DEVARSH PATEL

Product Design Portfolio

2018

INDEX

PACKAGING

TIE SET PACKAGING

To design a systematic , organised and compartmental package of a two tie set.

Problem areas :

- Ties often gets crumbled.
- Not easy to re-pack after use.
- Less or no choice selection of the items in a package.
- Different package for different tie set items.

Tie Set Items :

Tie , Pocket Square , Tie Pin , Cufflinks

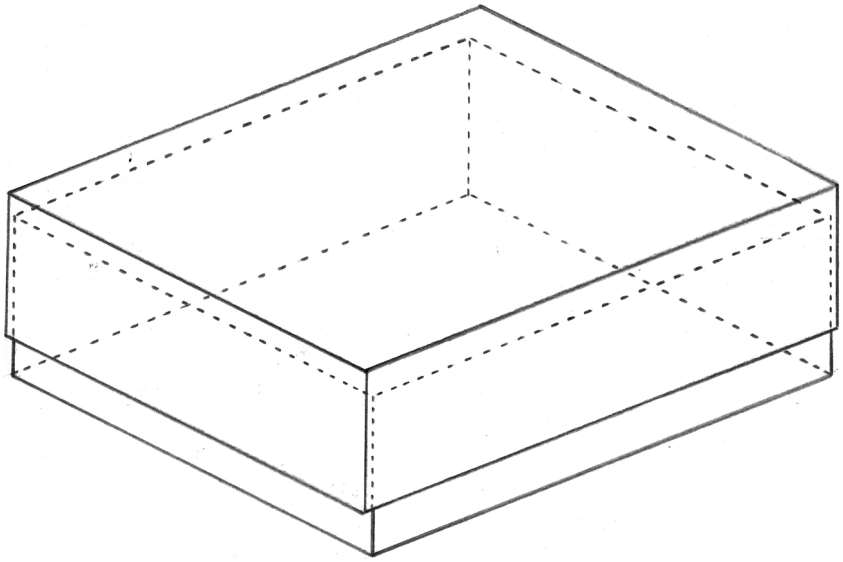
Materials Explored :

