

3
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DIN

PROCESSES

PROJECT 2
Planar Construction

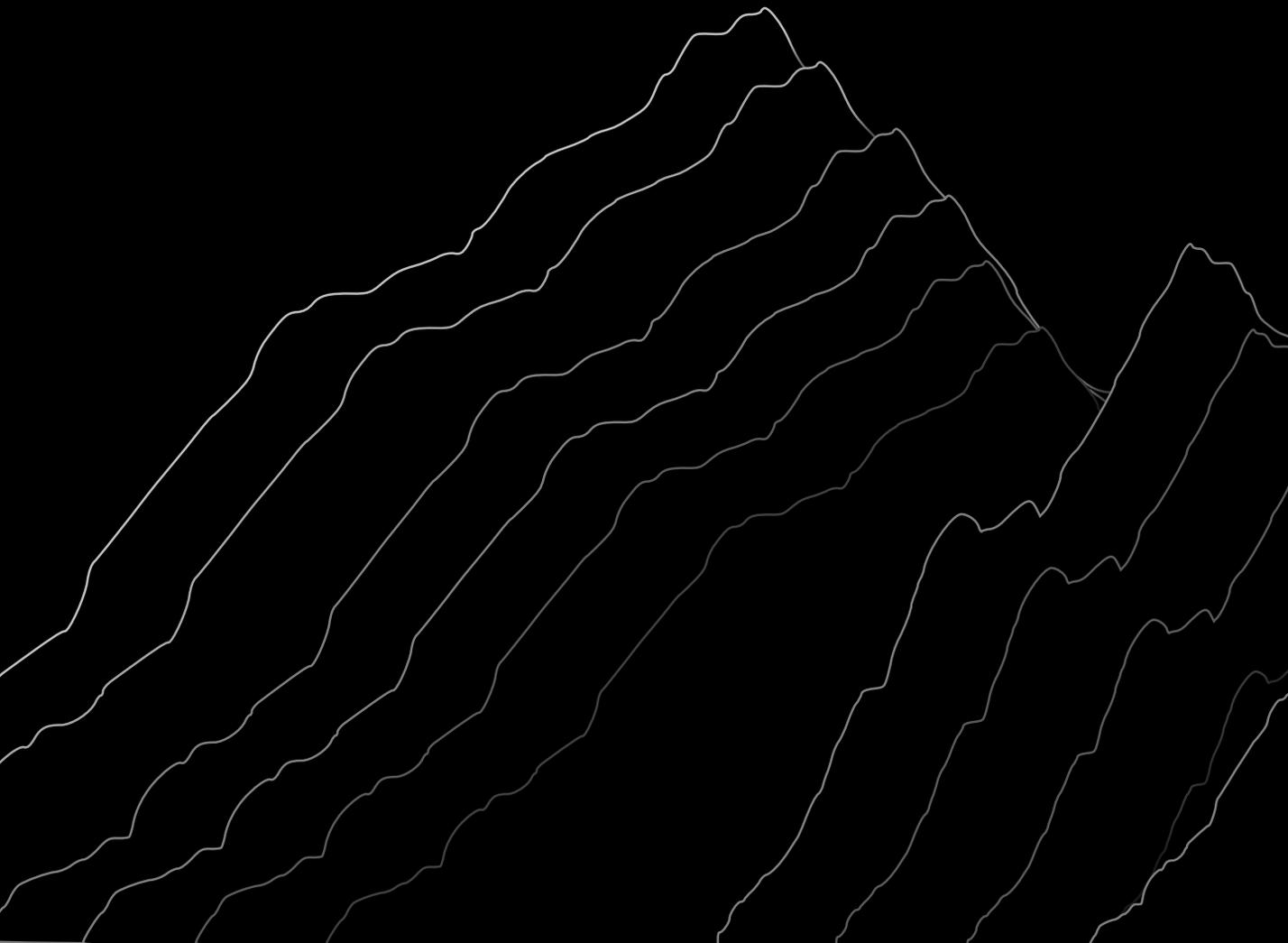
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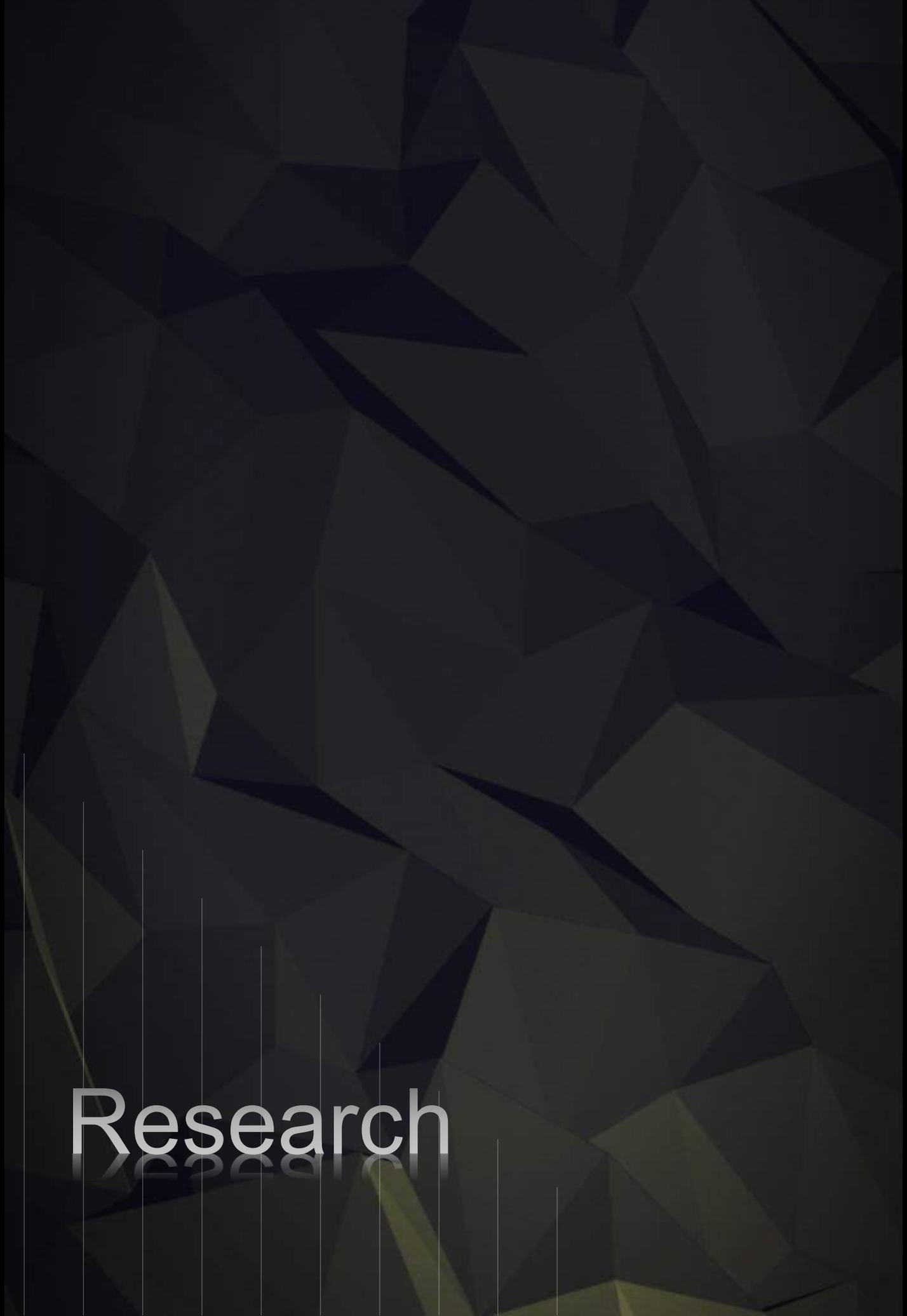
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Project Brief

To creates a combination of 3~5 planes which consists of the dominance, sub-dominance and sub-ordinate.





