

JOURNEY WITH BAMBOO



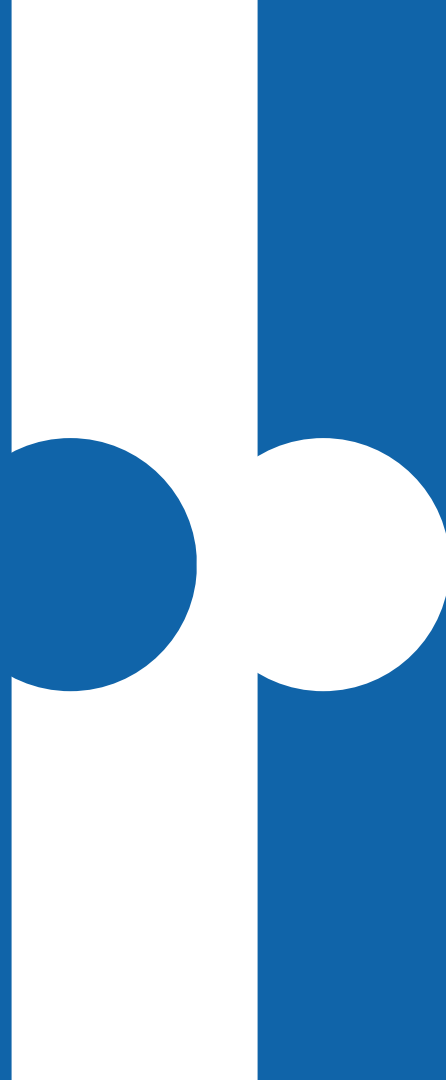
P1 Presentation

ARJUN PRASANTH

Uravu is an NGO that promotes social enterprises based on value addition of local, natural resources, especially bamboo, the “green gold”. Uravu implements integrated, end-to-end programs in the bamboo sector, which include providing skill training in bamboo processing, establishing micro enterprises, marketing of bamboo handicraft, cultivation of bamboo and promotion of eco-tourism.



DESIGN SOLUTION TO STABILISE THE STRENGTH
OF AN EXISTING BAMBOO CHAIR



DESIGN CONSIDERATIONS

- Any extra joinery or member adding should not hinder the flow of the current design.
- The positive and negative space formed by the concurrent members should be maintained



PROBLEMS IDENTIFIED

- The legs of the chair are shaking
- Tendency to fall backwards while sitting on the seat.
- Each of the segments stretch themselves when someone is seated.