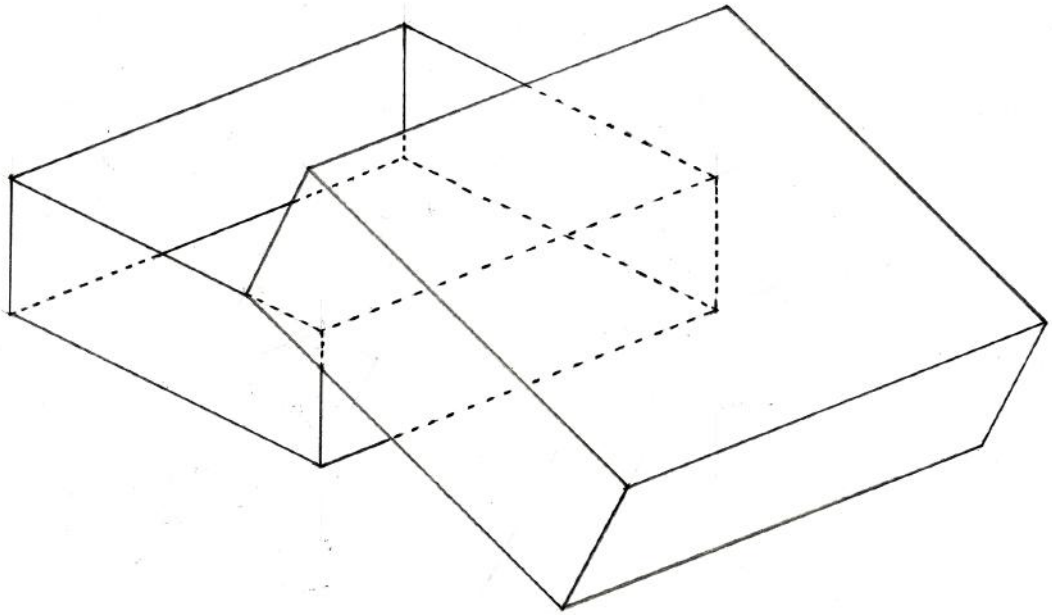
Mill board , Rexine , PVC

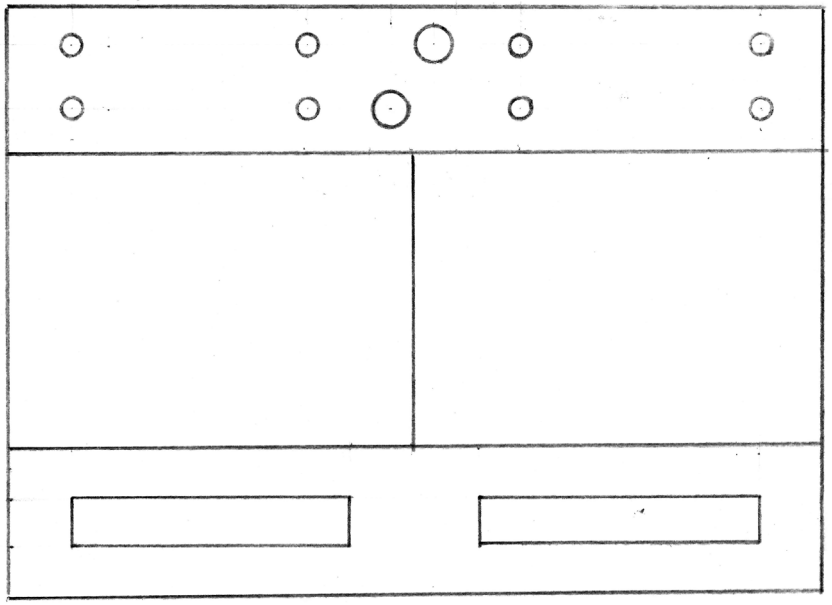
EXISTING PACKAGING

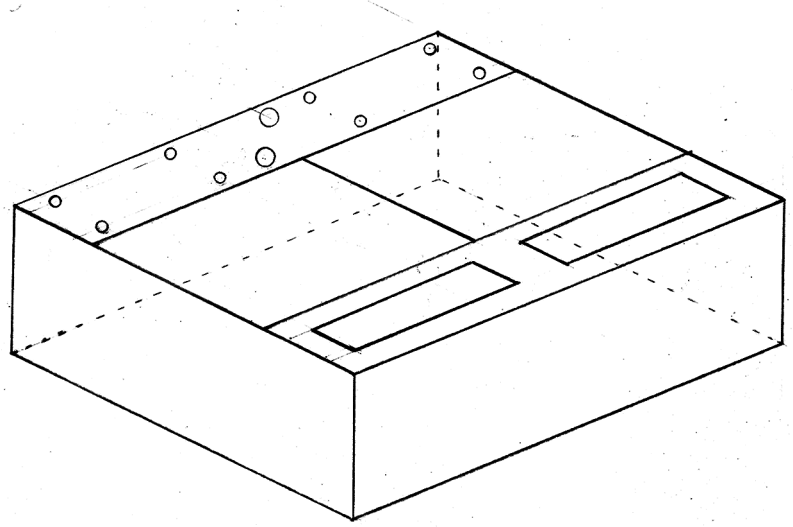
MOOD BOARD

CONCEPT









MODEL EXPLORATION

LAYOUT

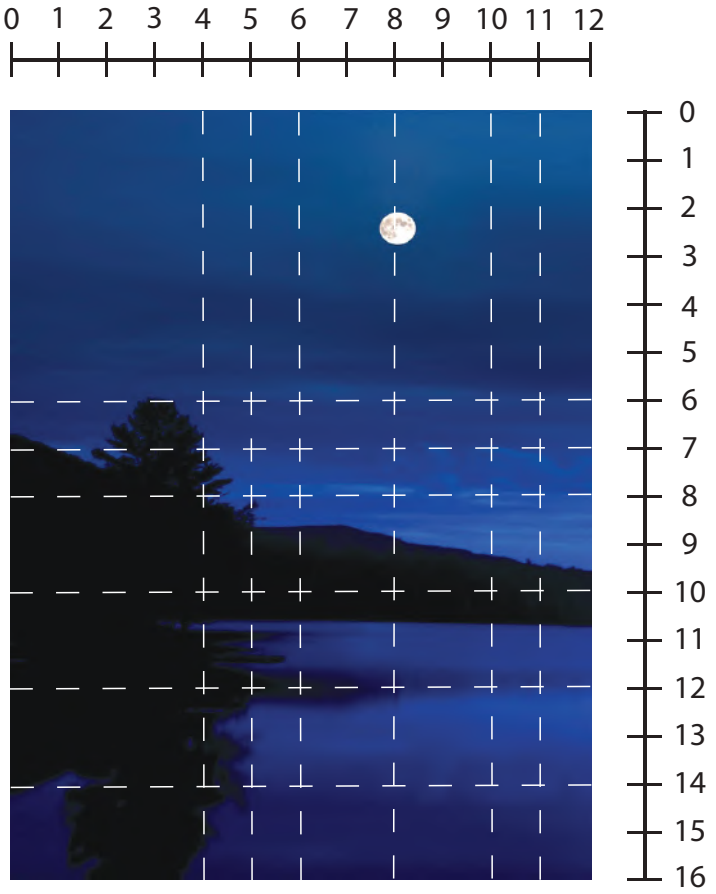
RENDER

SIMPLE PRODUCT DESIGN

The aim of this project was to develop a craft product.
The product I worked with is a photoframe. Rather then having different frames for different sized photos , adjustable frame accomodates all those photos in a single unit.