Research

Plane Characteristics

PLANE

A plane can be described as an element that has surface direction unaccompanied by mass

Is a path of a moving line

has width and length

Shape / surface

Orientation / position

Expresses direction and movement

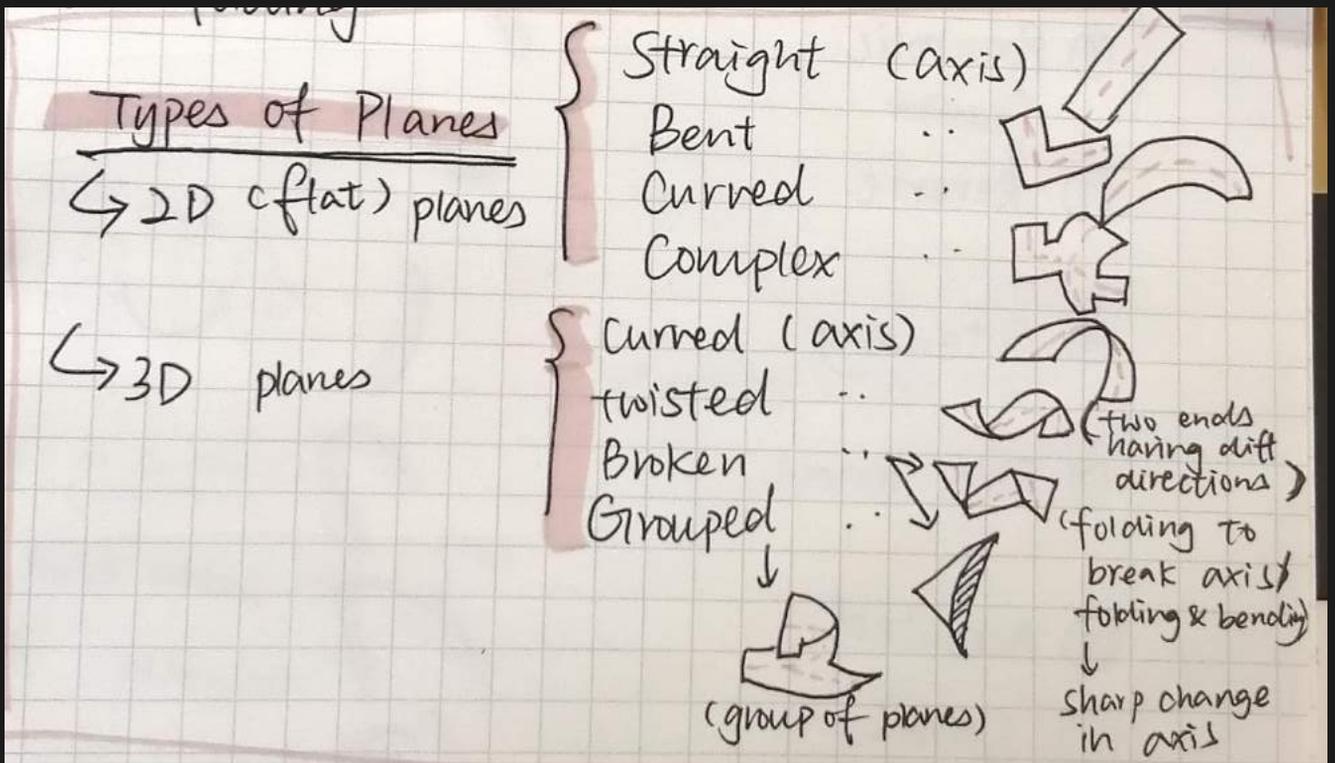
Expresses different axial quality

Planes can be 2D or 3D

Planes can be 2D or 3D

Expresses different axial quality

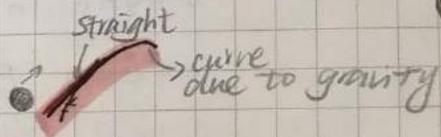
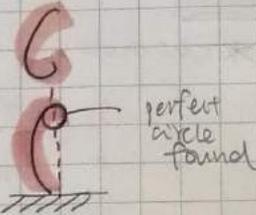
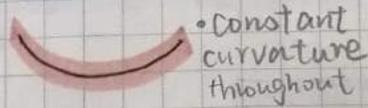
Type of planes



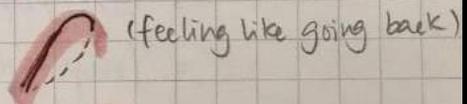
Type of axis

Types of lines / Axis

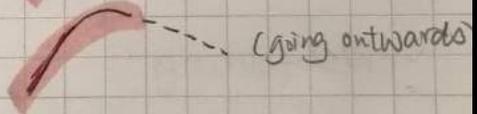
- Static
- ① Neutral (curve)
(any arc from a perfect circle)
 - ② Resting
 - SS
 - ③ Supporting
(spring up visually
when pressing downwards)



- Movement
- ④ Trajectory



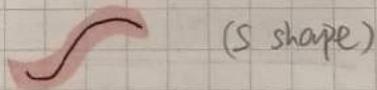
- ⑤ Hyperbolic



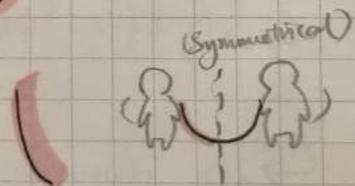
- ⑥ Parabolic

↑ similar

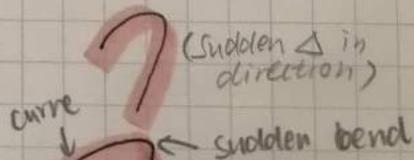
- ⑦ Reverse



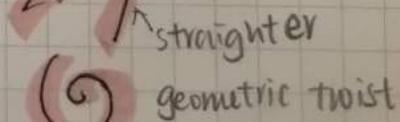
- ⑧ Catenary
(curve created by gravity)



- ⑨ Directional



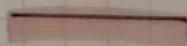
- ⑩ Accented



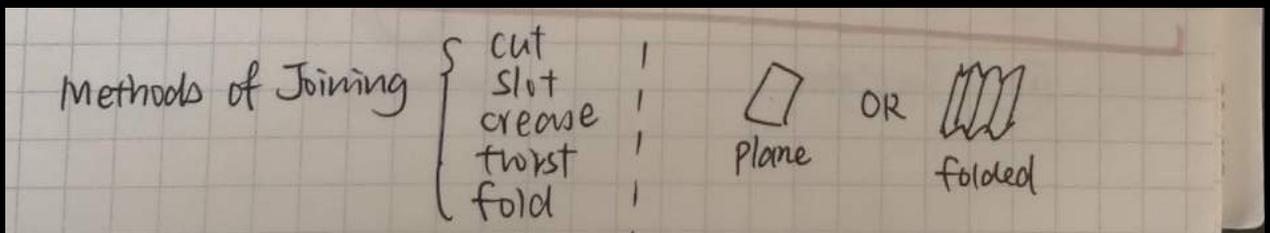
- ⑪ Spiral



- ⑫ Straight



Methods of joining



Sculpture



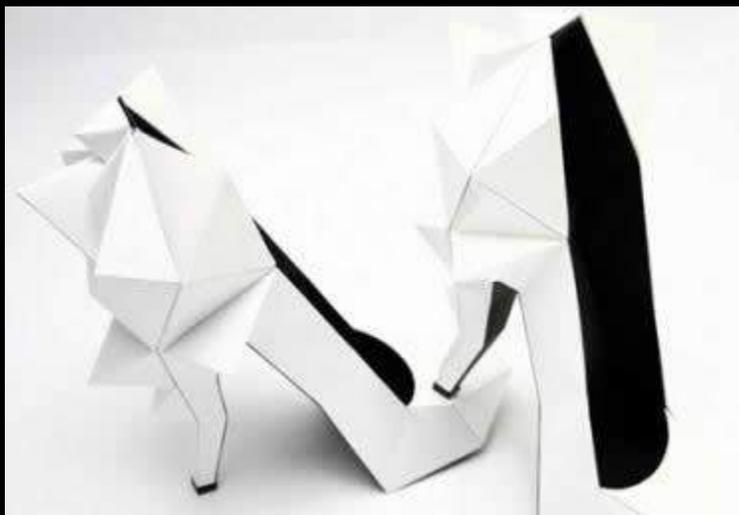
Using planar designs to show the movement and flow of the works.