EXISTING BAMBOO CHAIR

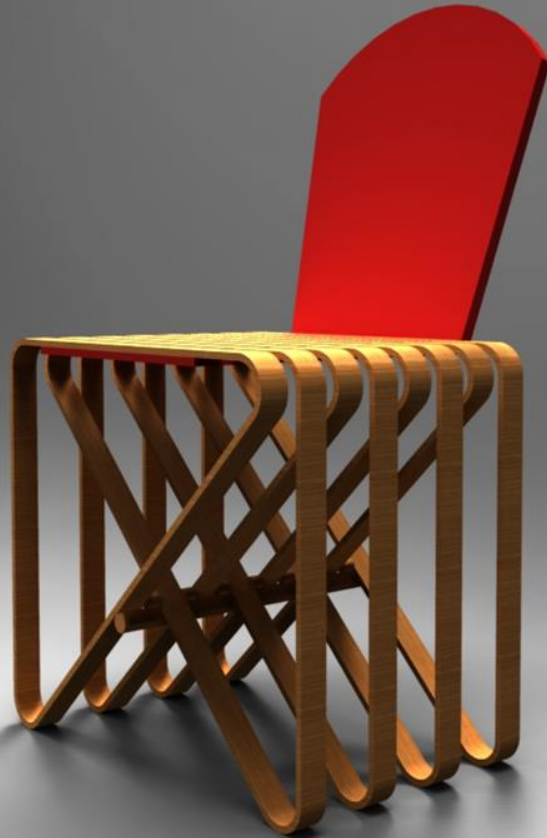
REASONS FOR THE UNSTABILITY

MORE NUMBER OF
BAMBOO SEGMENTS
FOR THE LEGS

UNEQUAL RADIUS FOR
THE CURVATURE

NO CONNECTING MEMBER TO
CONNECT ALL THE 8 BAMBOO
SEGMENTS





ONE OF THE DESIGN SOLUTIONS



SMALL PIECE OF ROD PLACED ABOVE
THE CONNECTING ROD FILLING THE
GAP OF THE CONCURRENT SEGMENTS

A ROD CONNECTING ALL THE
BAMBOO SEGMENTS



ROD AND PIECE ARE
CONNECTED USING
BAMBOO
LAMINATE (REED)
AND USING NUT ,
BOLT AND
WASHER TO
STRENGTHEN THE
JOINERY



MODULAR FURNITURE SET

Brief

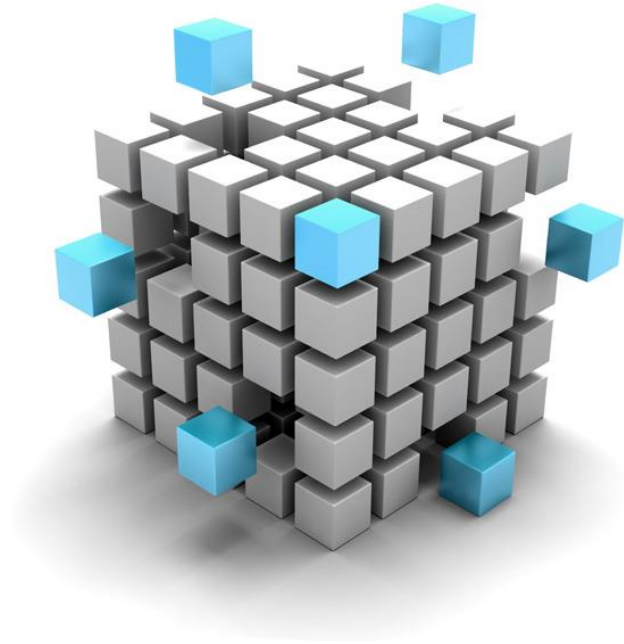
- To design a modular furniture set which caters its functionality in public semi-open space and compact residential spaces. e.g.:- outdoor coffee shops,
- To be used in areas with less circulation space, the furniture should consume very less space.
- Multiple usage of furniture

Material

Bamboo (Elephant bamboo)strips, bending

BACKGROUND STUDY

MODULARITY AS A CONCEPT

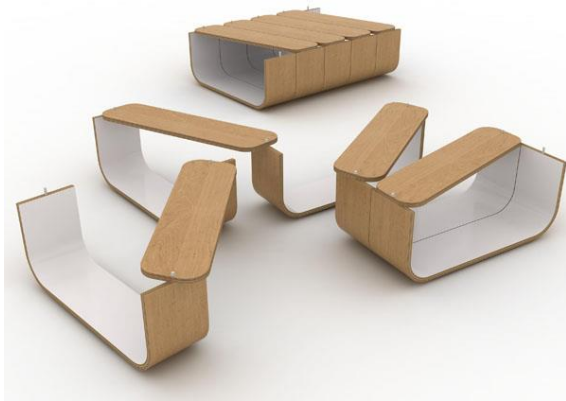


The concept of modularity refers to the subdivision of a system into different modules and can be used in another systems that serves different purposes.

The combination of different sub modular system enables the user to modify its purpose according to his own need.

