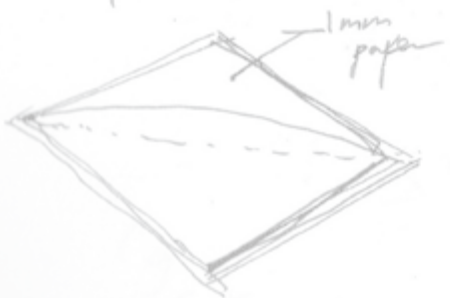
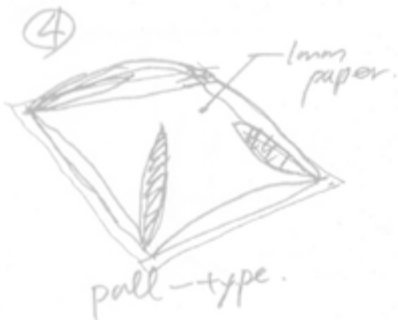
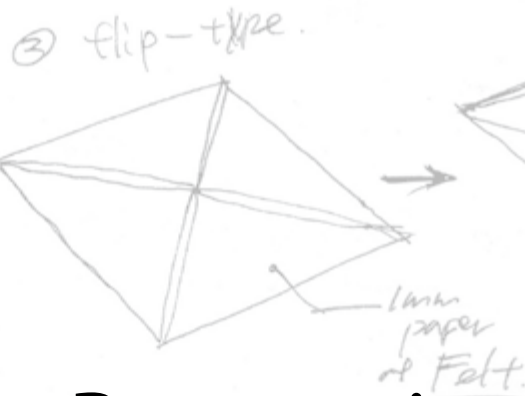
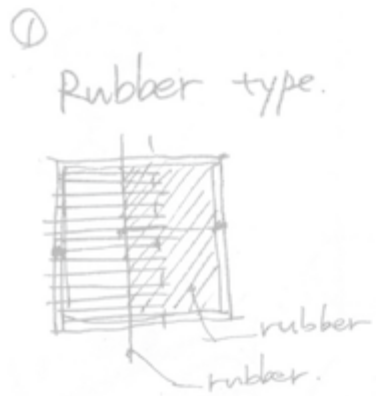
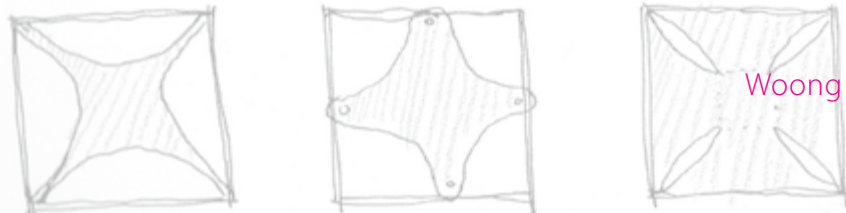