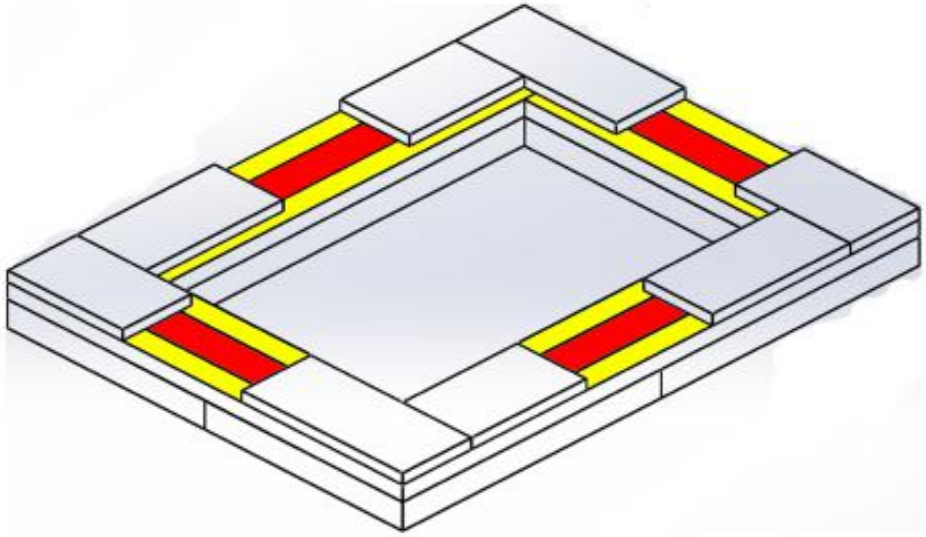
MATERIALS EXPLORED

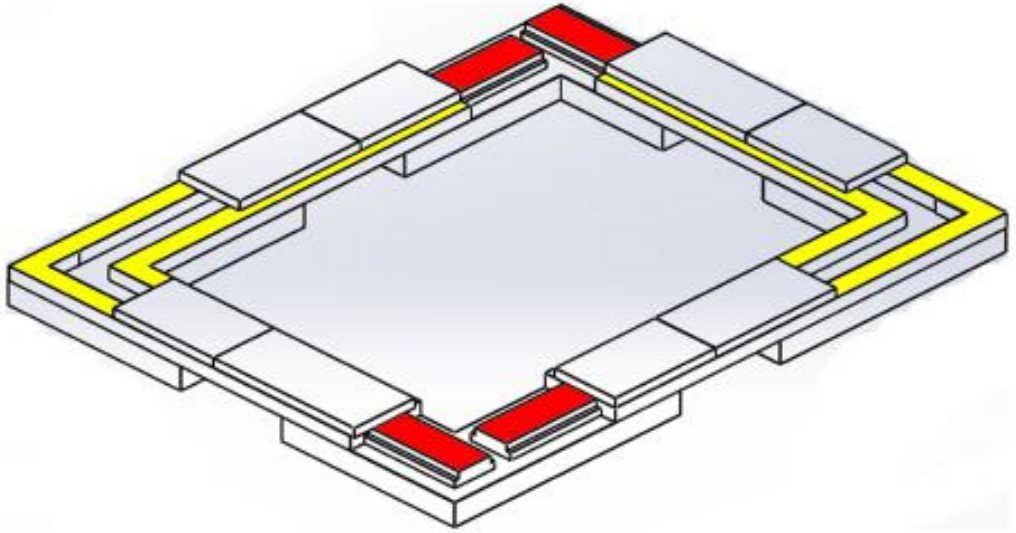
PVC
Alluminum rod
Wood

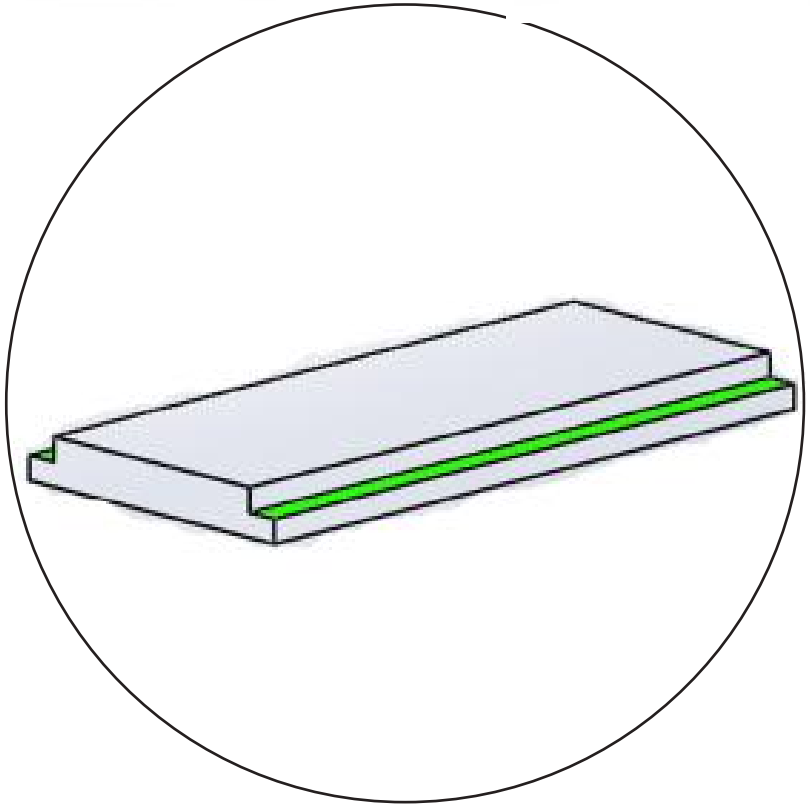


PHOTOGRAPH SIZES (Inch) :
4:6
5:7
6:8
8:10
10:12
11:14
12:16

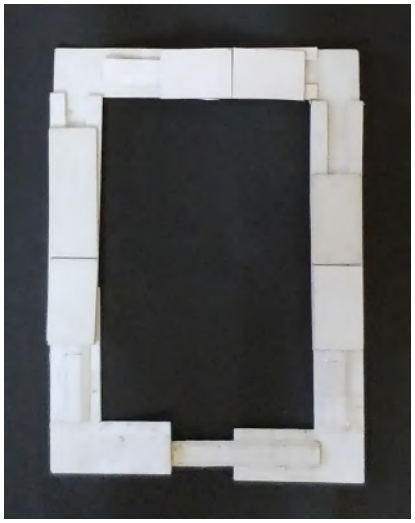