MODULARITY AS A CONCEPT

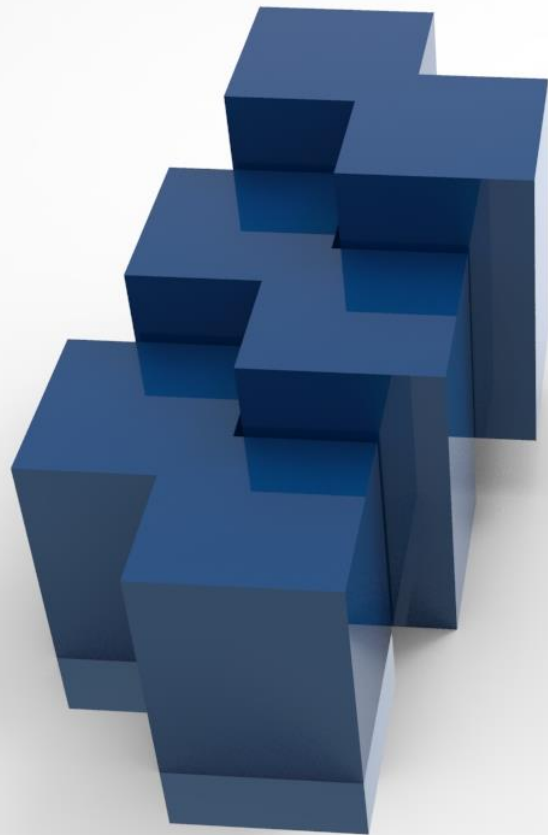
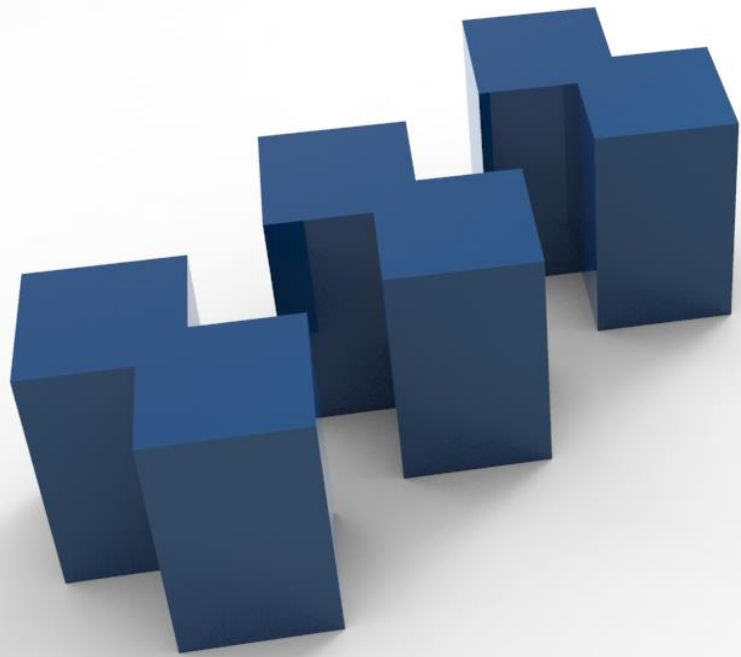
Tremendous amount of space can be saved by complimenting the different functionalities of the modules and its combinations which caters different objectives.



