

## Project 1

# Design Elements

Tan Yi Yun (0345559)  
Foundation in Design



# **PART 1 - POINTS & LINES**

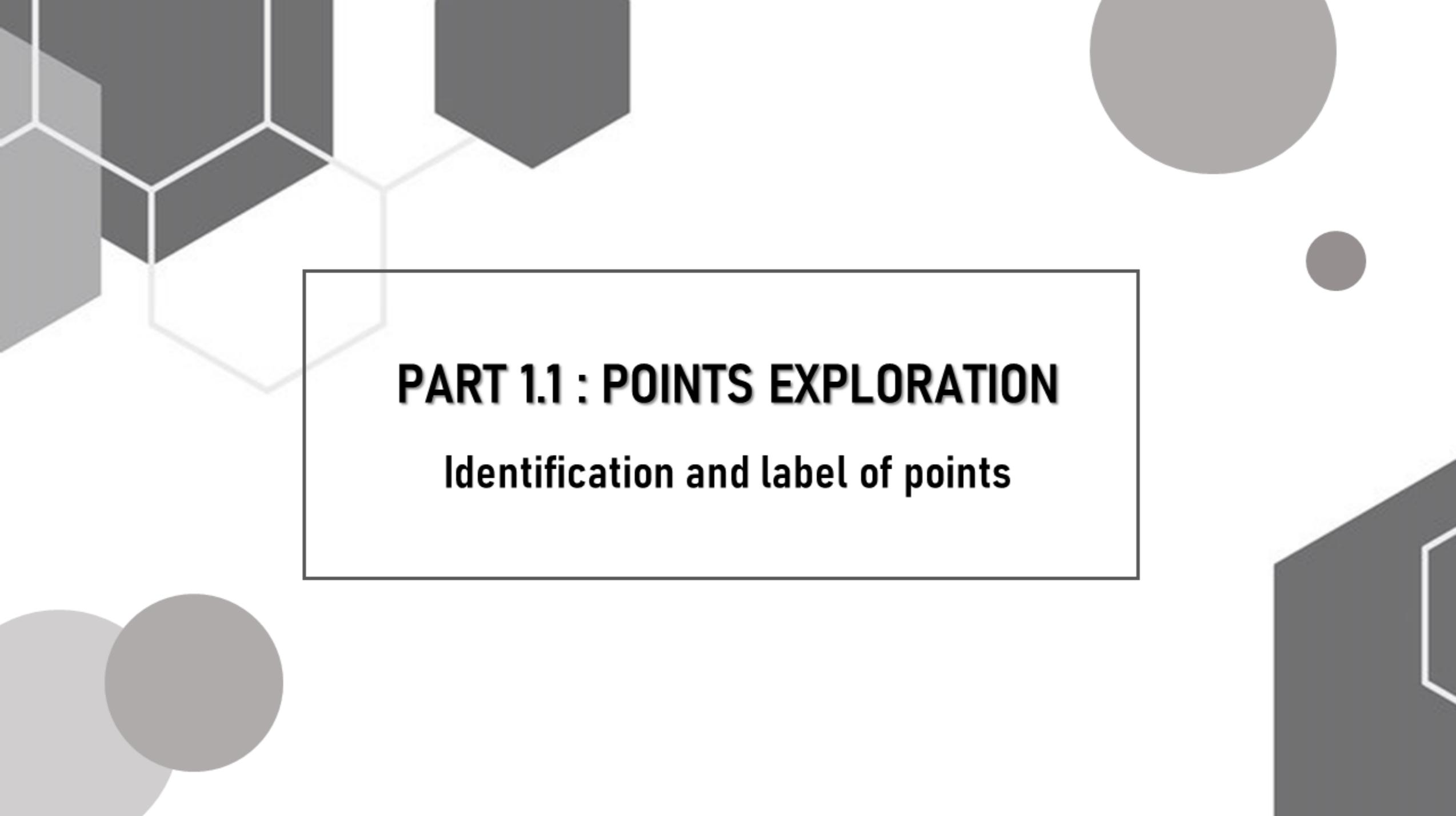
**2-Dimensional : Drawings & Sketches**





## Interior Space of Architectures





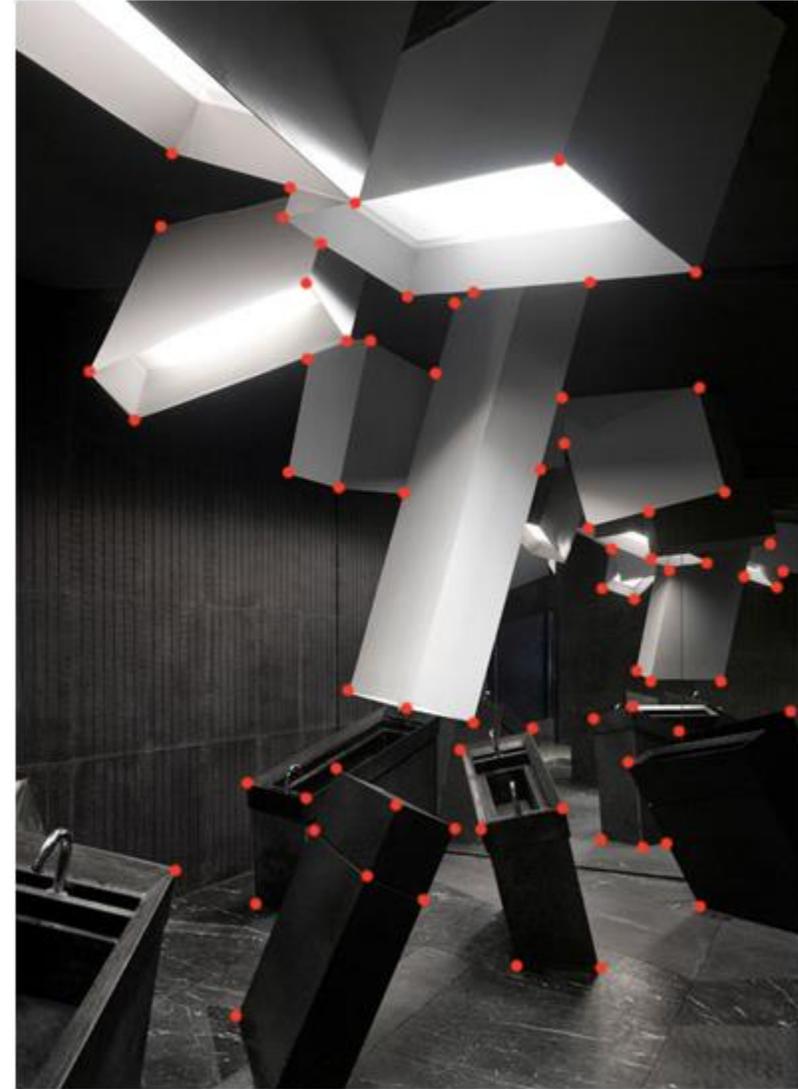
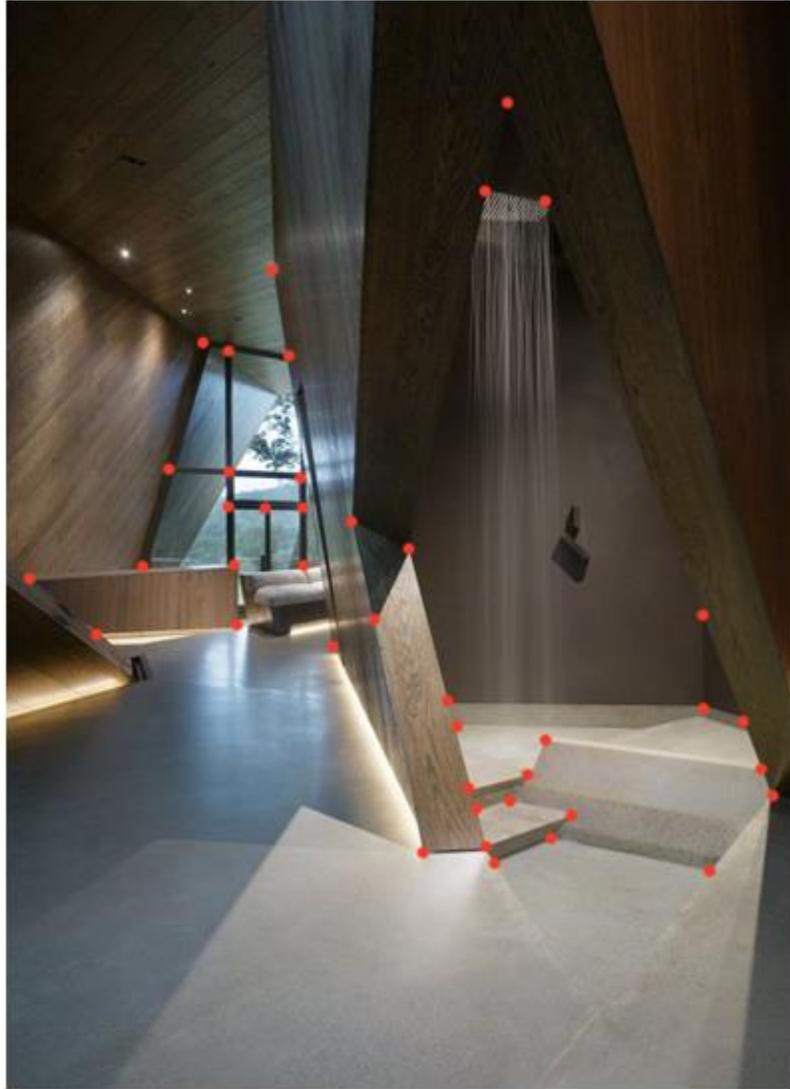
## **PART 1.1 : POINTS EXPLORATION**