Crafting Material assignment07



- hardware = pins.
- wood board.
- 1mm paper.
- 25.5/2

1 Aperture Type

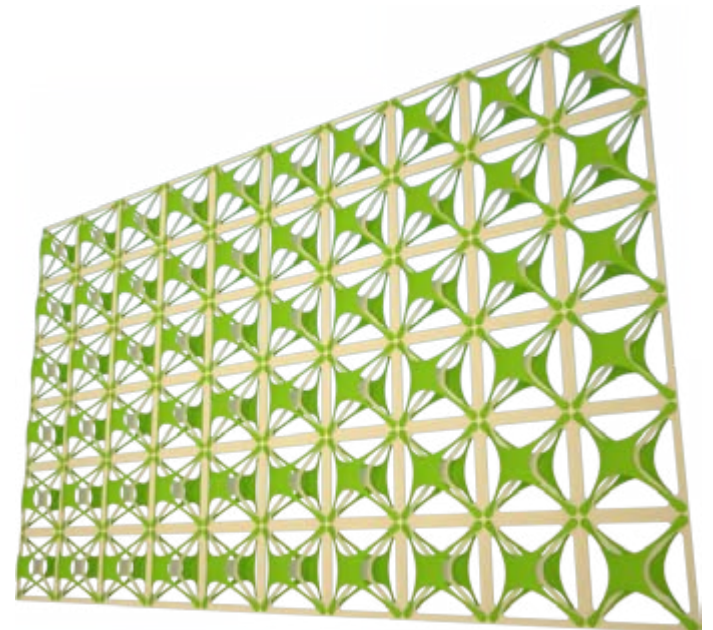
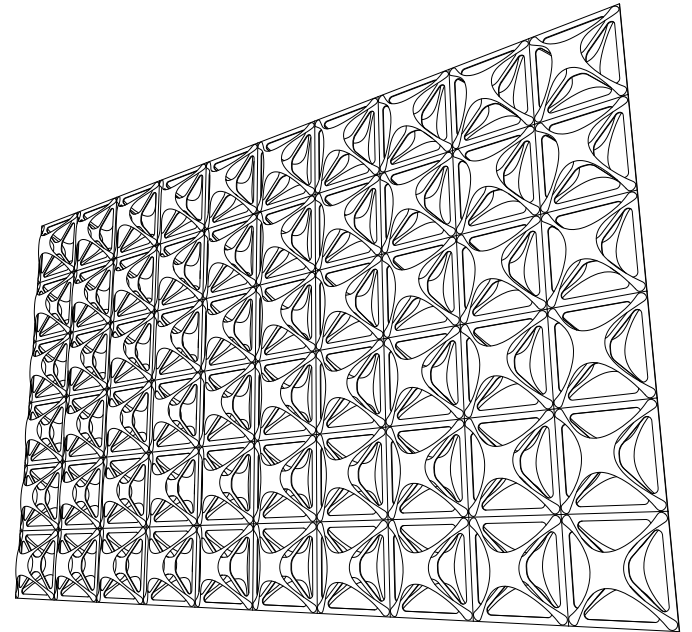


Woong Ki Sung

Project Description

[Responsive Surface]

The goal of the final project is to investigate possibility to make a responsive surface (or facade,) which can effectively react to the environmental changes with simple structure and technology.



A Preliminary Survey