Architecture & Furniture



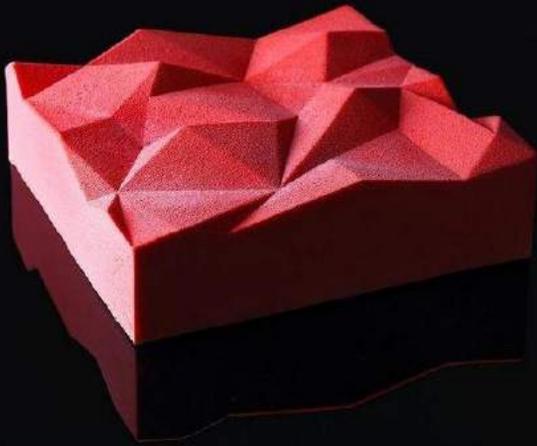
The positive and negative spaces are being emphasized, meanwhile, the empty gaps between each places divide the space into segments.

Fashion

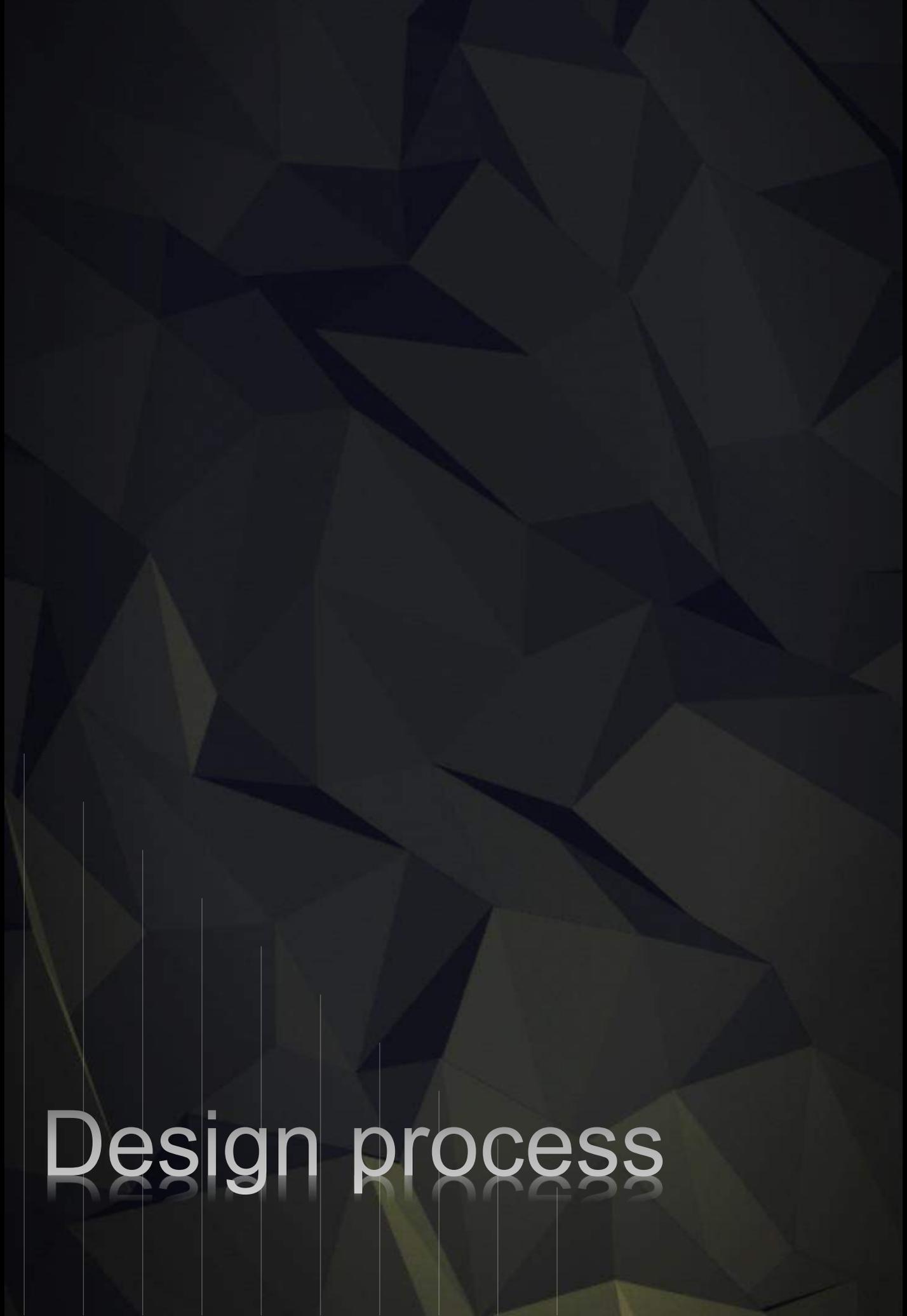


The folding effects of the planes create more layers and shadows, which gives an interesting effect.

Food



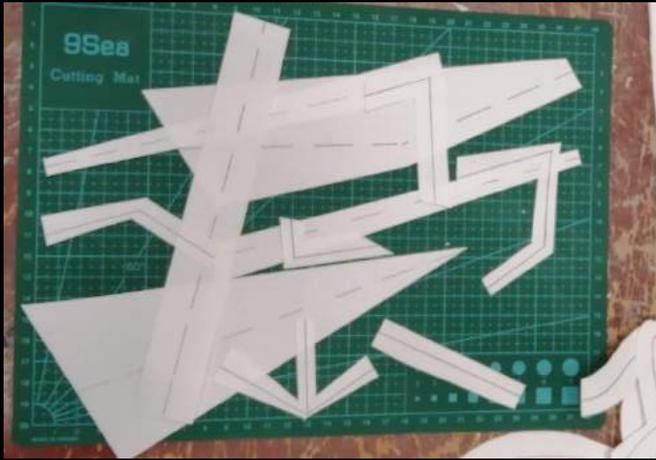
Looks aesthetically pleasing and increase the level of steadiness.



