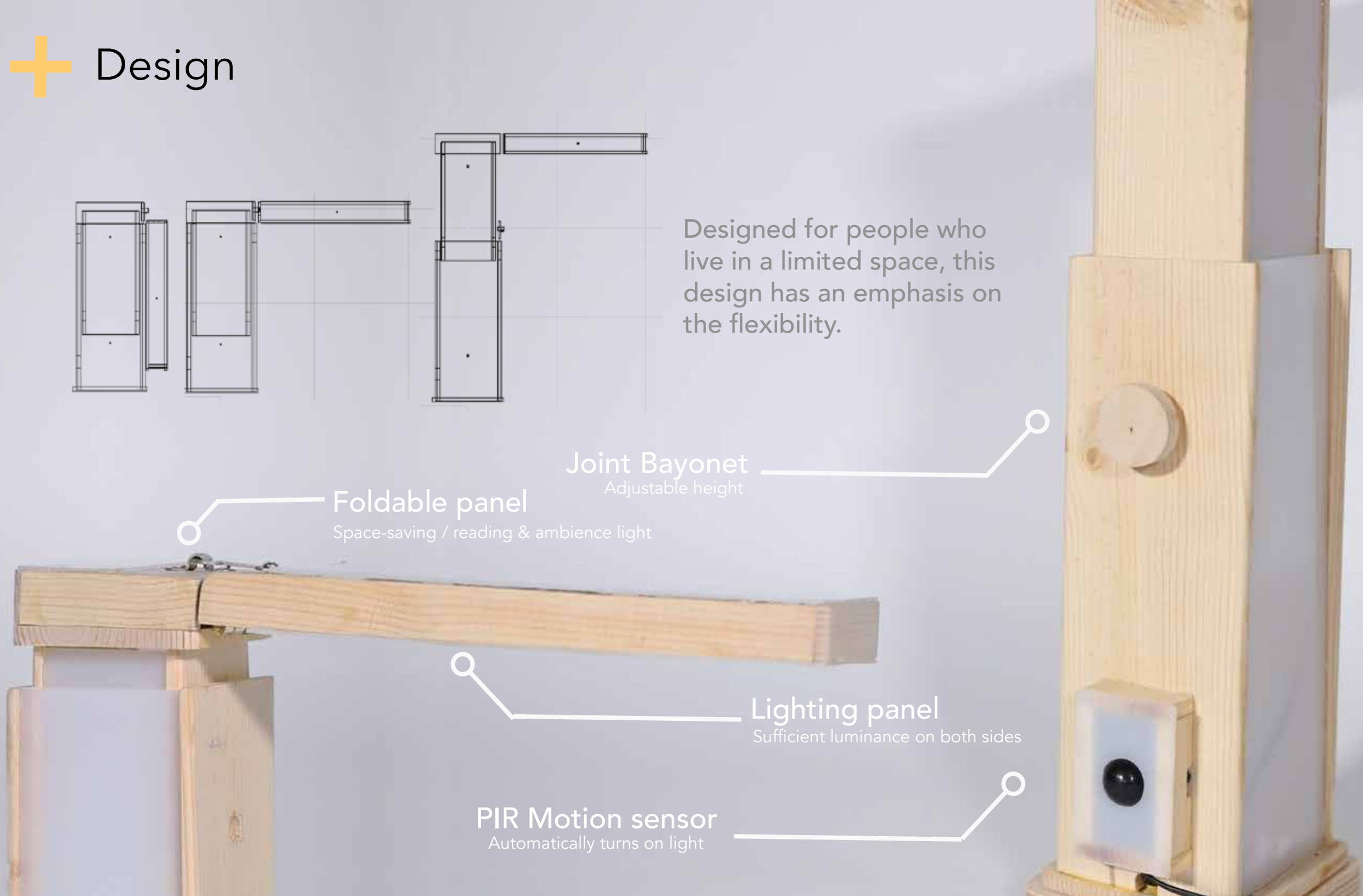
Adjustable height

Lighting panel

Sufficient luminance on both sides

PIR Motion sensor

Automatically turns on light



+ Realisation

A light that adds the sparks of smart and warmth to your home.