CONCEPT







Path where the sliding of the frame happens.



Using PVC sheet pieces and Alluminum rod for lock mechanism.

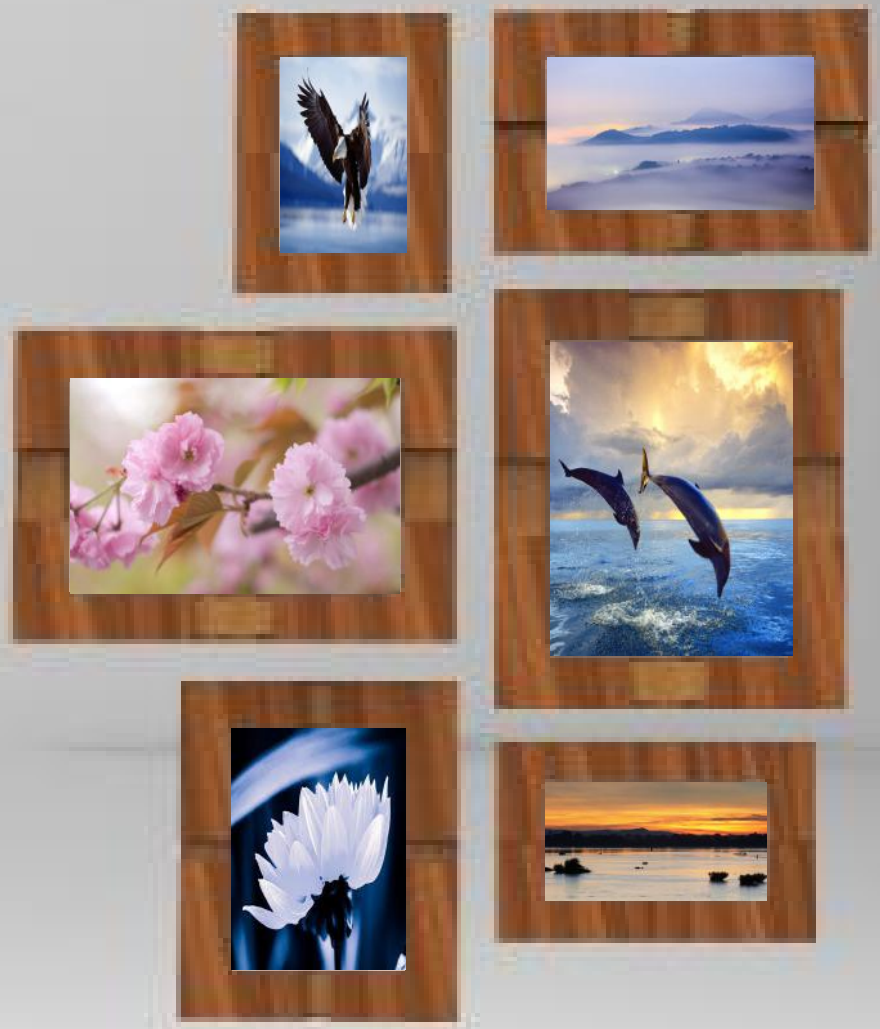
The Wooden support stand and Acrylic frames will be provided with the package.