**Identification and label of points**

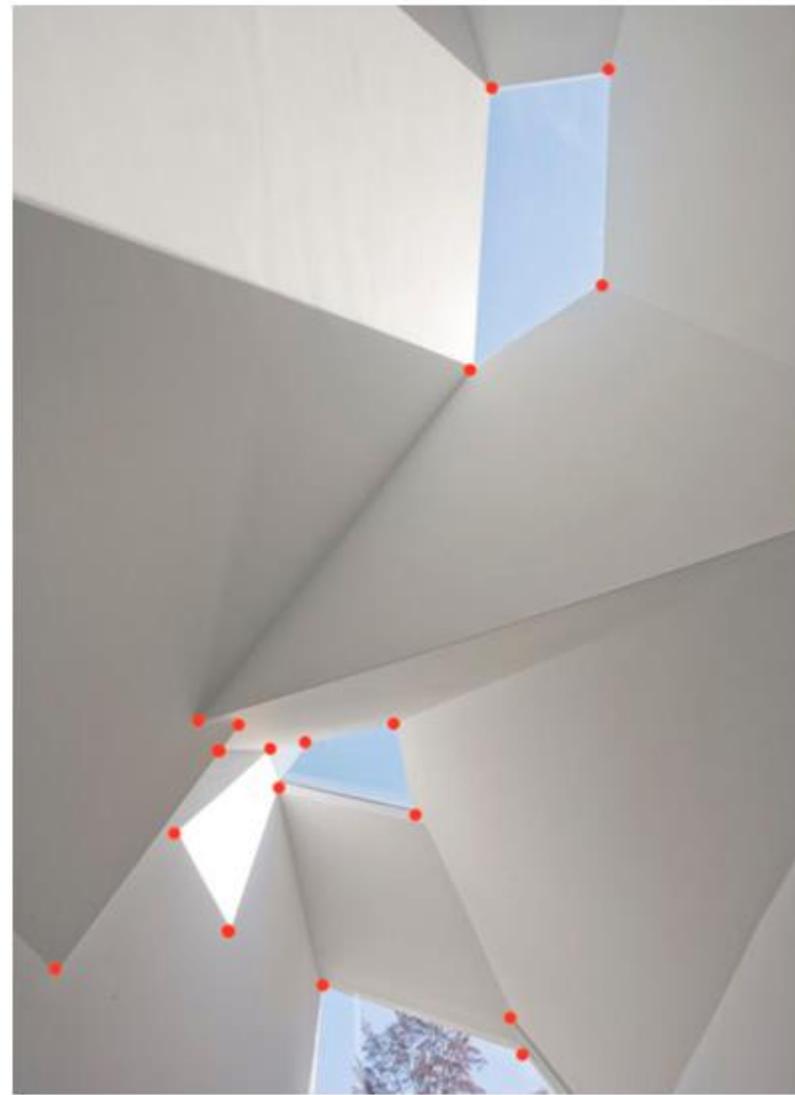
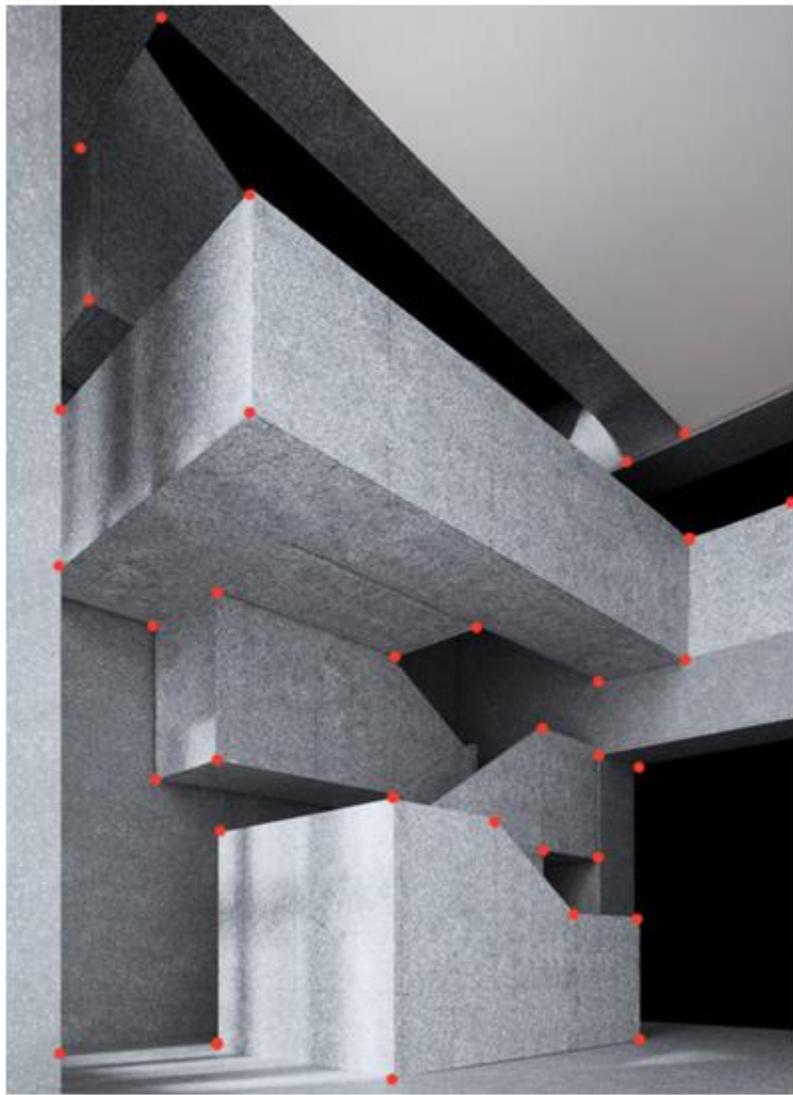
# POINTS EXPLORATION

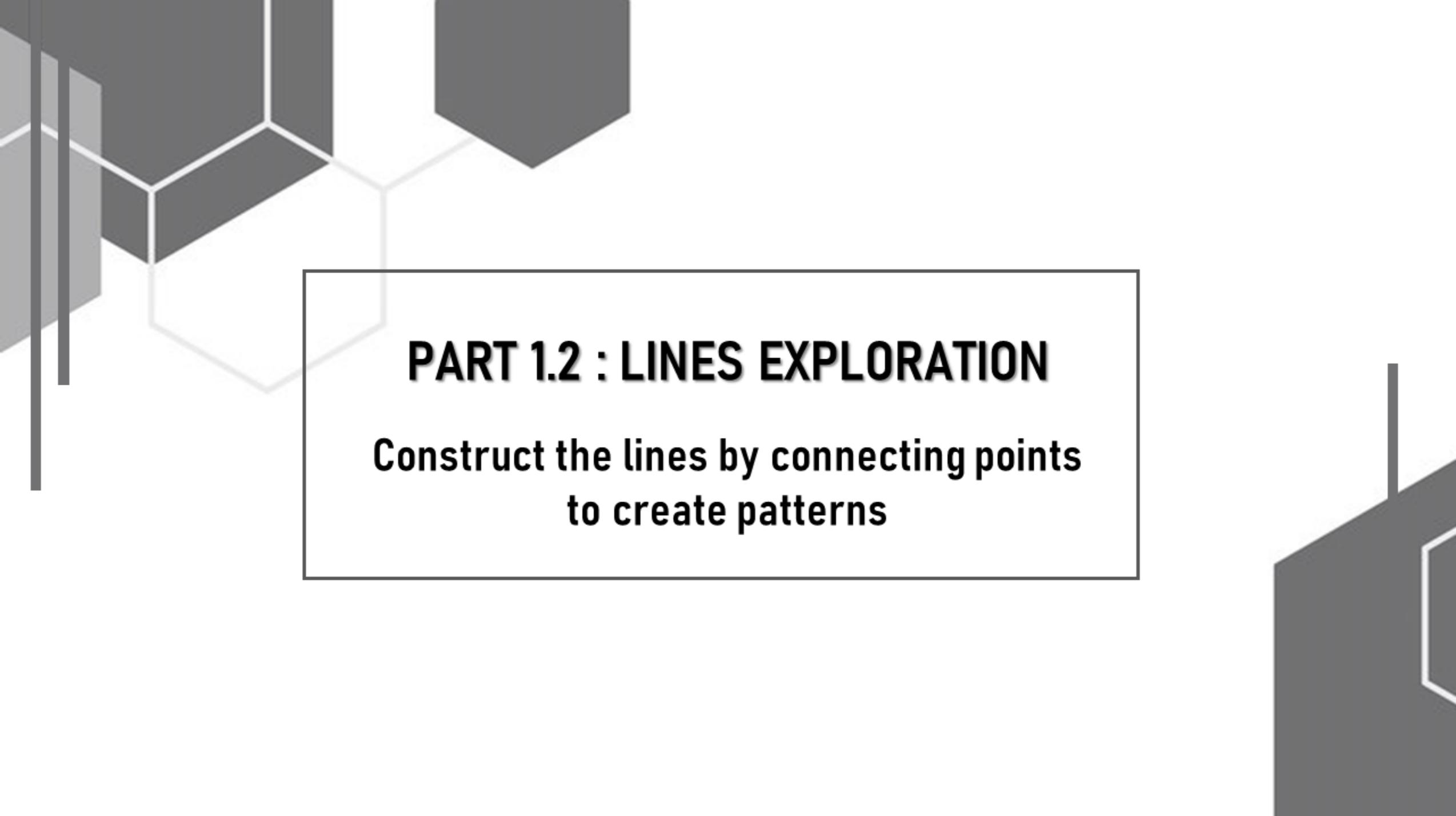


# POINTS EXPLORATION



# POINTS EXPLORATION





## **PART 1.2 : LINES EXPLORATION**

**Construct the lines by connecting points  
to create patterns**

# LINES EXPLORATION

#1



Winners of INNATUR 3 propose fresh ideas of blending architecture and nature : First Prize-winning proposal by Quang Le and Lien Hoang Phuong.



- Image of one-point perspective
  - Fish-like creature
  - Mostly triangular and quadrilateral shapes
-

# LINES EXPLORATION

#2



Jean De Lessard wraps Néméau seafood shop in Quebec City with glass prisms.