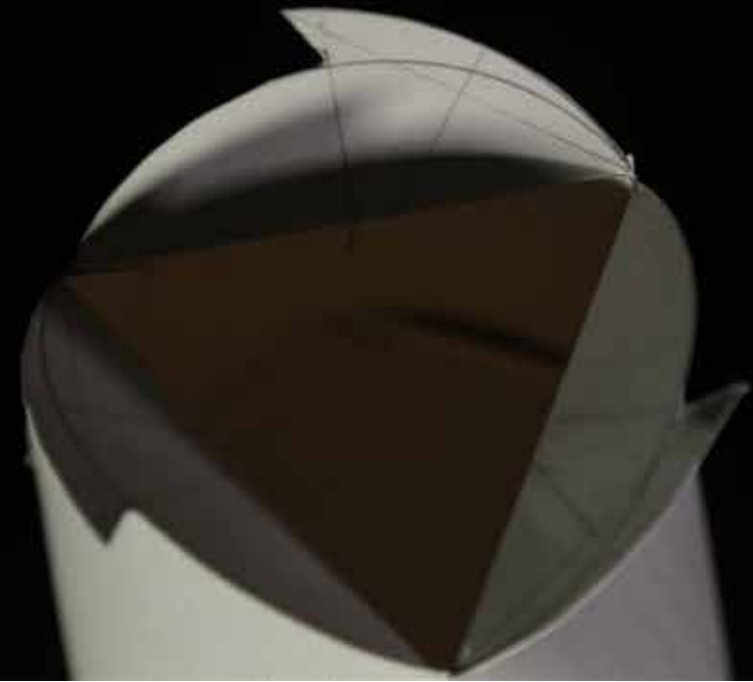
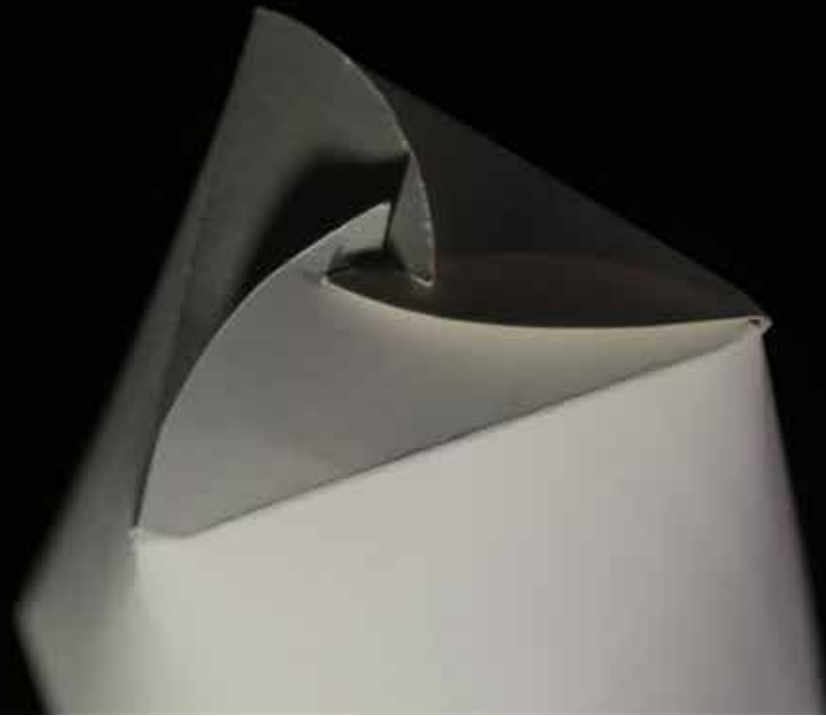
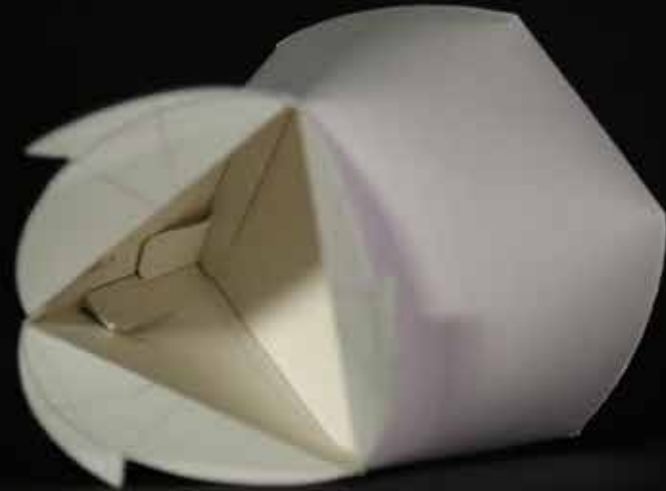