Design process

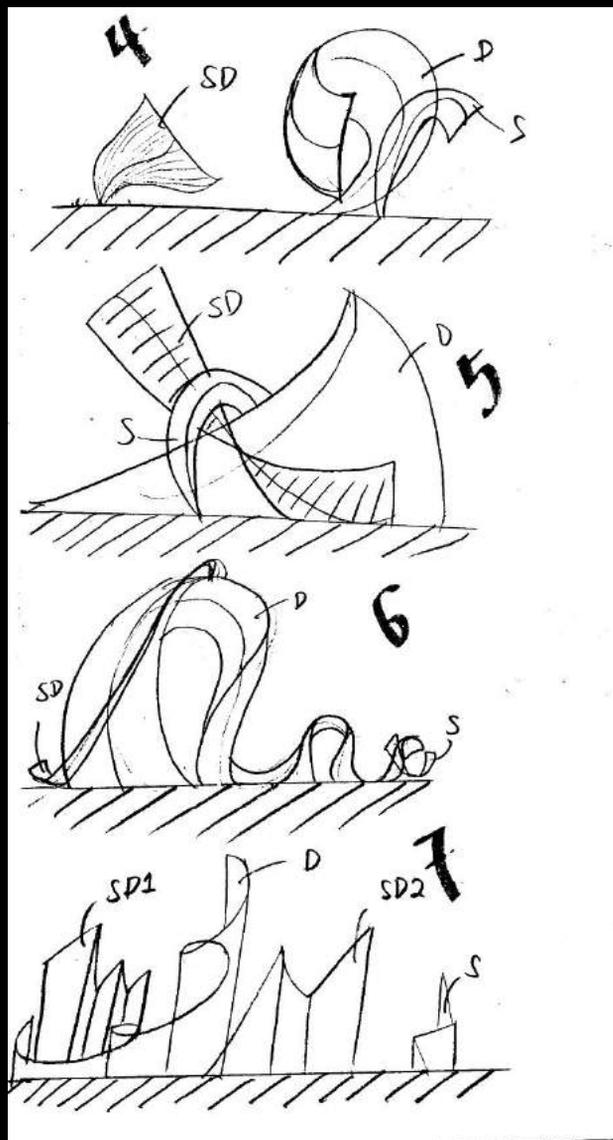
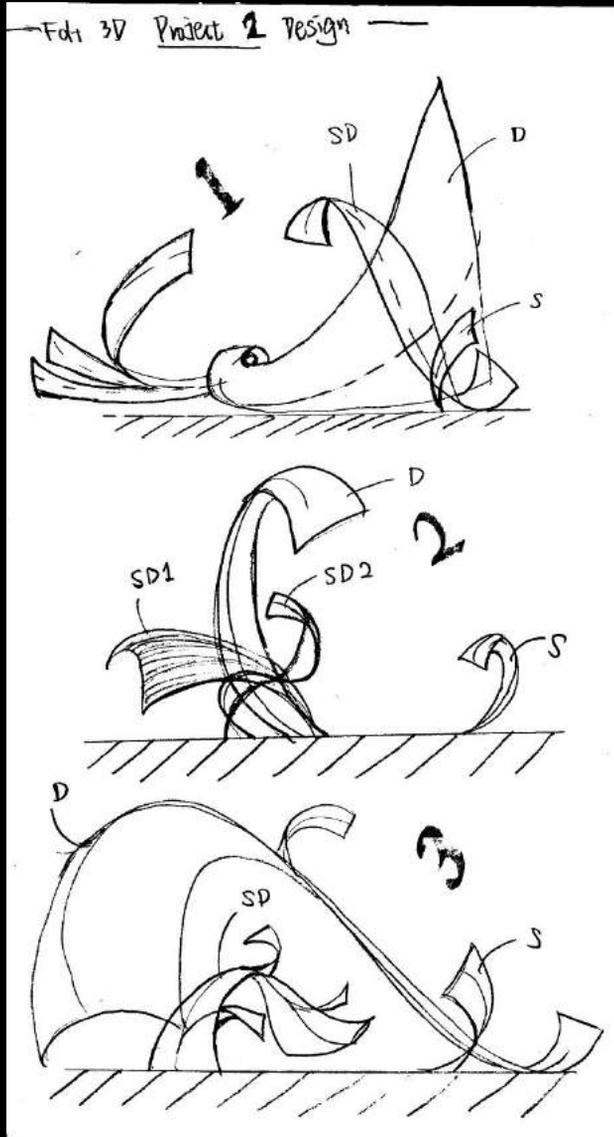
Experiments

Construct a variety of 2d and 3d planes

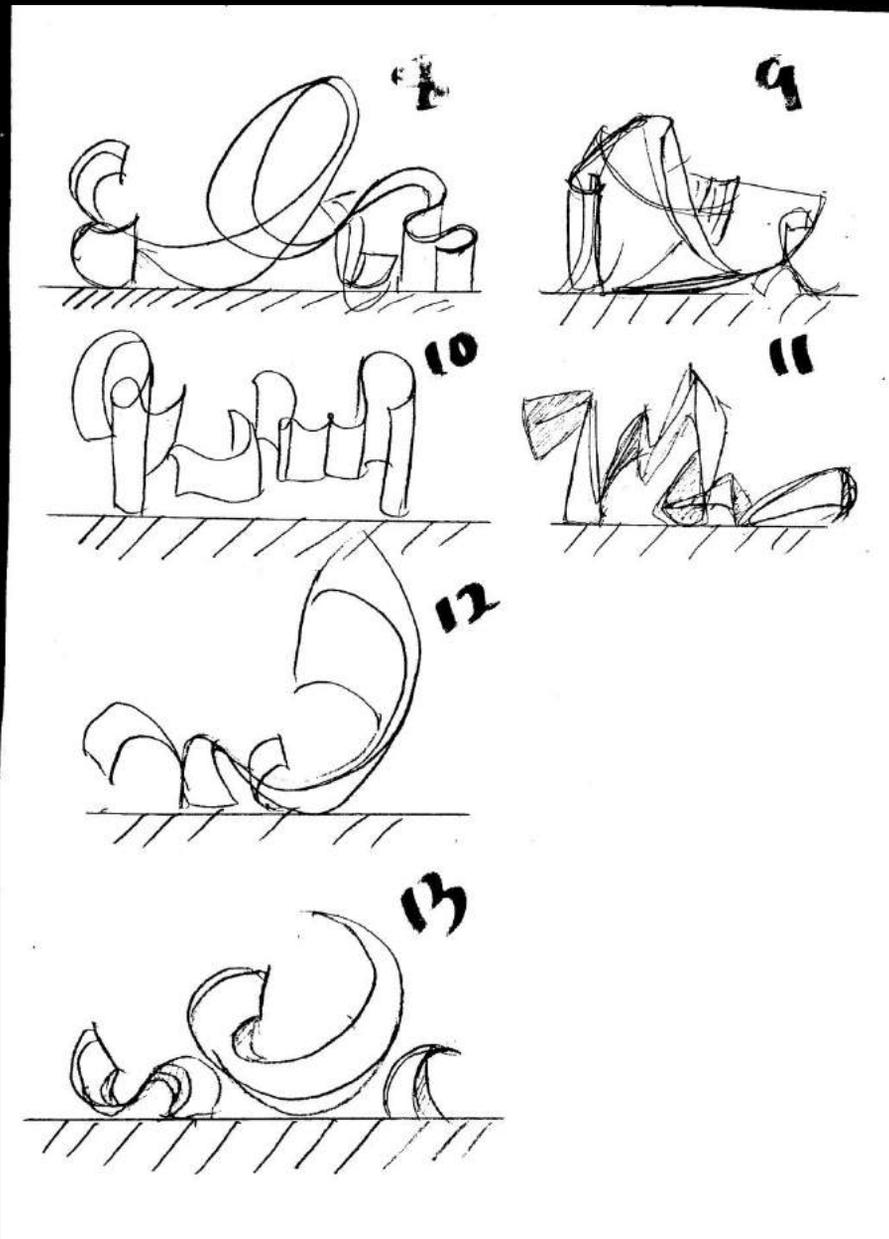


Firstly we started from cutting certain planes with different axis and try to assemble them together.