STACKABILITY IN FURNITURES



MODULARITY IN STACKABILITY





MOOD BOARD

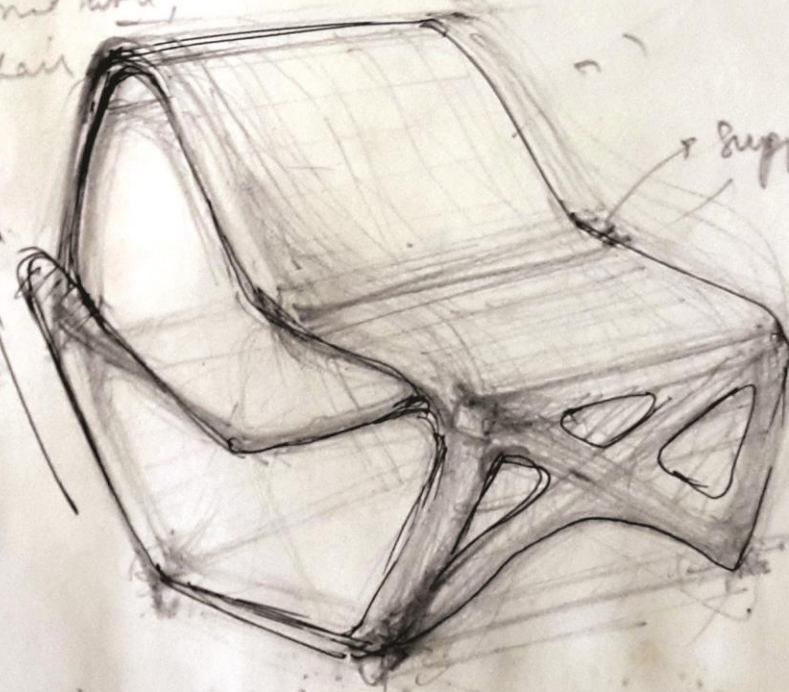
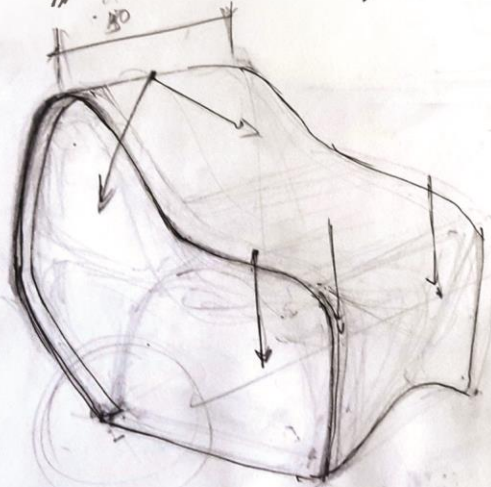