Package Design



+ Structure

The entire structure is folded out of a piece of paper, without any glue.



+ Appearance

A package design that embedded with the fluidness of paper. Simple, and elegant.



Research

Interviews, mindmapping & observations

IDEAS & SKETCHING

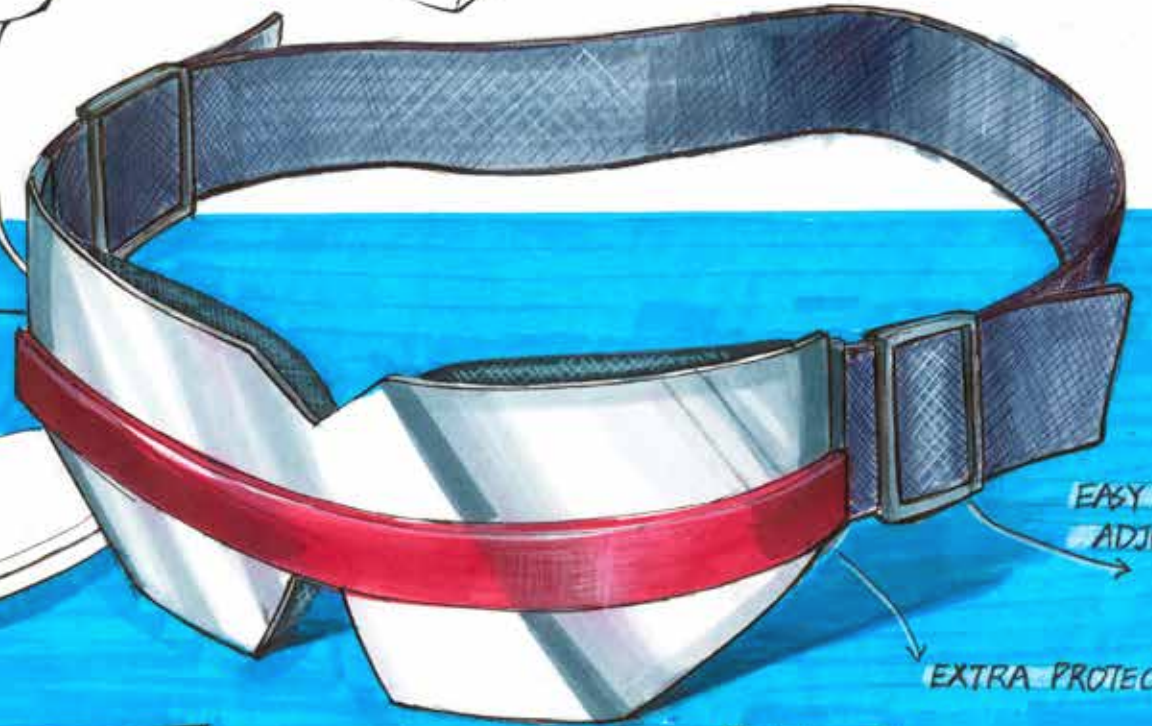
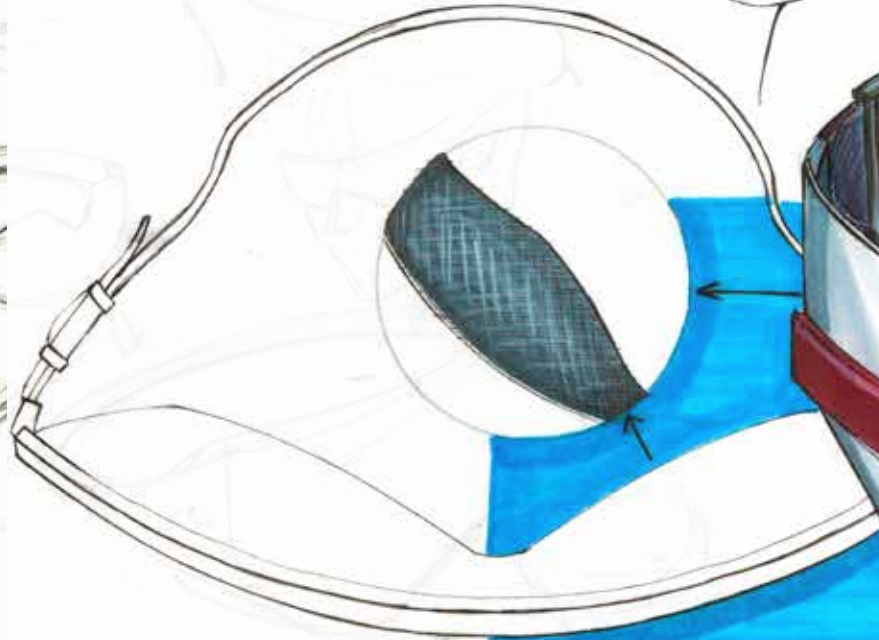
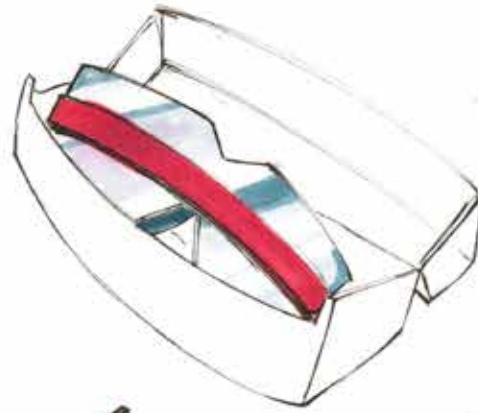