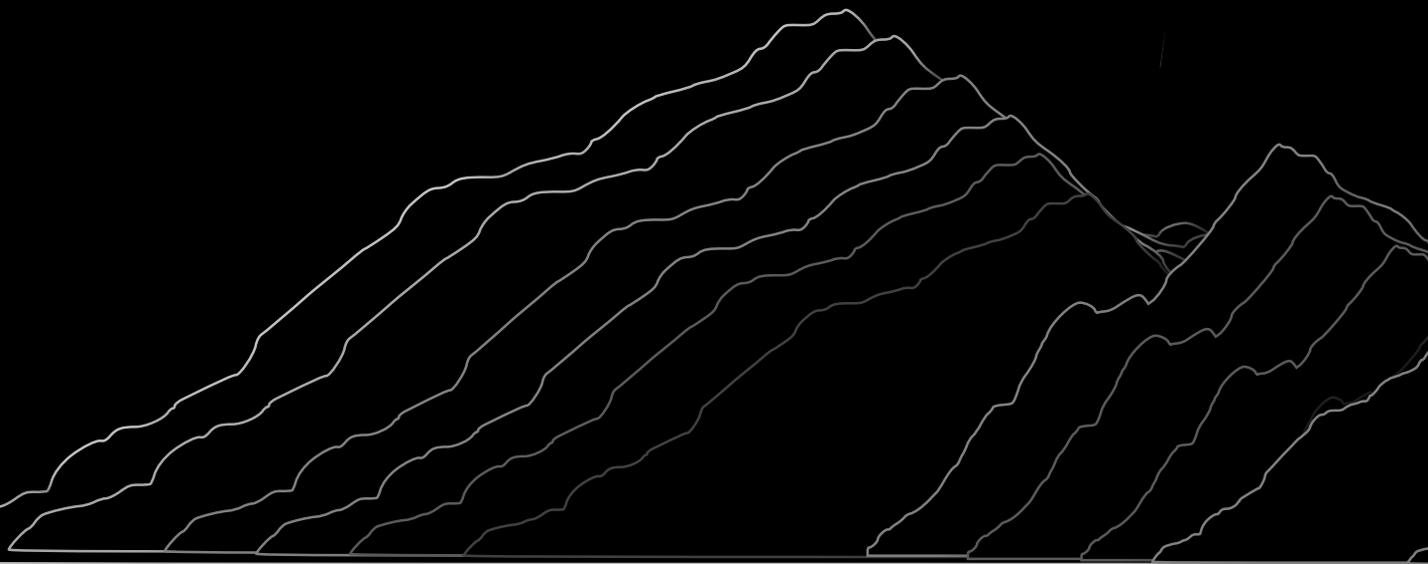
Sketches



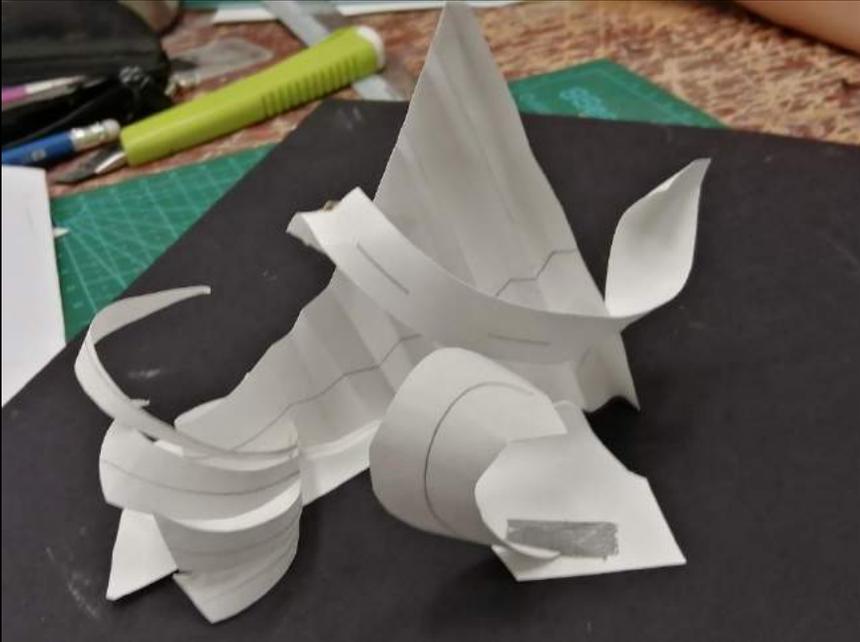
Sketches



1 First round of design



Model 1



Types of planes

- Curved
- Broken
- Twisted
- Complex

Type of lines

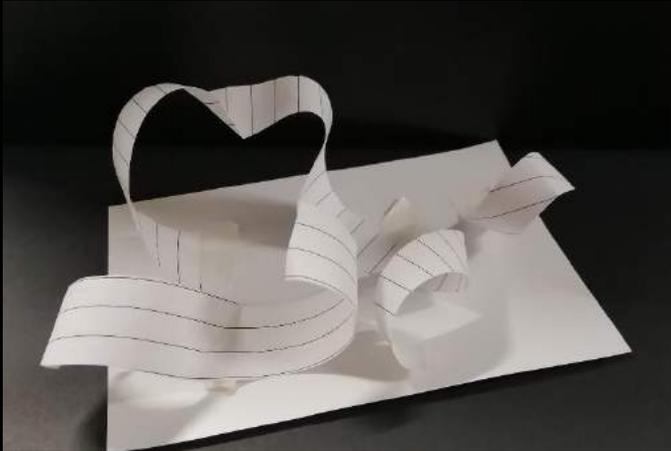
- Supporting
- Twisted
- Accented
- Hyperbolic

Feedbacks

- No obvious difference between SD and S
- SD and D seems to interrupt the motion of D



Model 2



Types of planes

- Curved
- Broken
- Grouped

Type of lines

- Reverse
- Catenary
- Direction
- Hyperbolic
- Trajectory

Feedbacks

- Reduce the amount of small details
- Increase the variations of pattern
- Should look more dynamic from different sides