Ongoing researches and precedents



Q1 headquarters building / JSWD Architekten



Open restaurant in Amsterdam / CIE architects

Concepts

From Precedents

[Weakness]

High cost

Maintenece

Noise

The final project

[Keywords]

Interactive

Low cost

Easy to make

Functional

[Applications]

Installation

Interior wall

Smart facade

[Operation]

Passive

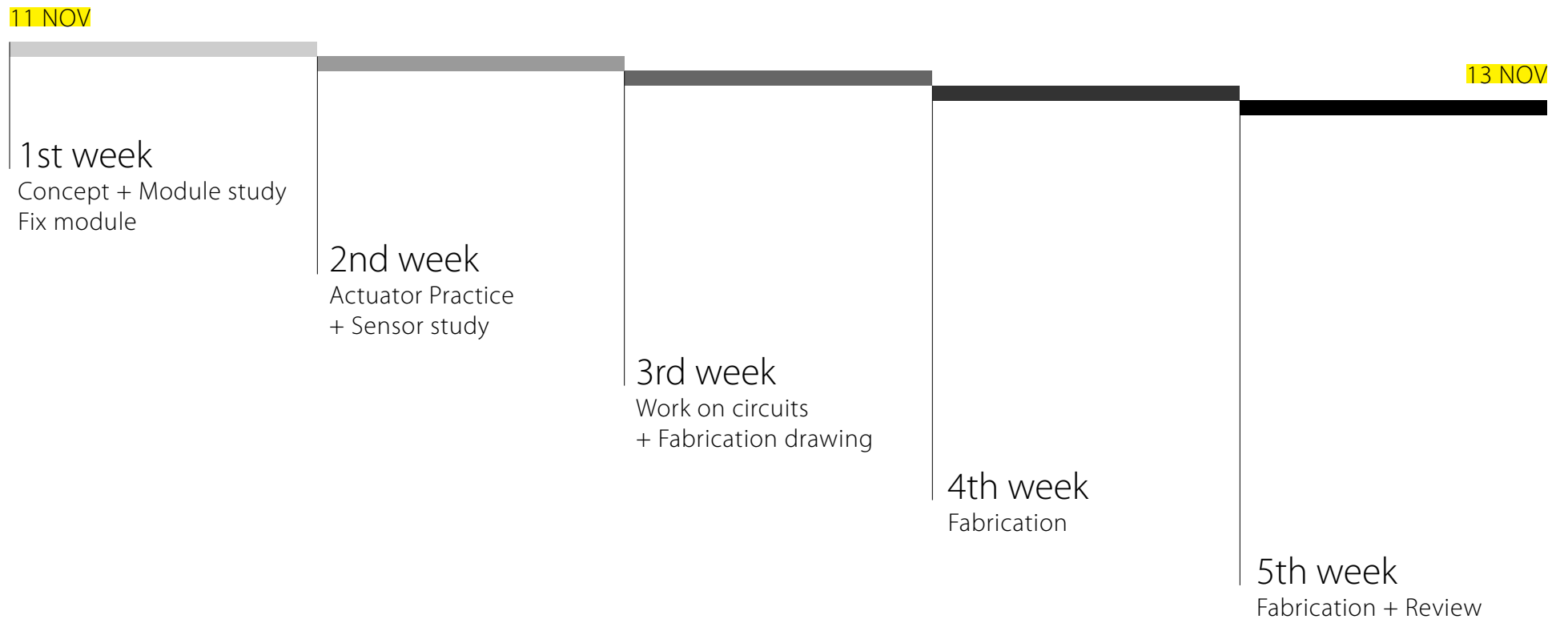
_Respond to the environment
(ex. Light, Temperature)