- Irregular gem-like pattern
  - Small segments
  - Similar size of shapes
-

# LINES EXPLORATION

#3



18.36.54 House by Daniel Libeskind. The 2000 square-foot home is conceived as a continuously folding ribbon structure of 18 planes, 36 points and 54 lines.



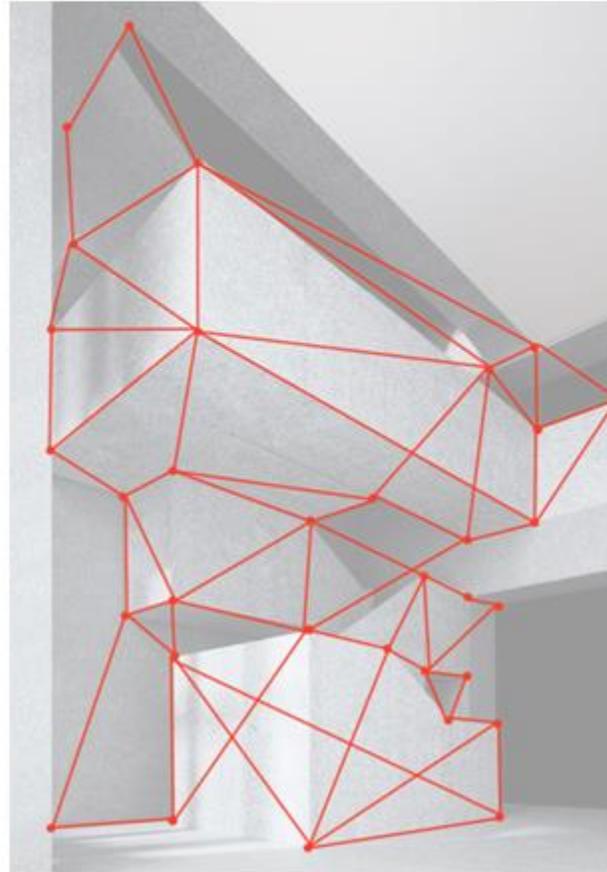
- Strong illusion of depth being shown
- Foreground (right) - larger portion of triangular shapes
- Background (left) - smaller portion of triangular shapes

# LINES EXPLORATION

#4



David Chipperfield new york valentino staircase.

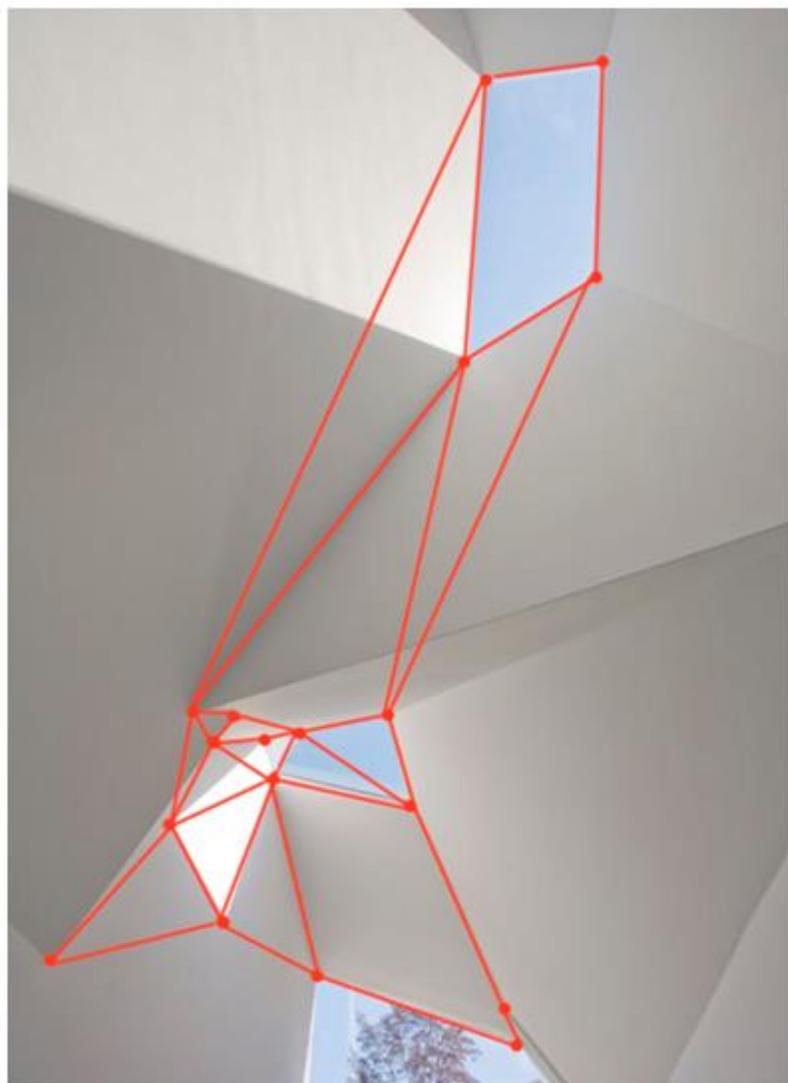


- Interesting layers and arrangement of geometrical shapes
- Sphinx-like sculpture
- Middle part is the focal point (rectangular shape)

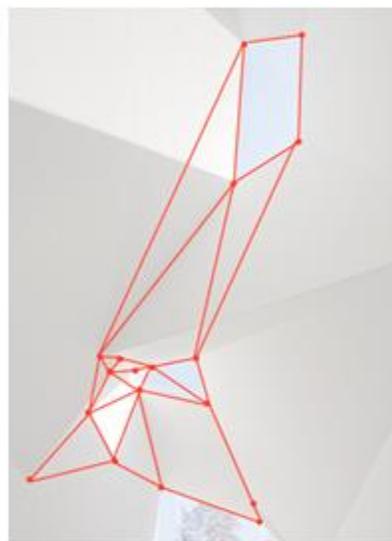


# LINES EXPLORATION

#5



Villa 4.0 / Dick van Gameren architecten.



- Minimalism photography
- 1<sup>st</sup> attempt : Shape of rocket
- 3<sup>rd</sup> attempt: Shape of rabbit