Model 3



Types of planes

- Curved
- Broken
- Twisted

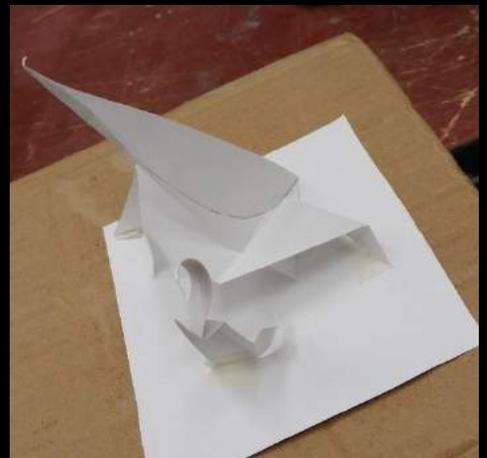
Type of lines

- Supporting
- Reverse
- Parabolic
- Straight

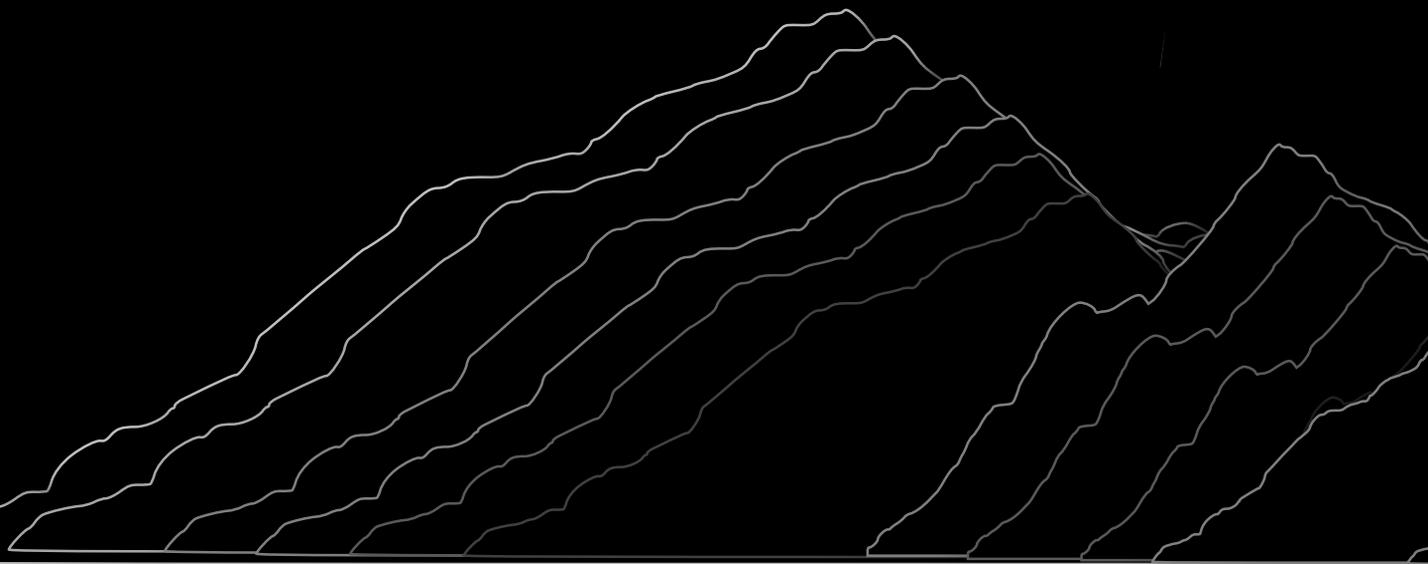


Feedbacks

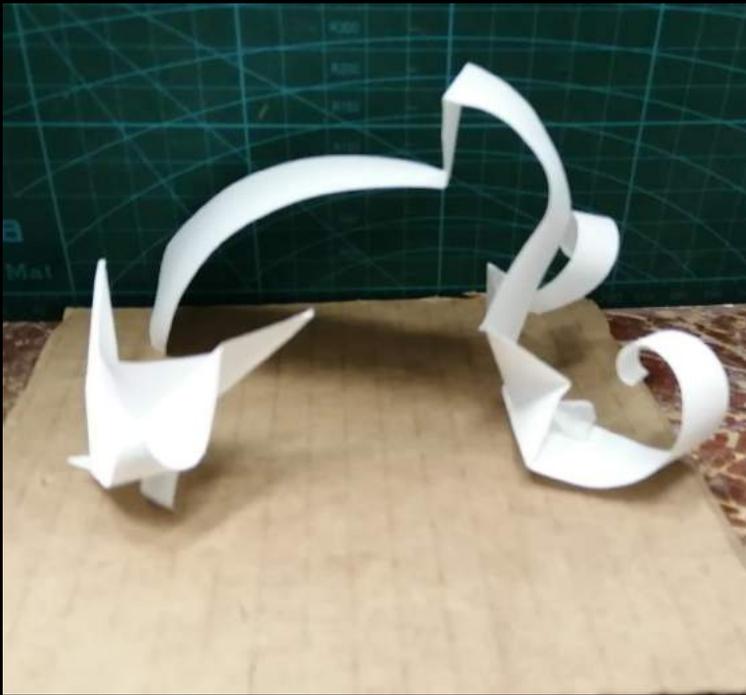
- D and SD are undefinable
- The two larger parts are blocking intersecting each other hence unable to show movements
- No much variation in terms of direction



2 Second round of design



Model 2 v2



Improvements

- More distinct differences between D, SD and S
- The flow of D is more obvious

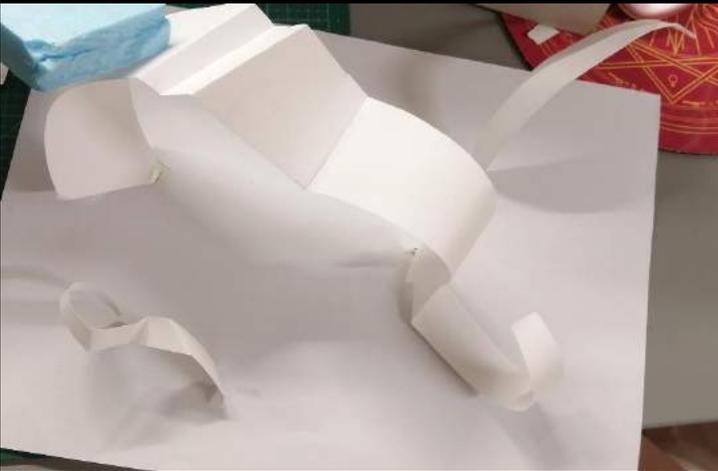
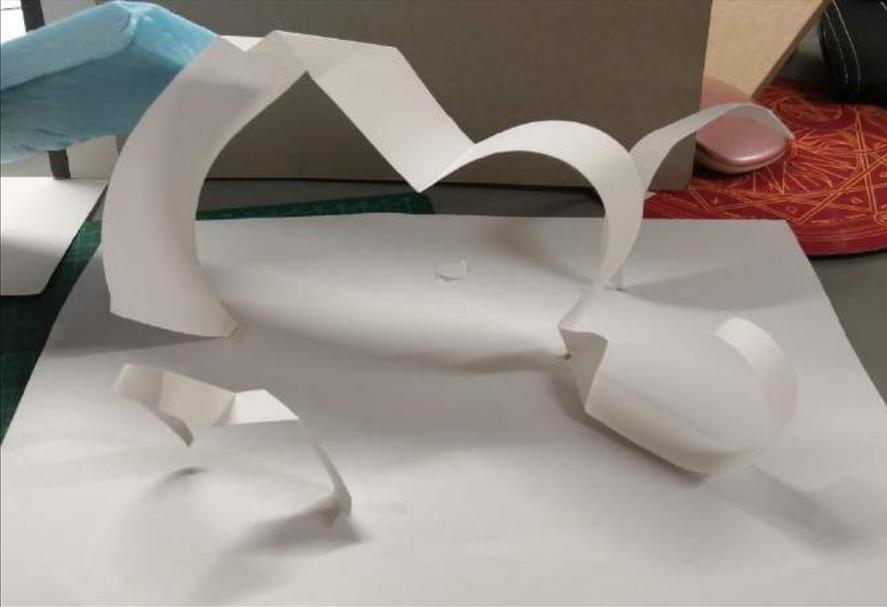


Feedbacks

- The flow of D should stand out and without too much small details.
- More contrast between the sizes of different planes may be better

Model 2 v3

Enlarge the model into A4 size



Improvements

- Further reduce the size of the other two pieces
- Also, tried to adjust the shape of the curve



But still prefer the previous one



Model 4

Reason for redesign

- Model 1 looks so complicated as there are many different lines and planes happening at the same time, which may be confusing. Hence, I decided to only emphasis more on the splitting curves.