IRENE CHEN
SECTION A81
ASSIGNMENT A
OCT 24

IRENE CHEN SECTION A81
ASSIGNMENT A OCT 11

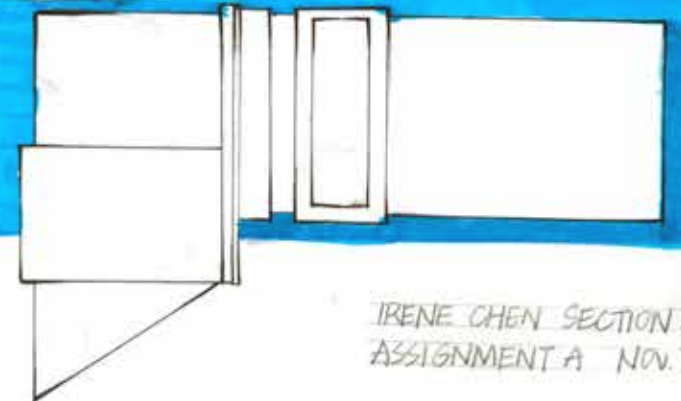
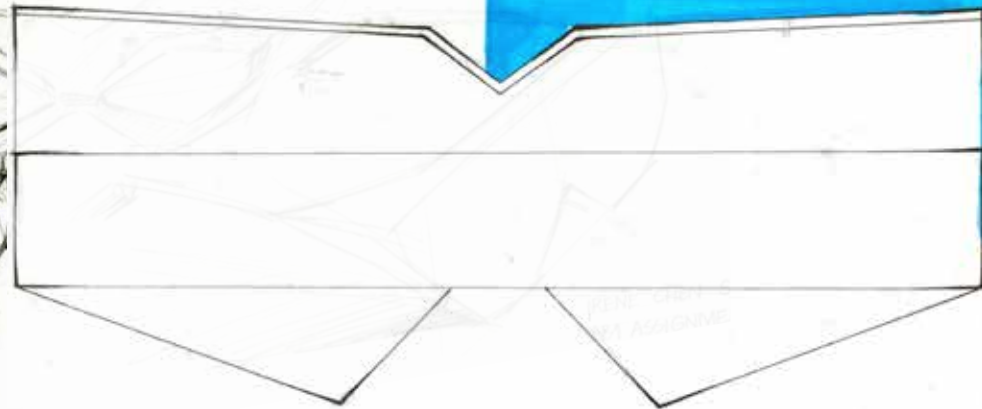
IRENE CHEN SECTION A81
ASSIGNMENT 5 OCT 11