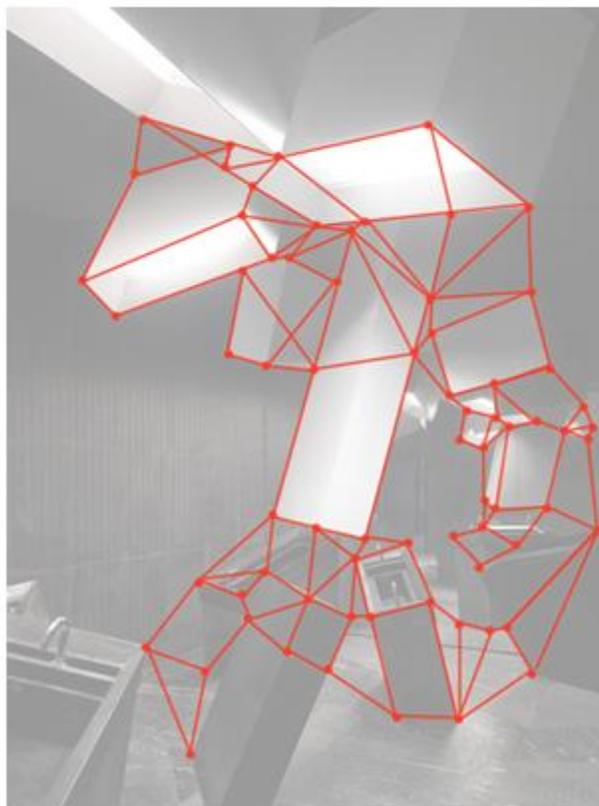


# LINES EXPLORATION

#6

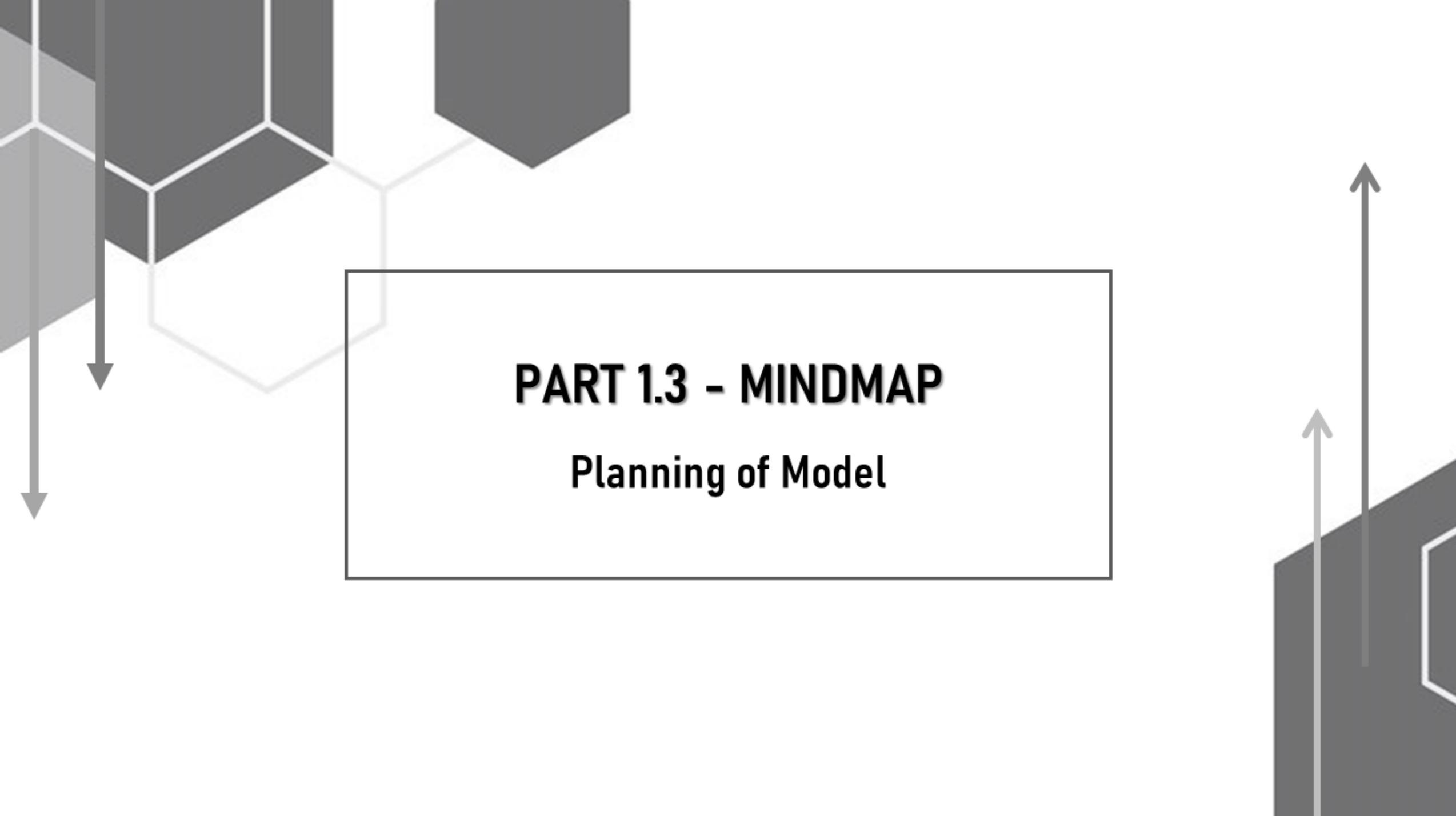


Hubei Xiang Sheng Yin Xing Entertainment – Wushang  
Zhongyuan Mall International Cinema.



- Chameleon / Tuatara
- Rhythmic



The background features a series of overlapping, semi-transparent grey hexagonal shapes on the left side. On the right side, there are two vertical grey arrows pointing upwards. The central text is enclosed in a white rectangular box with a thin black border.

## **PART 1.3 - MINDMAP**

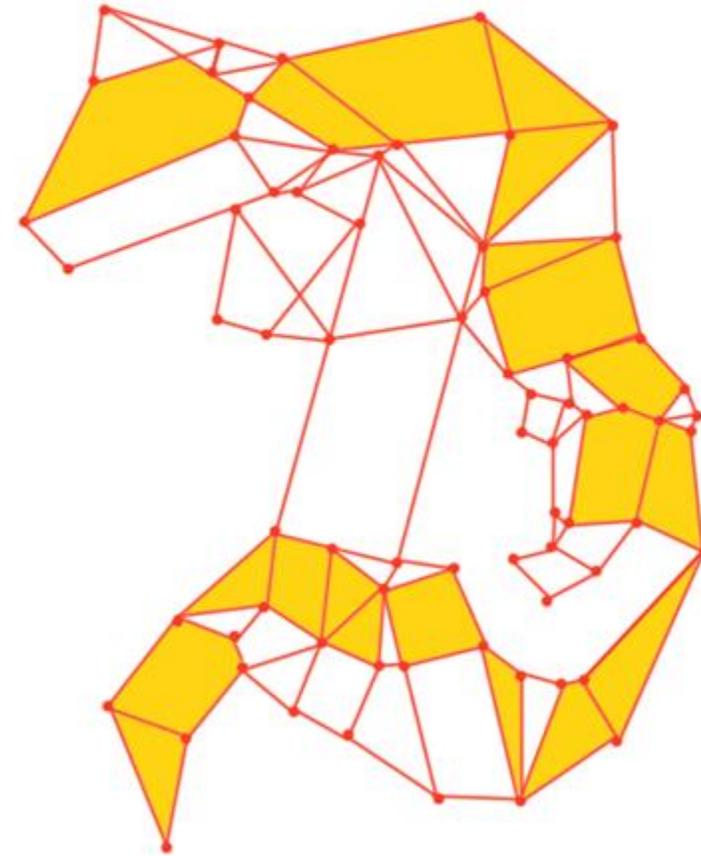
**Planning of Model**

# Chosen Pattern

Derived from image #6

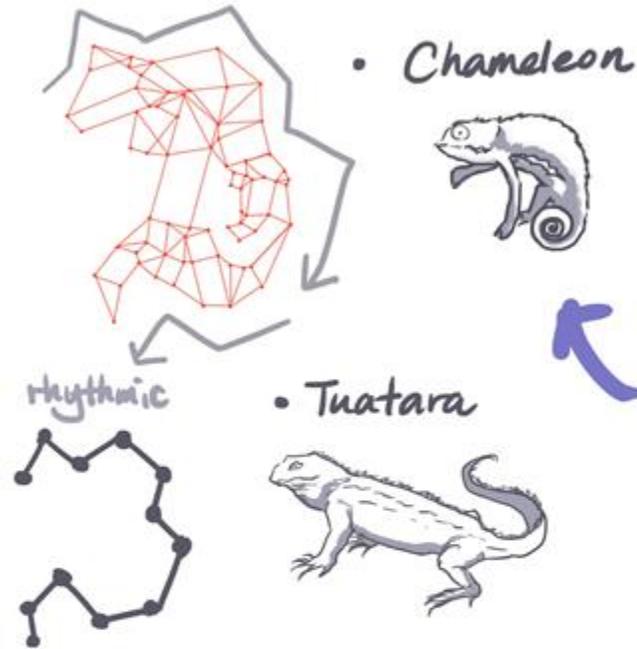
This pattern is just a guideline for the model making. The position of points or lines might vary during the process of model making because some parts are pretty complex.

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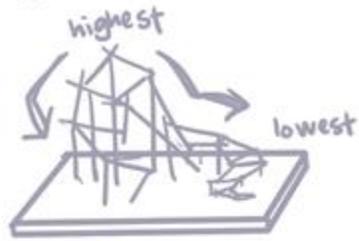


Top View of Model (with planes)

# 1. CONCEPT



# 5. OVERVIEW

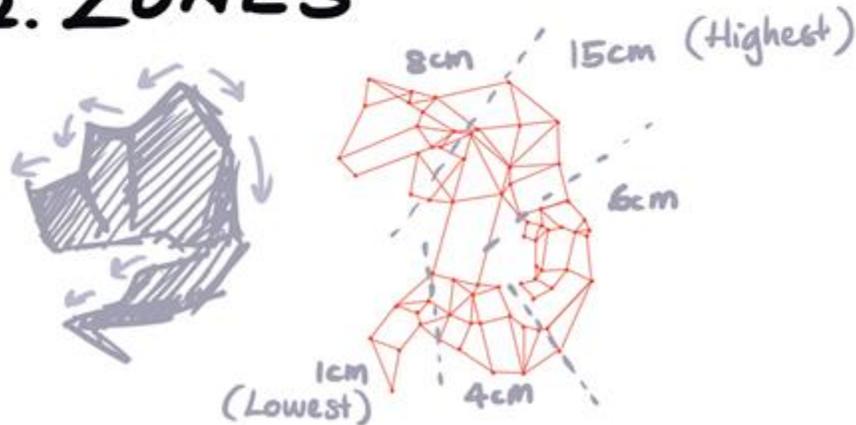


# 4. MATERIALS

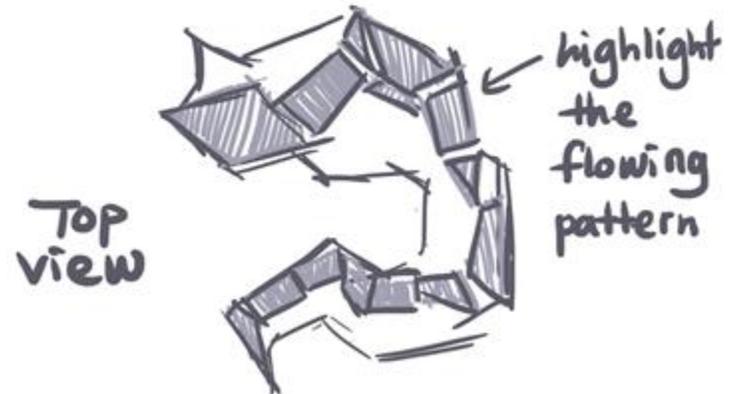
- ✓ Bamboo/Satay sticks
- ✓ Foam board/polystyrene board
- ✓ White/brown modelling board