Types of planes

- Curved
- Complex
- Twisted
- Grouped

Type of lines

- Resting
- Parabolic
- Directional

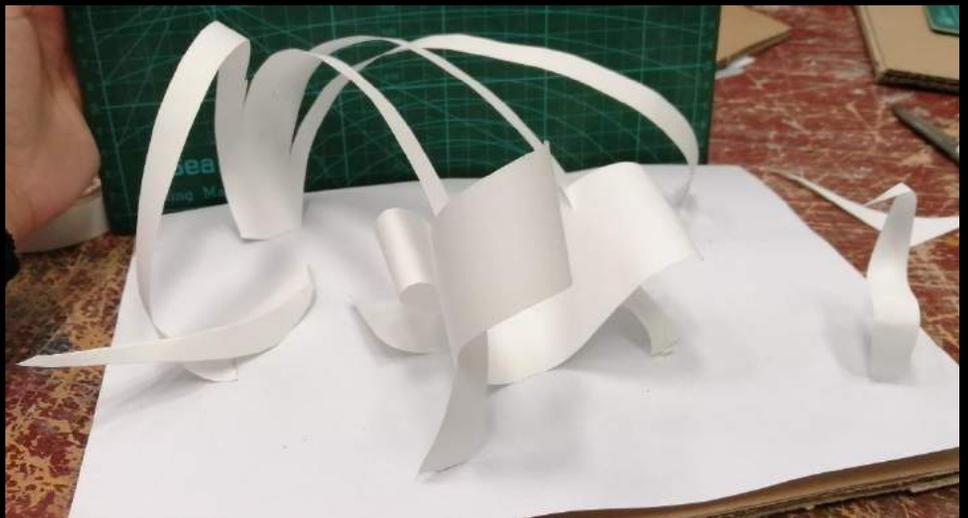
Feedbacks

- D and SD are undefinable
- The lager plane could be tilted



Model 4 v2

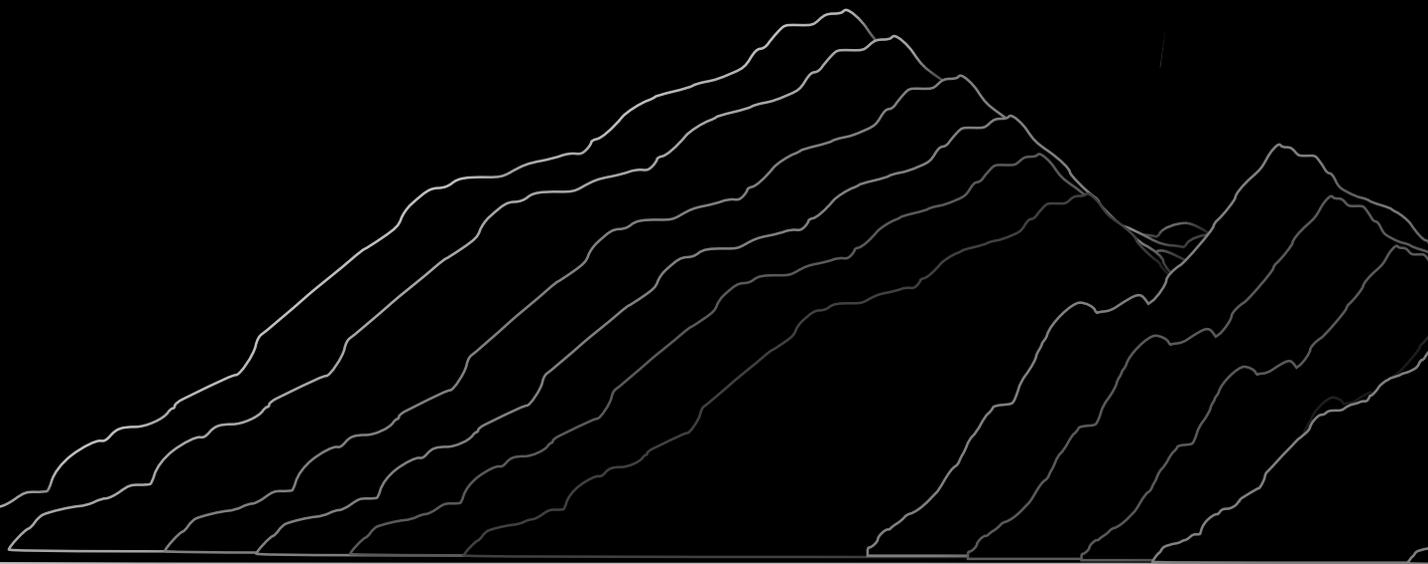
Enlarge the model into A4 size



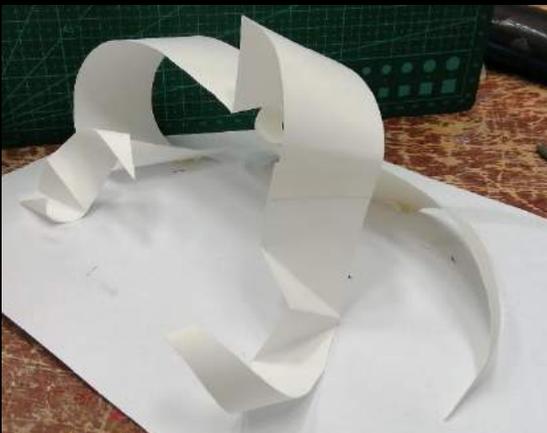
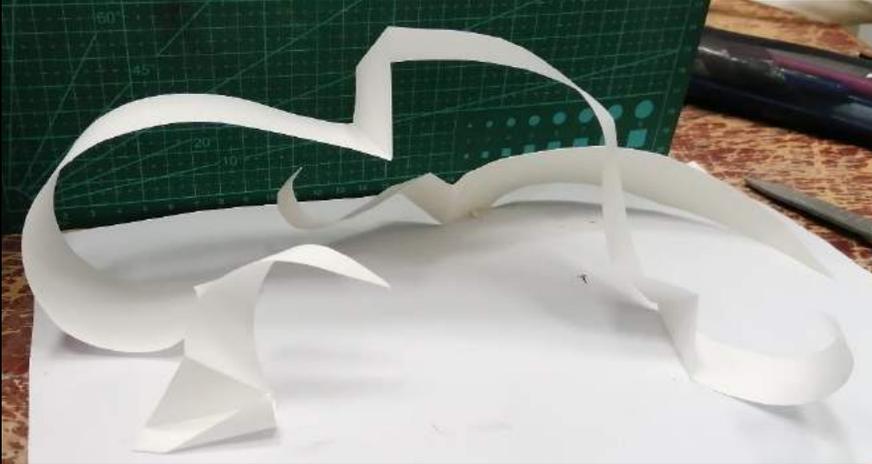
Feedbacks

- May try to increase the number of splits in order to create the sense of PLANE
- The S should be as simple as possible

3 Final round of design



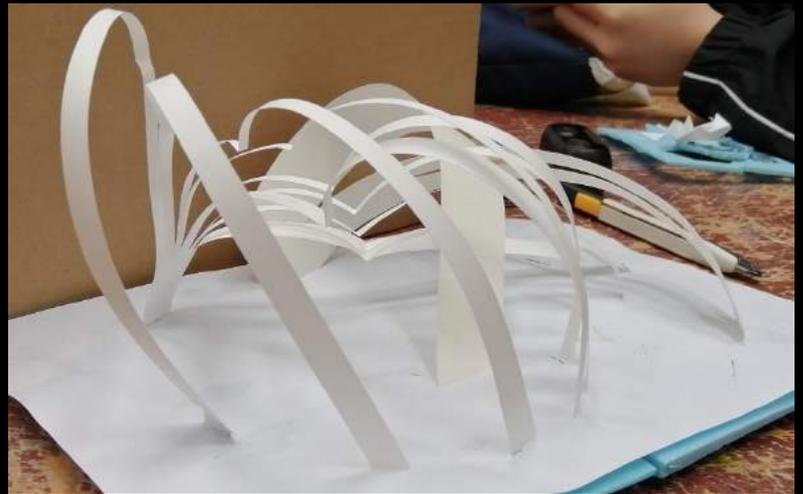
Model 2 v4



Improvements

- The shape of SD and S are kind of correspond to D
- There is a main direction of flow which can attract viewer's attention

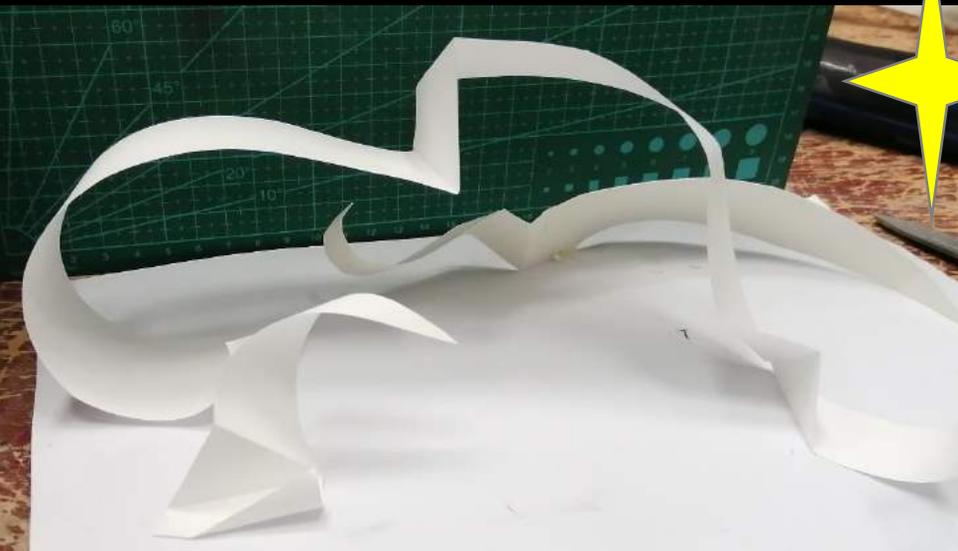
Model 4 v3



Improvements

- Increased the number of splitting arms to show the movement of a plane
- Each arm is decreasing in height to give movement
- The two pieces are interlocking to increase complexity