TRYING OUT WITH
BAMBOO BENDING

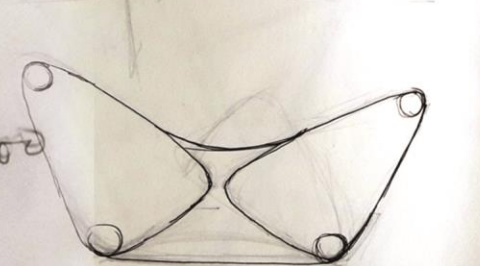
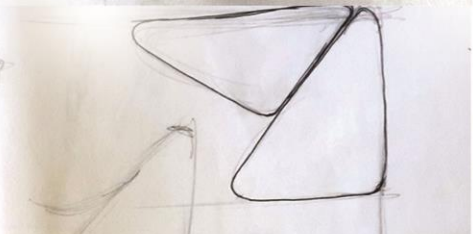
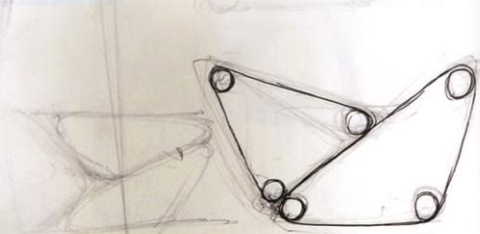
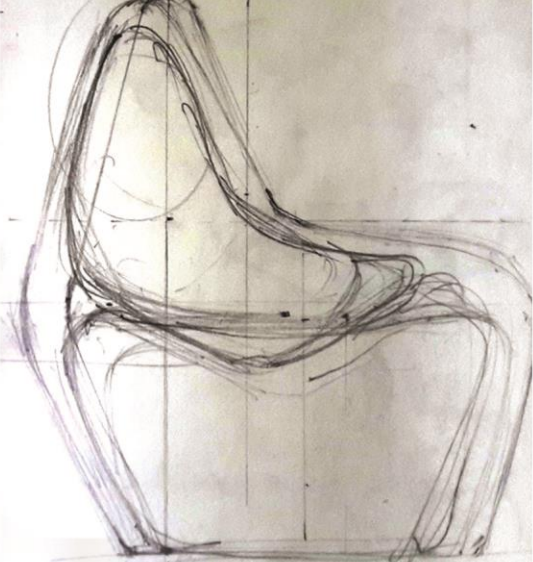
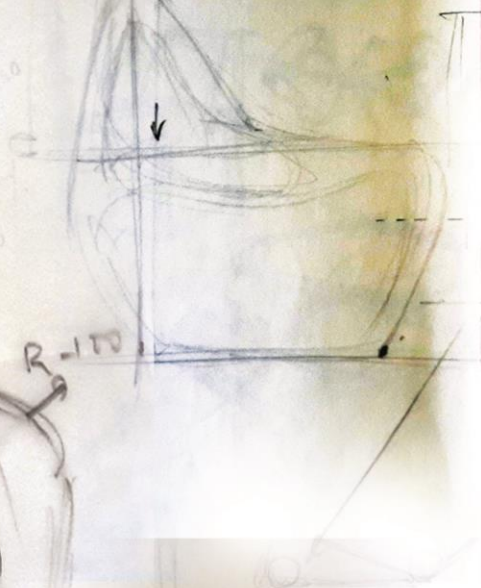
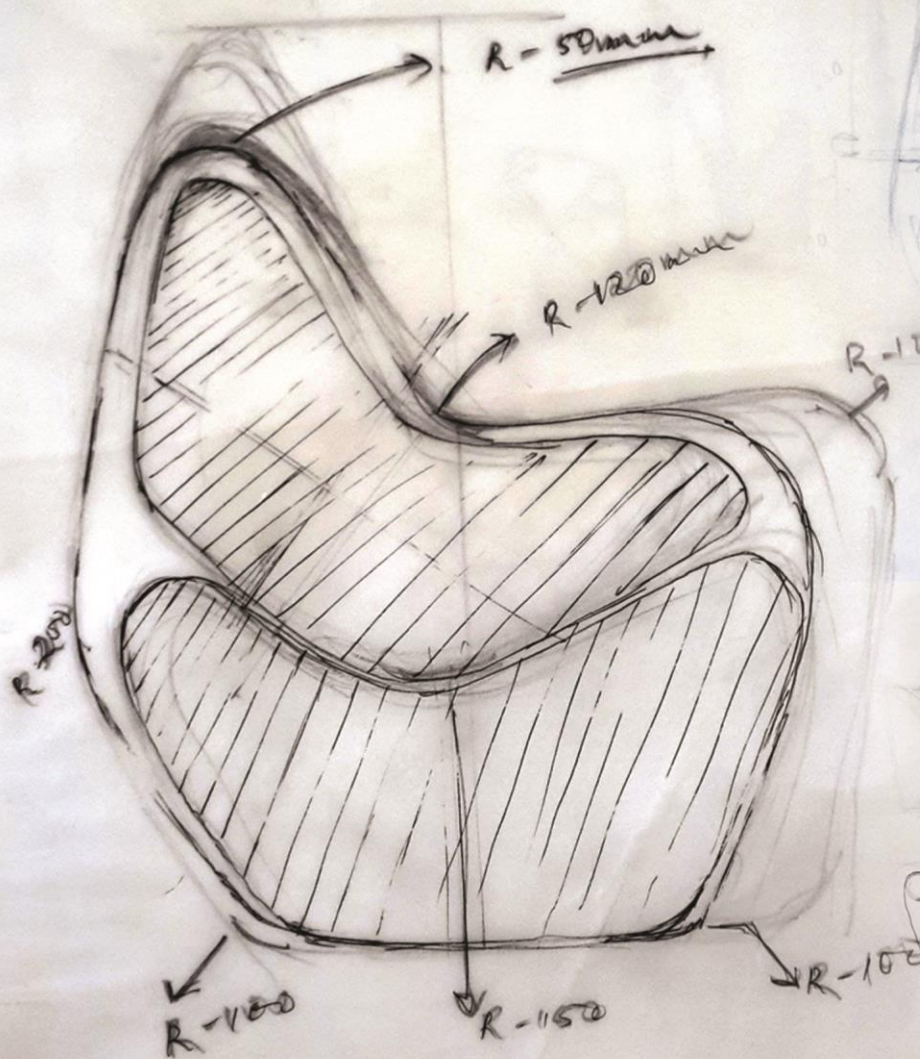
2 - large chair