Active

_Programmed movement
_Respond to touch

Expected Time Line

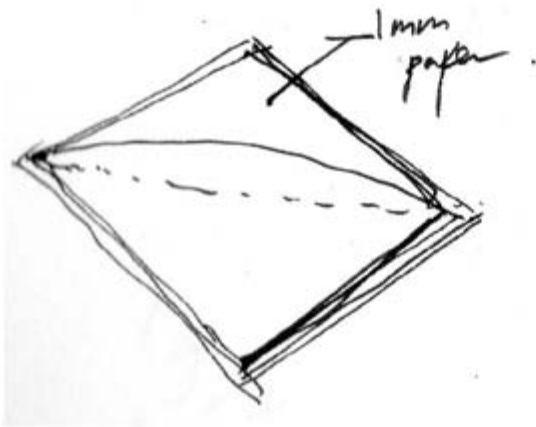
Ongoing researches and preliminary studies



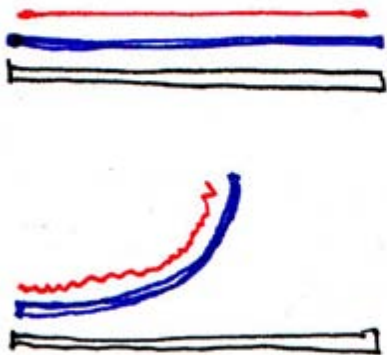
Module Study

type 1 : curling

- Sketch



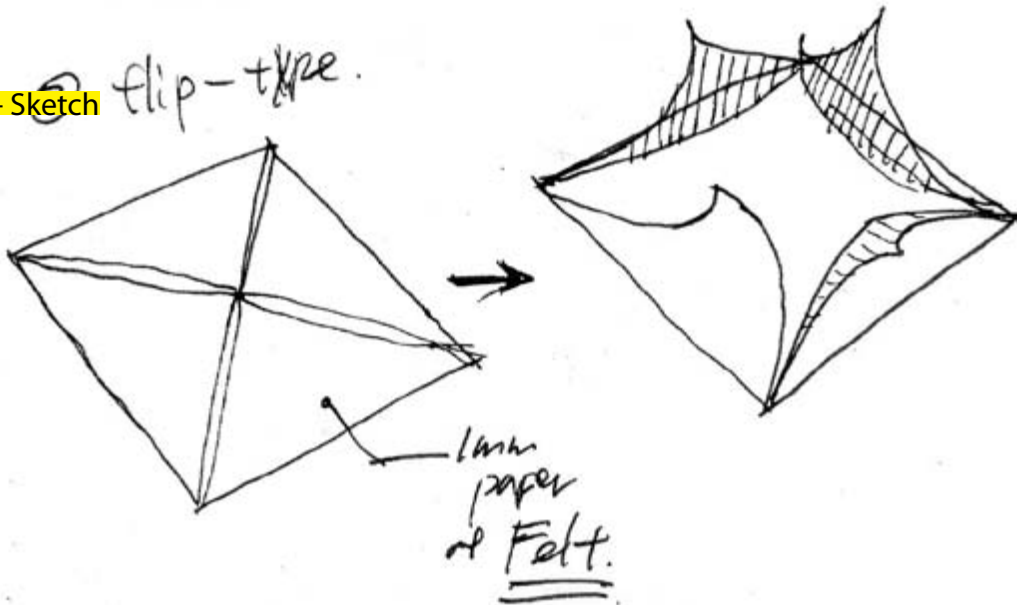
- Actuator



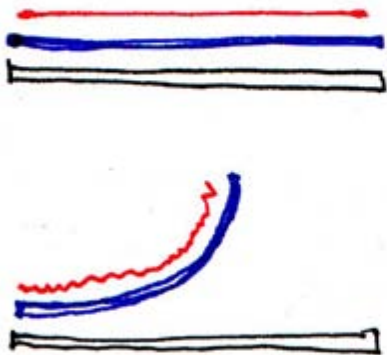
Module Study

type 2 : curling

- Sketch flip-type.



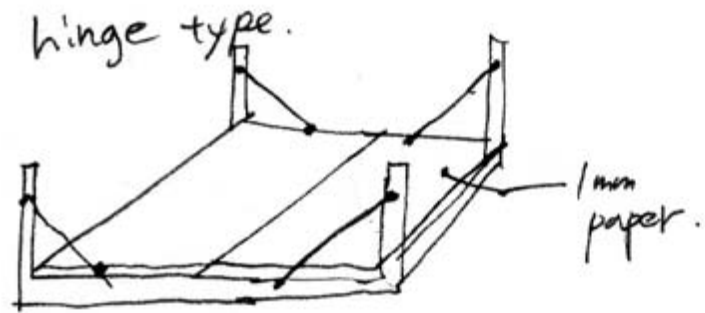
- Actuator



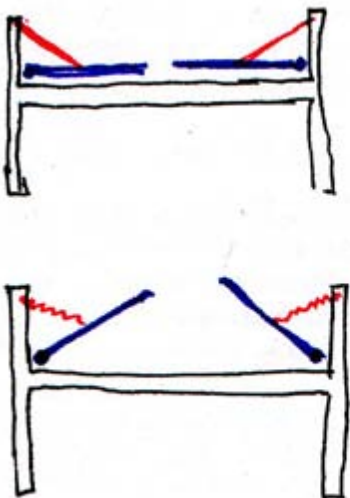
Module Study

type 3 : hinge

- Sketch



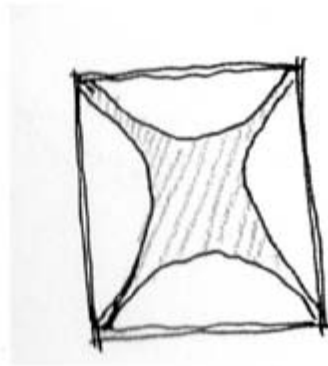
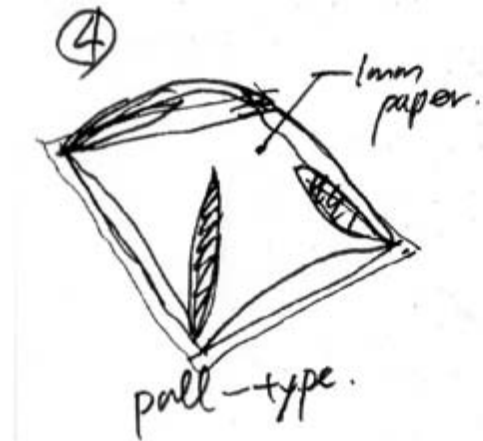
- Actuator