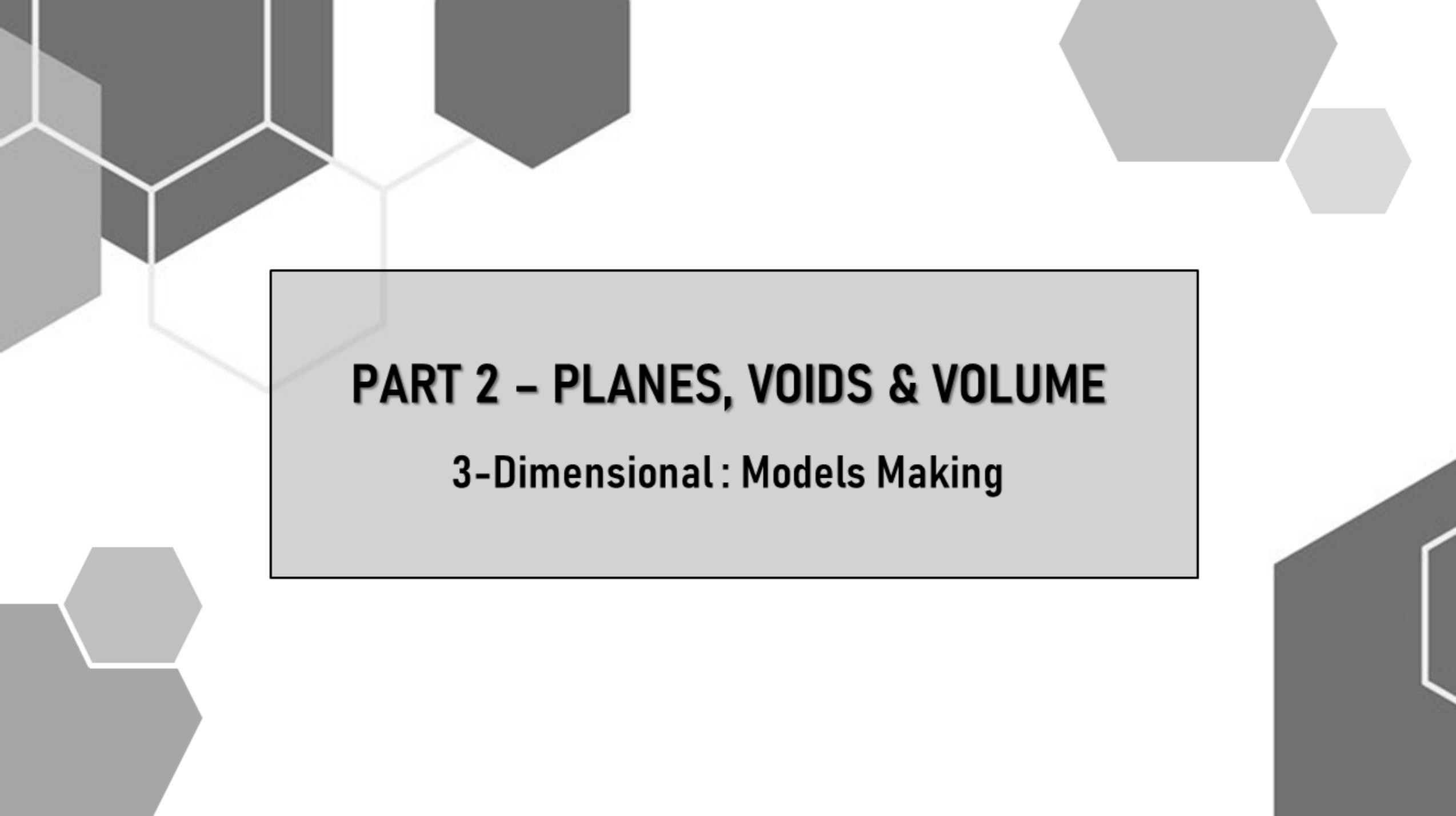
# Ideation

# 2. ZONES



# 3. PLANES





## **PART 2 – PLANES, VOIDS & VOLUME**

**3-Dimensional : Models Making**



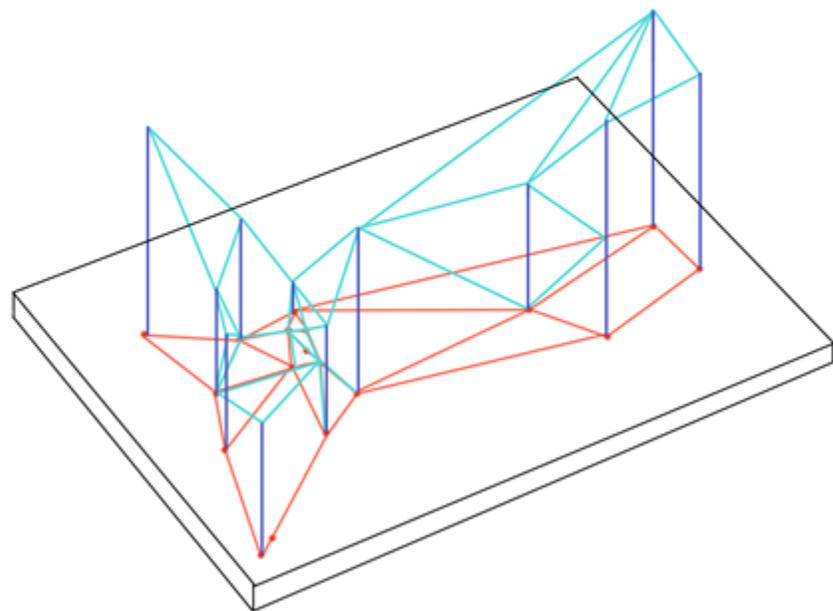
## **PART 2.1 – 3D Sketch**

**Transformation of 2D into 3D**



## 3D SKETCH

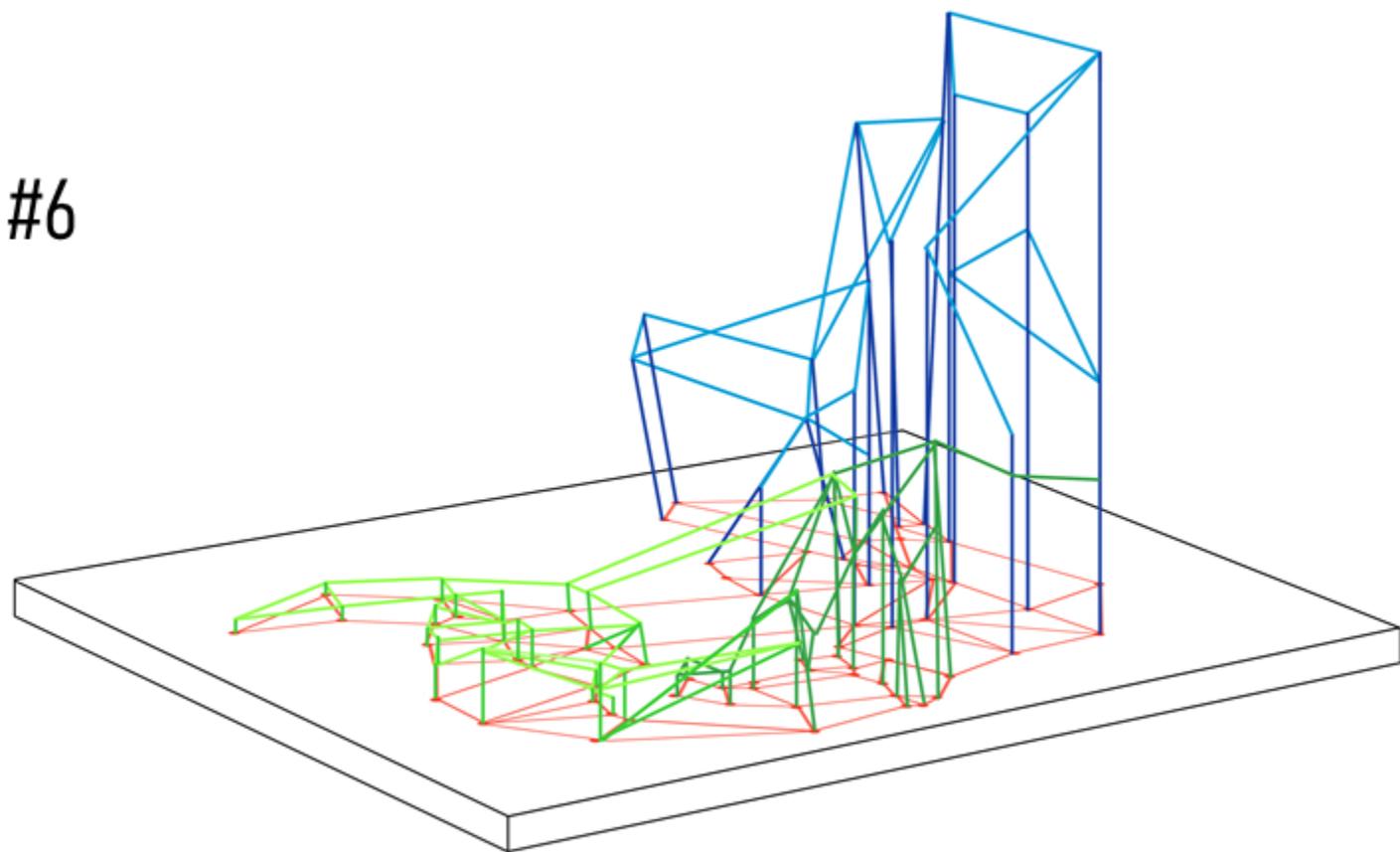
#5



3D sketch of image #5.

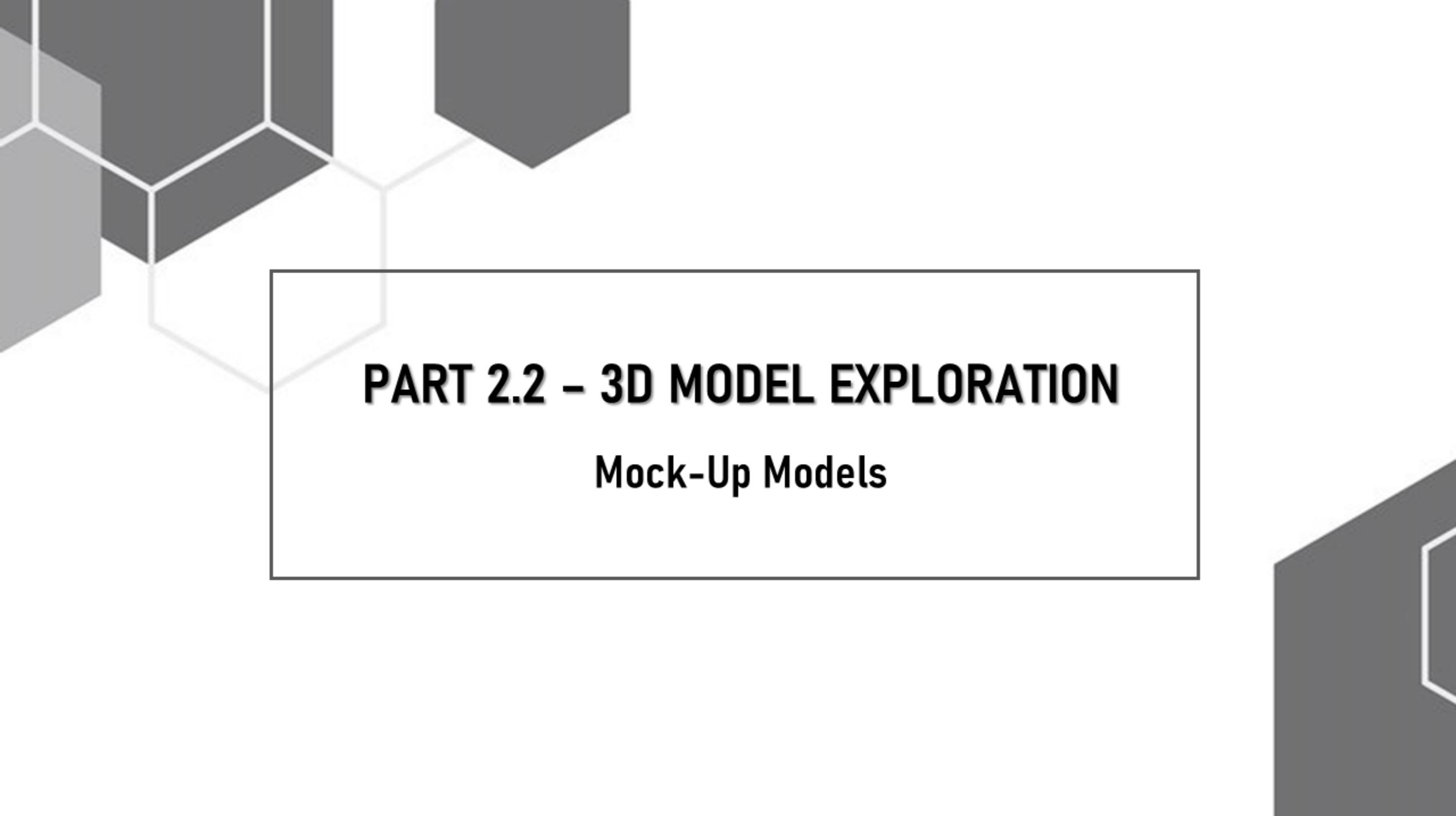
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#6