TACTIC

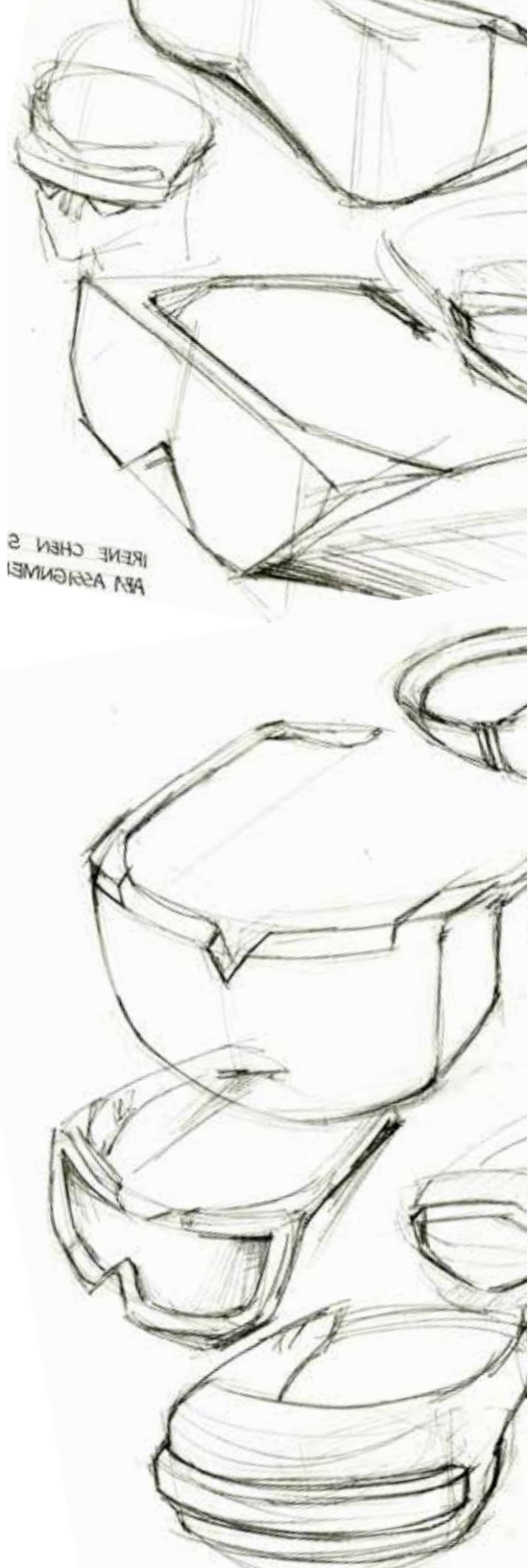


EASY TO
ADJUST

EXTRA PROTECTION



IRENE CHEN SECTION AB1
ASSIGNMENT A NOV. 7



IRENE CHEN 2
AB1 ASSIGNMENT A