Final selection



Reasons

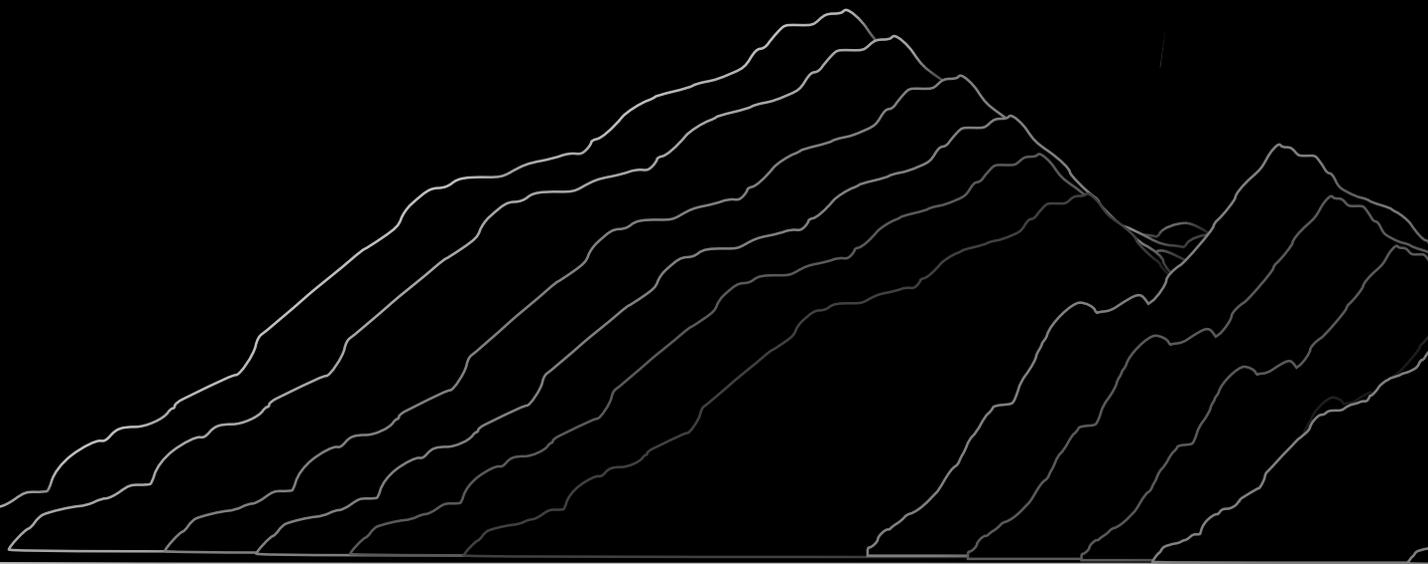
- The combination of linear and curvilinear lines looks interesting
- The use of broken planes throughout creates a sense of cohesive and harmony



Reasons for not choosing

- Although there are only two pieces, the outcome already looks complete. Which made it hard for me to add another piece to fulfill the project requirement.

4 Final Design

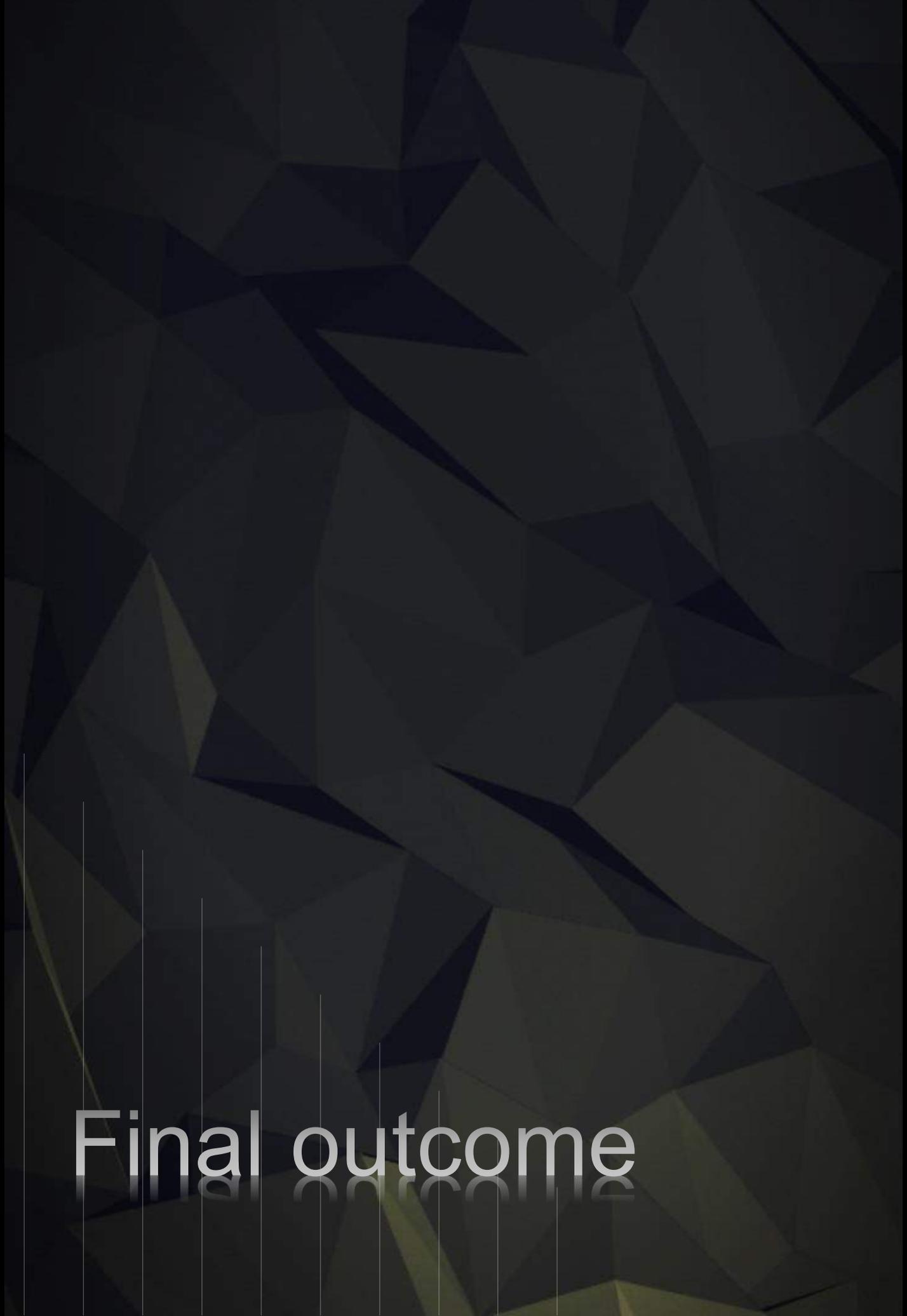




Improvements

- Decreased the size of S
- Adjusted the position of SD and S so that they will not block D
- Titled the all three pieces to add more variations when seen from different directions.





Final outcome

Final outcome



Final submission



Nephelo-

With the combination of straight and curve planes, and the cohesiveness of the directions, the dominance, sub-dominance and sub-ordinate creates a sense of cloud scudding across.

Reflections

- It was interesting to experiment the different shapes and patterns which a piece of paper can turn up to become.
- I was more aware to look the design from different directions and made improvements to make it looks engaging from all sides.
- Trying out the combination of different axis and planes creates more opportunities.



T H A N K S F O R R E A D I N G