3D sketch of image #6. The blue lines represent higher zone, while the green lines represent lower zone.

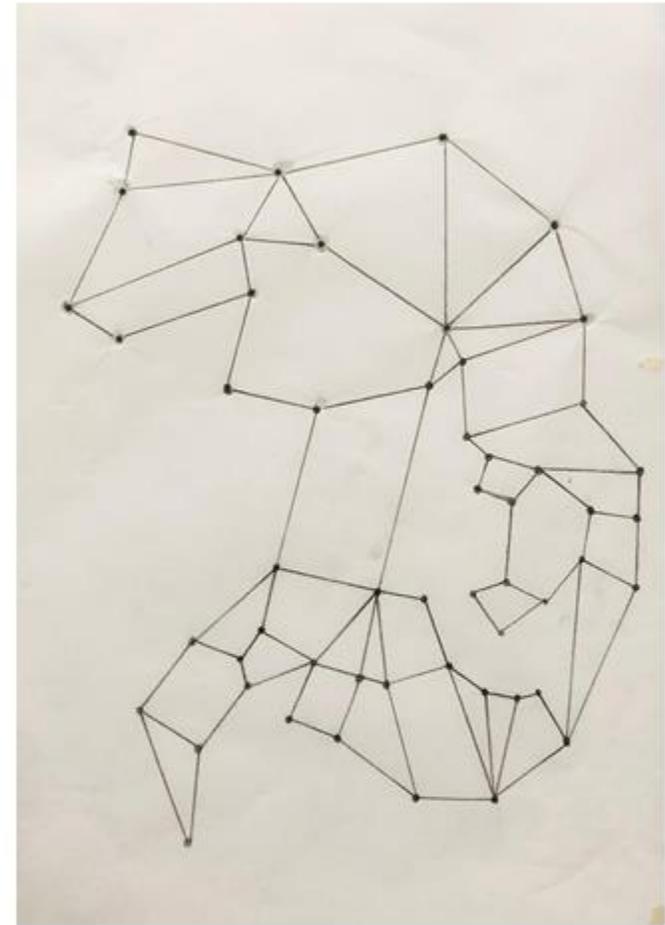
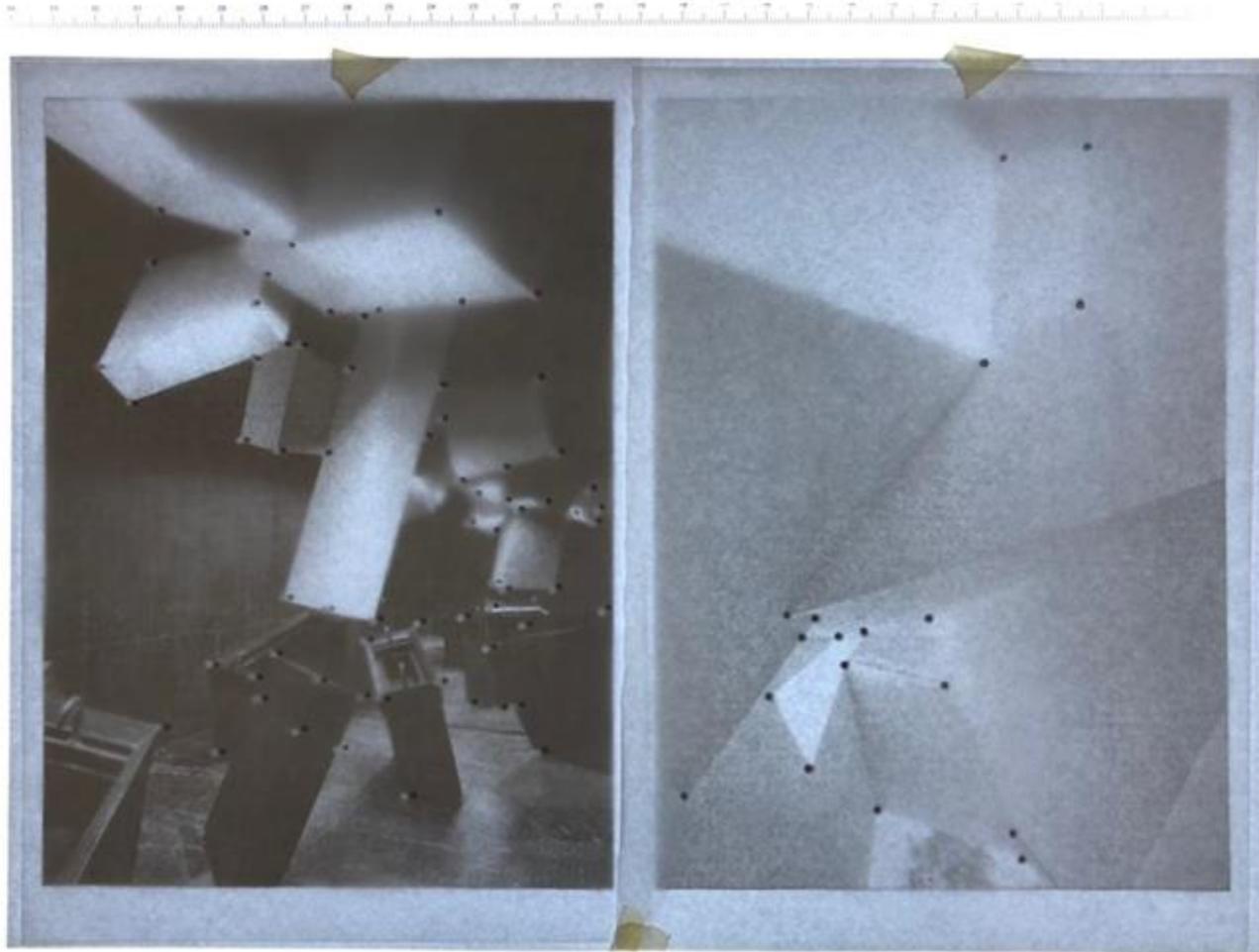
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The slide features decorative geometric elements. In the top-left corner, there is a cluster of overlapping hexagons in various shades of gray, some with white outlines. A thin white line extends from the bottom-right of this cluster towards the top-left corner of the central text box. In the bottom-right corner, there is a dark gray shape with a white outline, resembling a stylized building or a corner of a structure.

## **PART 2.2 – 3D MODEL EXPLORATION**

### **Mock-Up Models**

The points are being transferred from the printed image to the tracing paper with the aid of the LED lightbox. The tracing paper is then being pasted on the base of the mock-up model.



The transferred pattern on the tracing paper.



TOP VIEW



THREE QUARTER VIEW

# 1st MOCK- UP

This exploratory model is an in-class activity. The pattern is taken from image #5.