1 large chair, 2 small chairs

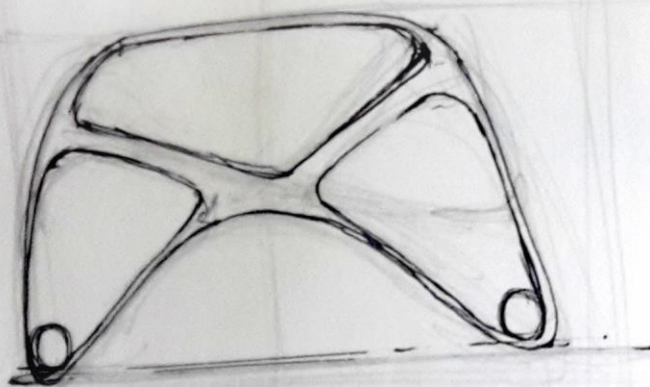
1 large chair, 1 small table,
1 small chair



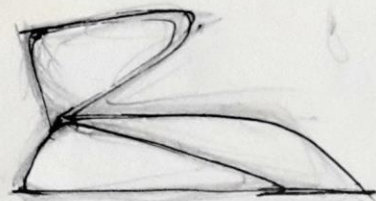
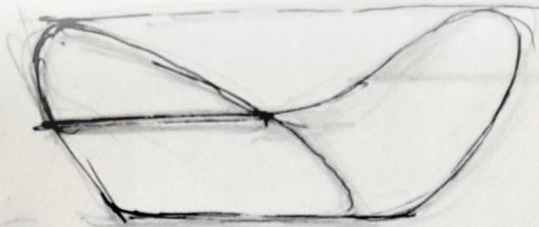
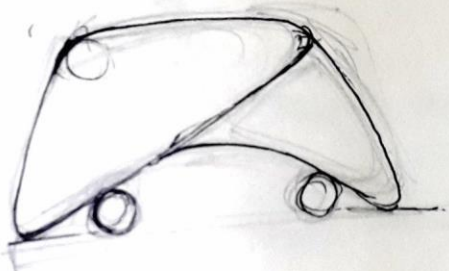
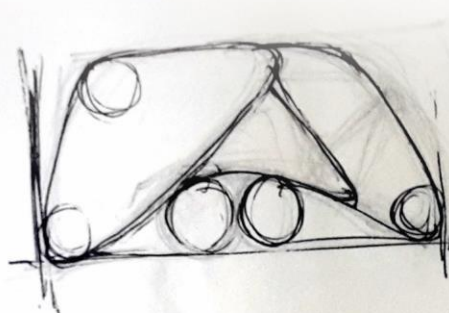
INITIAL DESIGN
PROCESSES

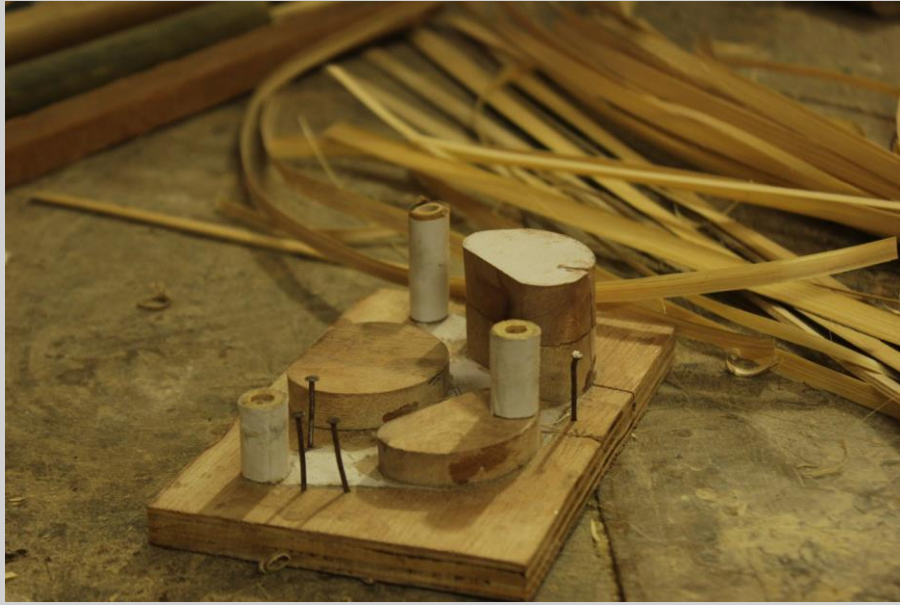


INITIAL DESIGN
PROCESSES



INITIAL DESIGN
PROCESSES





MOLD FOR MAKING
SCALED PROTOTYPE



SCALED PROTOTYPE
(INITIAL STAGE)