Horizontal Framing

Frames photos of 3 different sizes - 4:6 , 5:7 , 6:8 (inches)

Vertical Framing

RENDERS



NATURE AND FORM

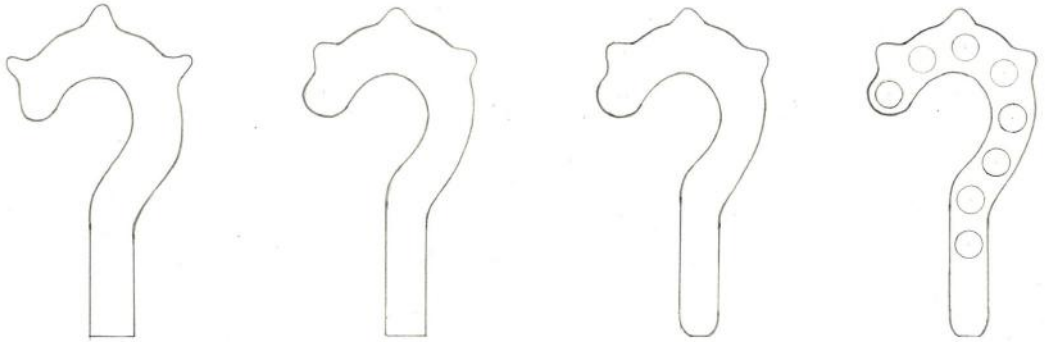
The aim of the project was to redesign the form of any product by taking inspiration from a nature element.