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# 1<sup>st</sup> MOCK-UP



RIGHT VIEW



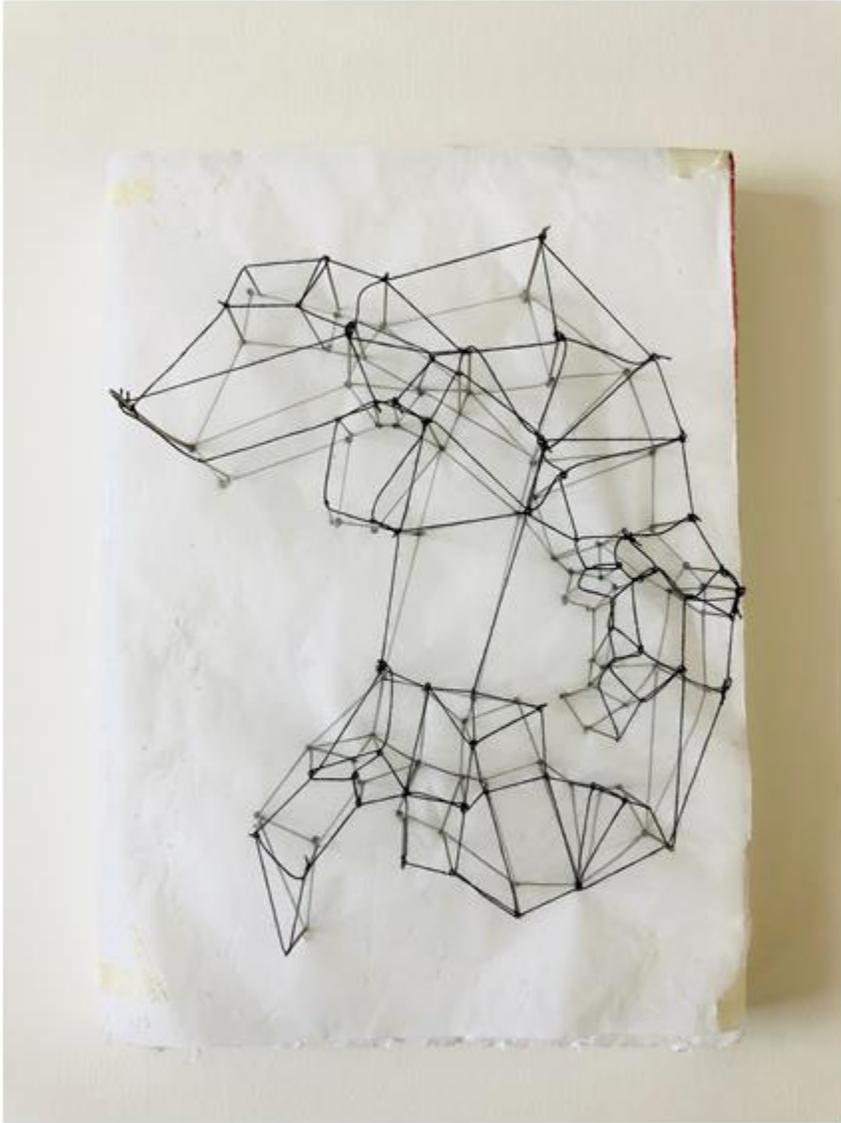
FRONT VIEW



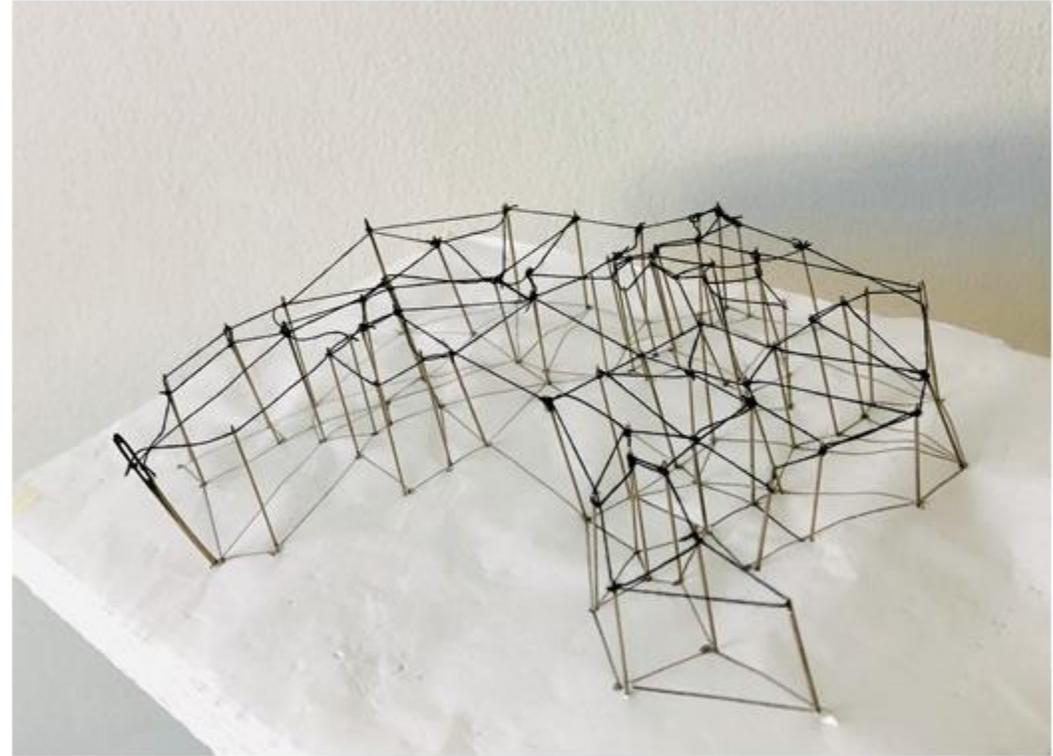
LEFT VIEW

## 2<sup>nd</sup> Mock-Up

This 3D pattern is created with needles and strings. It helps to visualize the pattern with height and volume, and also to test out if the chosen pattern is workable.



TOP VIEW



THREE QUARTER VIEW



TOP VIEW



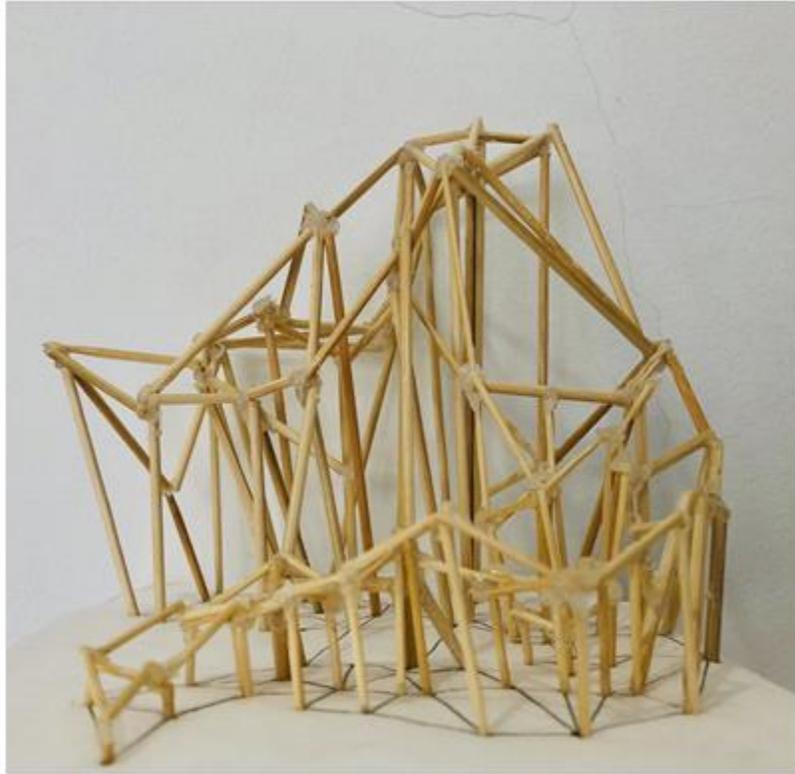
THREE QUARTER VIEW

## 3<sup>rd</sup> Mock-Up Model

The pattern is taken from image #6. It is considered a complex pattern, especially the “tail” part of this model. The dense arrangement of sticks is one of the most challenging parts of making this model.

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# 3<sup>rd</sup> Mock-Up Model



FRONT VIEW



BACK VIEW



LEFT VIEW



TOP VIEW



THREE QUARTER VIEW

## 3<sup>rd</sup> Mock-Up Model (with planes)

White planes are being added as the overhead planes to highlight the shape of chameleon.

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**3<sup>rd</sup> Mock-Up  
Model  
(with planes)**

FRONT VIEW



LEFT VIEW



BACK VIEW



RIGHT VIEW

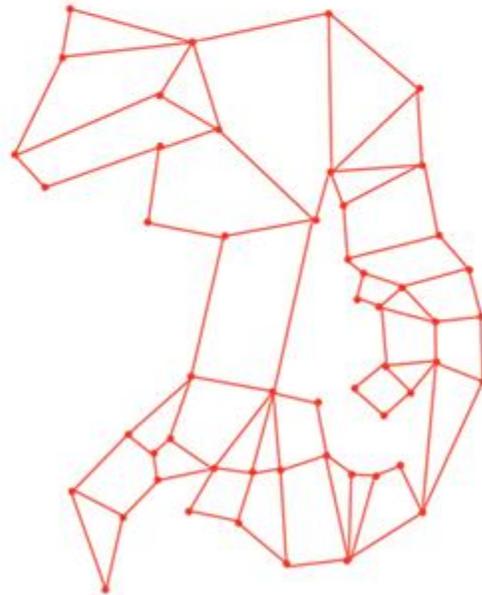




TOP VIEW

## Final Model (without plane)

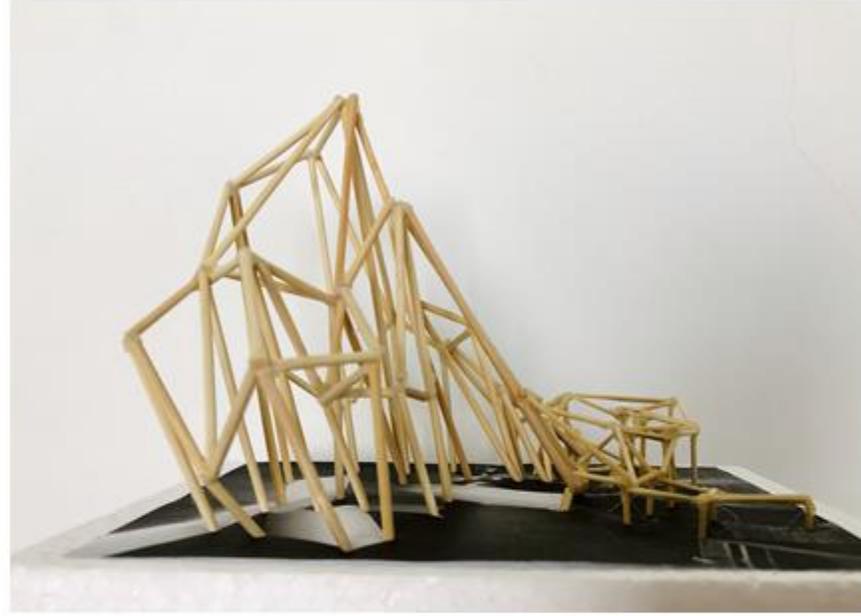
The structure of the final model is being constructed based on the 3<sup>rd</sup> mock-up.



This is the final version of pattern which is used as the final model making.