IDEATION 1



Low seating coffee chair



Low table



Lounge chair

WHOLE UNIT



LOW SEATING CHAIR

PROVISION FOR KEEPING MAGAZINES
AND BOOKS ALSO



LOW TABLE





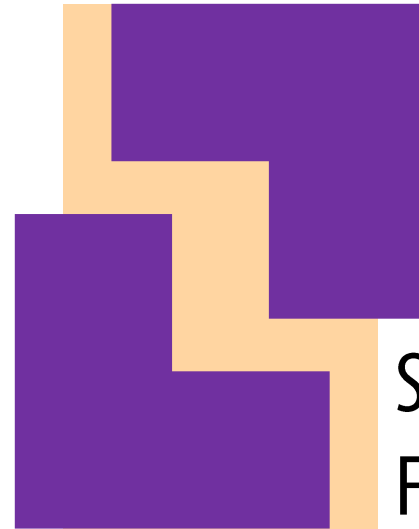
LOUNGE CHAIR



LOUNGE CHAIR



WHOLE FURNITURE UNIT



STACKING OF
FURNITURES









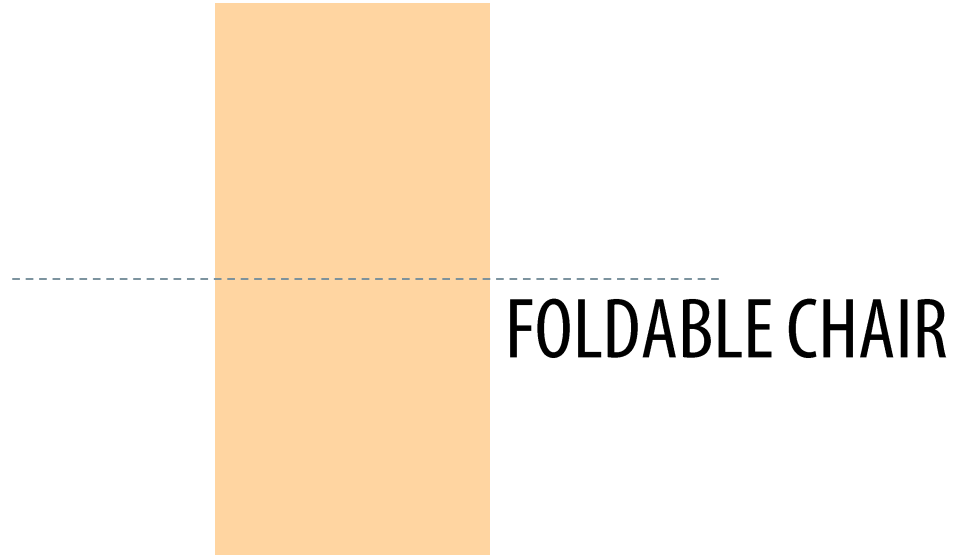








Scenario in which the furniture set is used



Brief

Foldable chair

Cost effective

Minimum usage of additional materials

Round bamboo to be used to reduce the cost.

Material

Bamboo (strictus)