Inspiration : Bat wings , Open-close movement

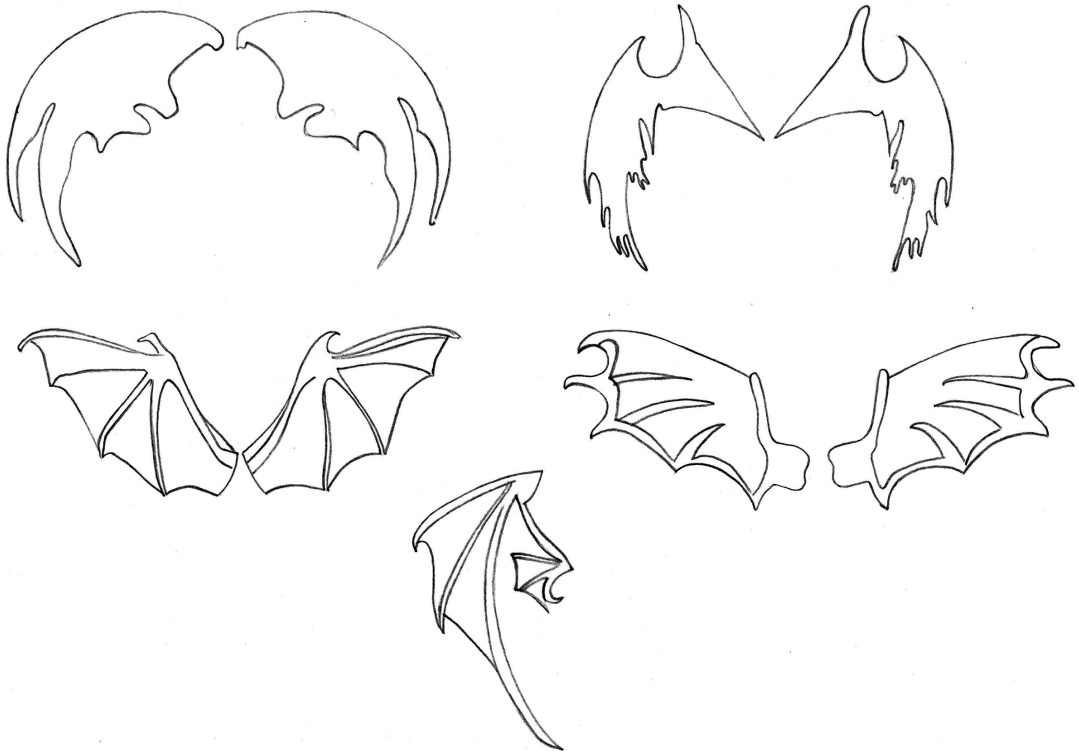
Materials Explored : PVC , Acrylic

MOOD BOARD

SKETCHES



HEAD VARIATION



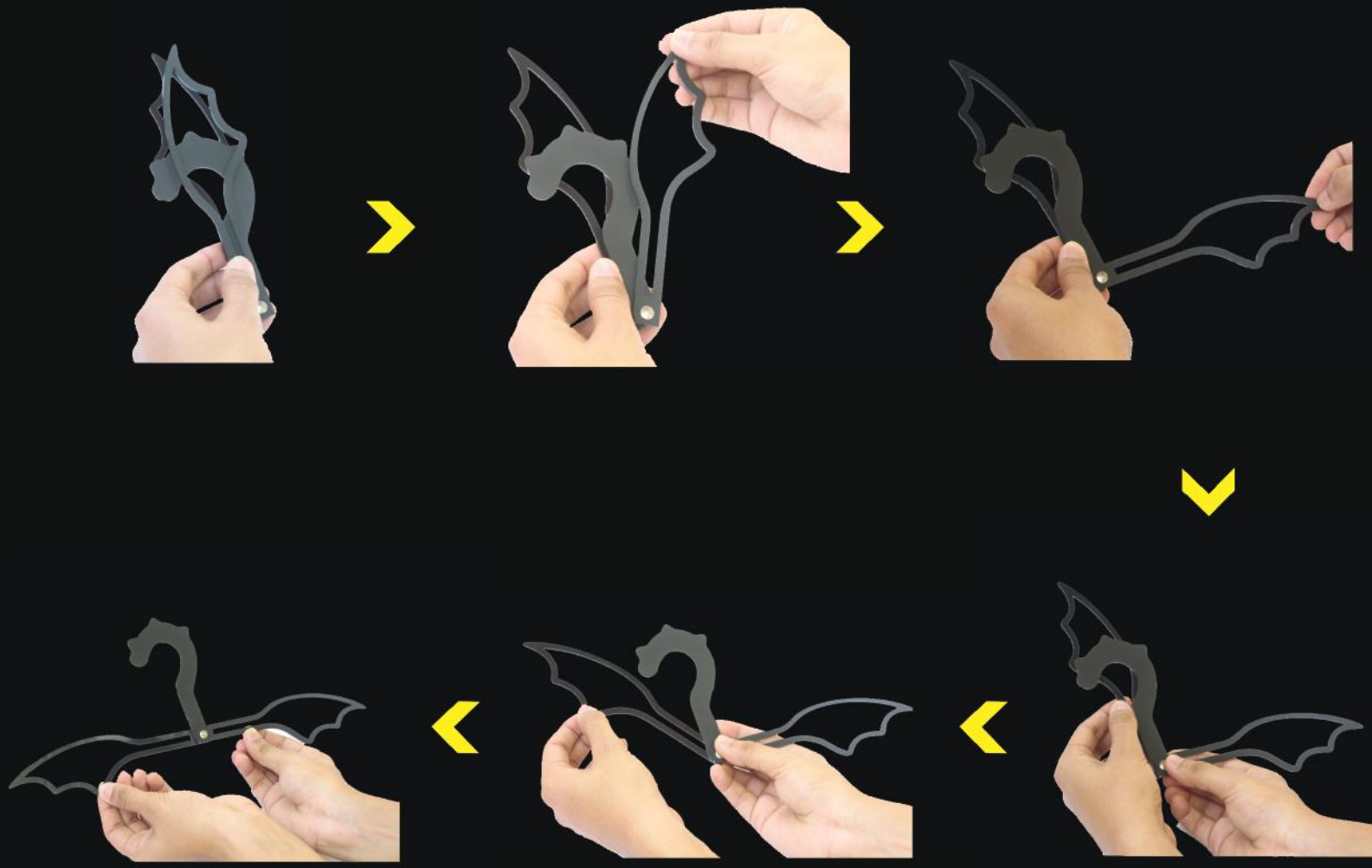
WINGS VARIATION

MOCK-UP MODELS

PVC MODELS

ACRYLIC MODELS

HOW TO OPEN