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FRONT VIEW

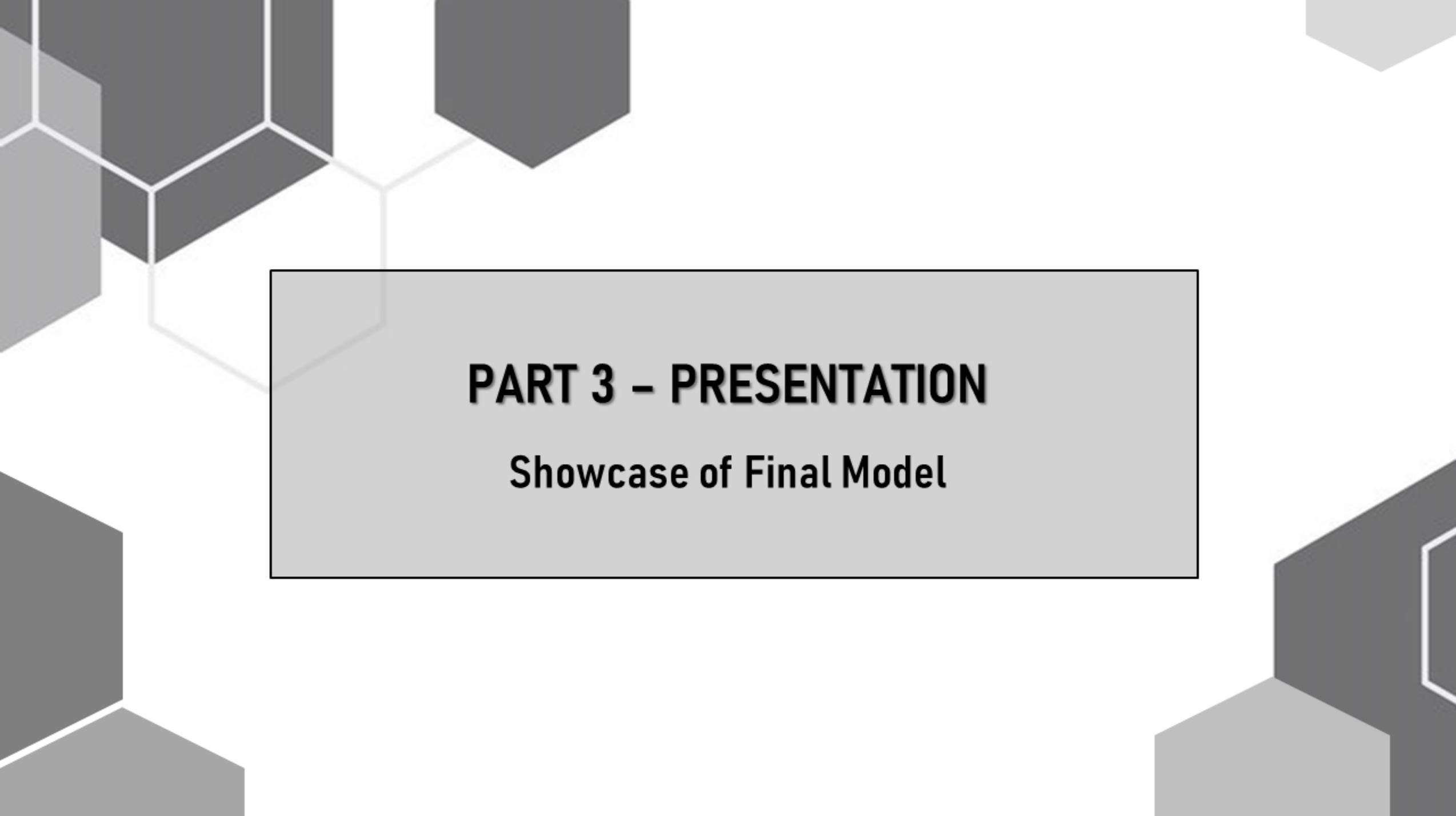


LEFT VIEW

BACK VIEW



RIGHT VIEW



## **PART 3 – PRESENTATION**

**Showcase of Final Model**



TOP VIEW



## Final Model

# CHAMELEONDO

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The final model —— Chameleondo, is inspired by reptiles (chameleon and tuatara), which stands at the height of 13.7cm. The materials used are bamboo sticks, white modeling board, brown modeling board, and polystyrene board. Its highlights are the shape of a chameleon from the top view, and the repetitive triangular and quadrilateral shapes which forms a rhythmic pattern.

FRONT VIEW



LEFT VIEW

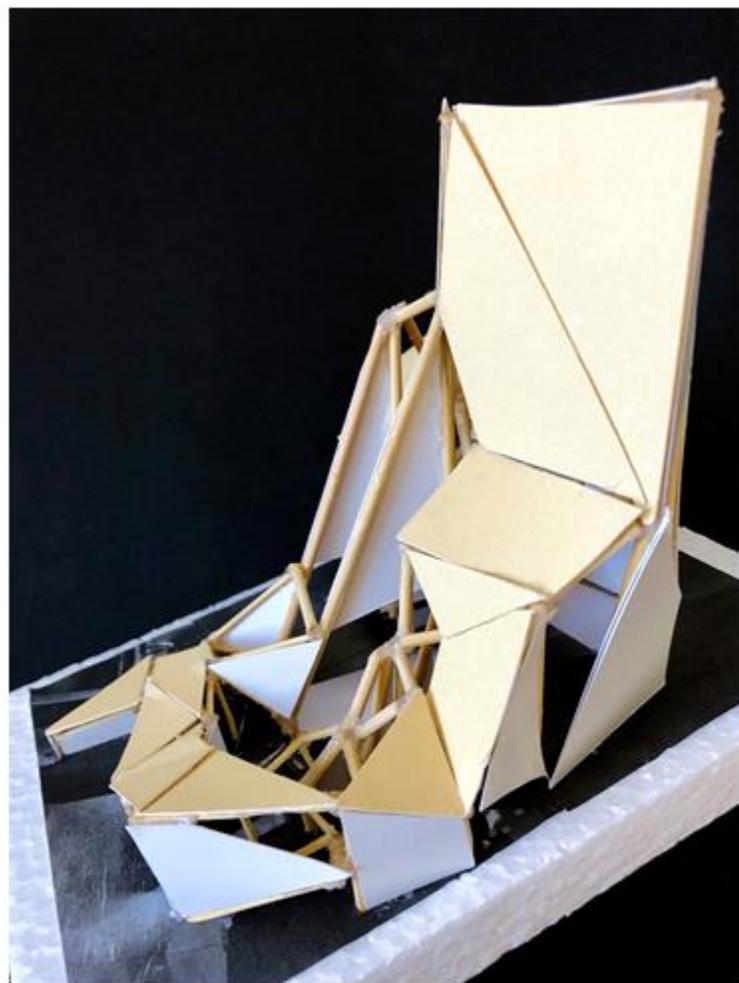


BACK VIEW

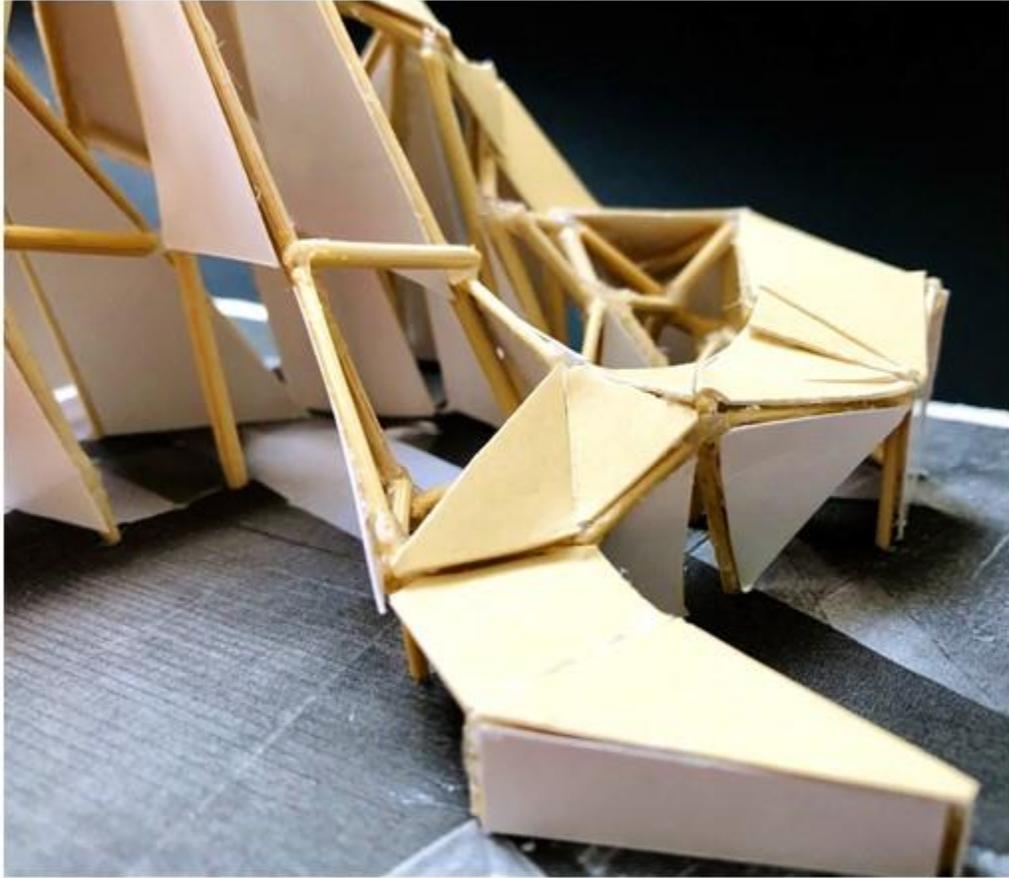


RIGHT VIEW





CLOSE-UP OF PLANES & WOODS



CLOSE-UP OF PLANES & VIODS



UNDER THE SUNLIGHT





UNDER THE SUNLIGHT





**END OF PRESENTATION**