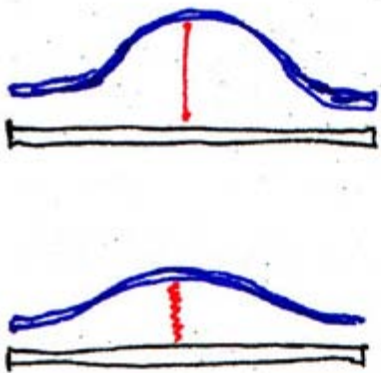
Module Study

type 4 : pulling_vertical

- Sketch



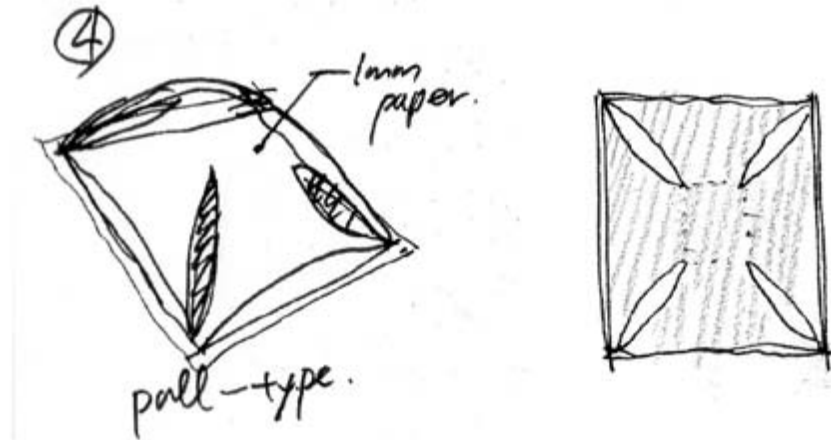
- Actuator



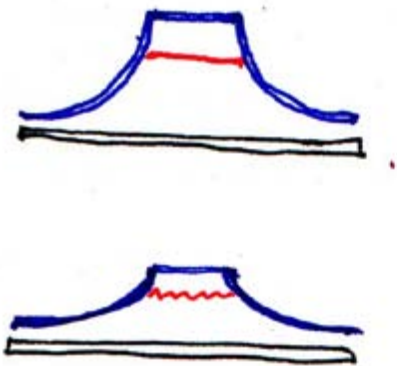
Module Study

type 5 : pulling_horizontal

- Sketch



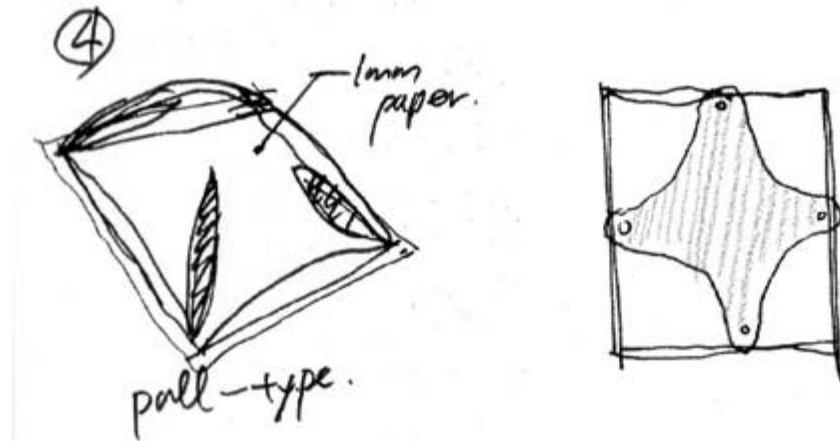
- Actuator



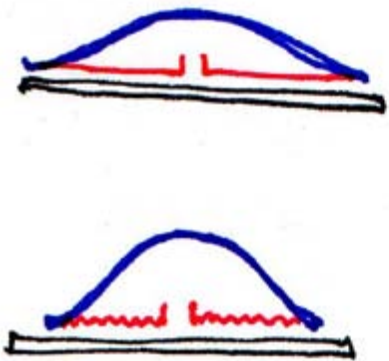
Module Study

type 6 : pulling_anchored

- Sketch



- Actuator

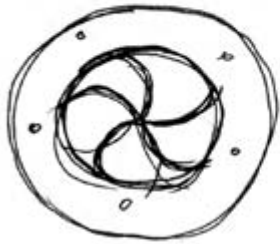


Module Study

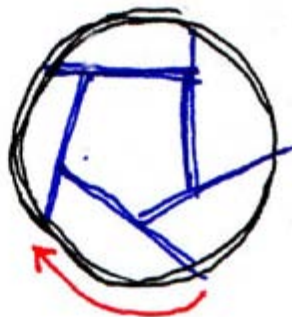
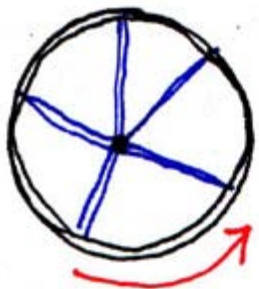
type 7 : aperture

- Sketch

⑤ aperture
+ pe.



- Actuator



Main Concerns

[Material]

Flexibility

Durability

[Structure]

Movement Control

Fabrication

[Circuits]

Movement Control

Sensor Control

nothing
more.

Thank You