OPTION 1



OPTION 2



OPTION 3



OPTION 4





SCALED PROTOTYPE



IN THE PROCESS OF MAKING

FINAL PROTOTYPE





FINAL PROTOTYPE



BALCONY ROOF
DESIGN SOLUTIONS



EXISTING BALCONY

EXISTING STRUCTURE



OPTION 1



OPTION 2



OPTION 3



SHADE FOR ENTRANCE DOOR



EXISTING

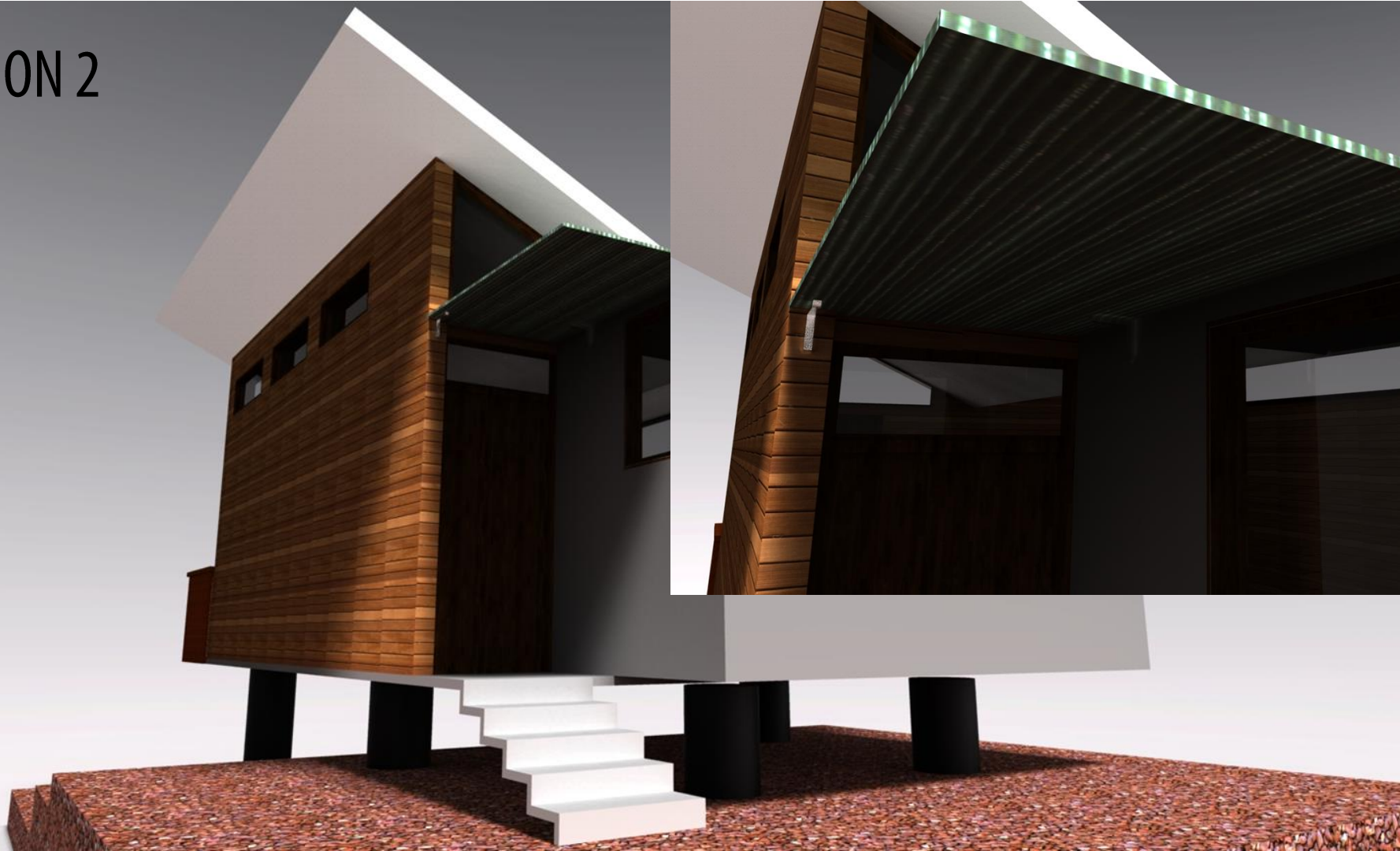


PROPOSAL

OPTION 1



OPTION 2





**SHEERA BOARD PLACED TO CHECK THE EXTENT IN
WHICH THE RAINFALL IS BLOCKED.**

A solid orange square is positioned to the left of the text.

**BAMBOO TOY
EXPLORATION**



Brief

- To design a DIY bamboo toy with the concept of imageries of animals
- Completely using bamboo joineries.
- Geometricizing the design according to the imageries.