WHEN IN USE

WHEN NOT IN USE

USER INTERACTION

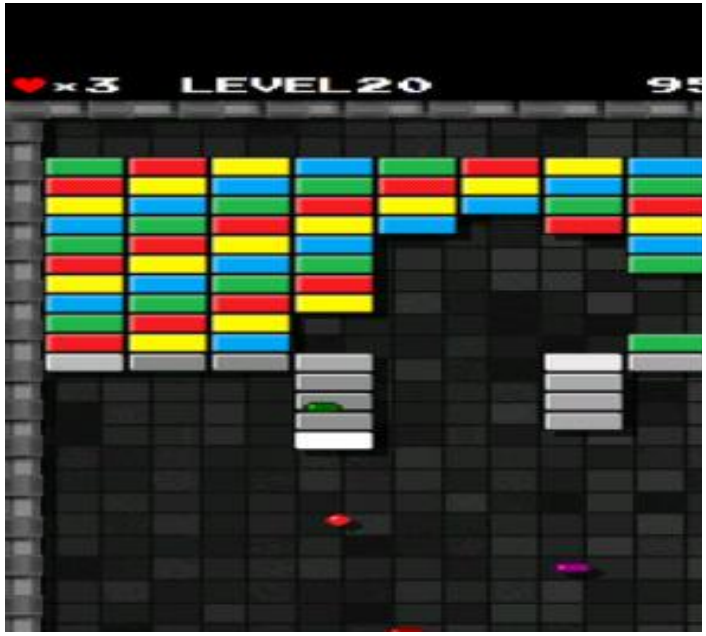
About :

Brick breaker is a breakout clone in which the player must smash a wall of bricks by deflecting a bouncing ball with a paddle.

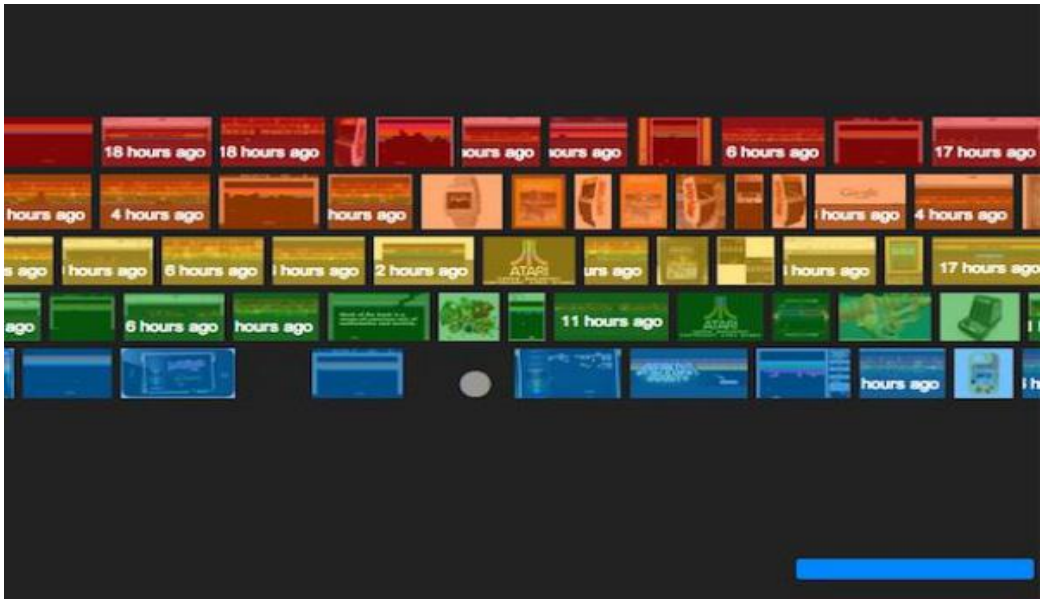
Objective :

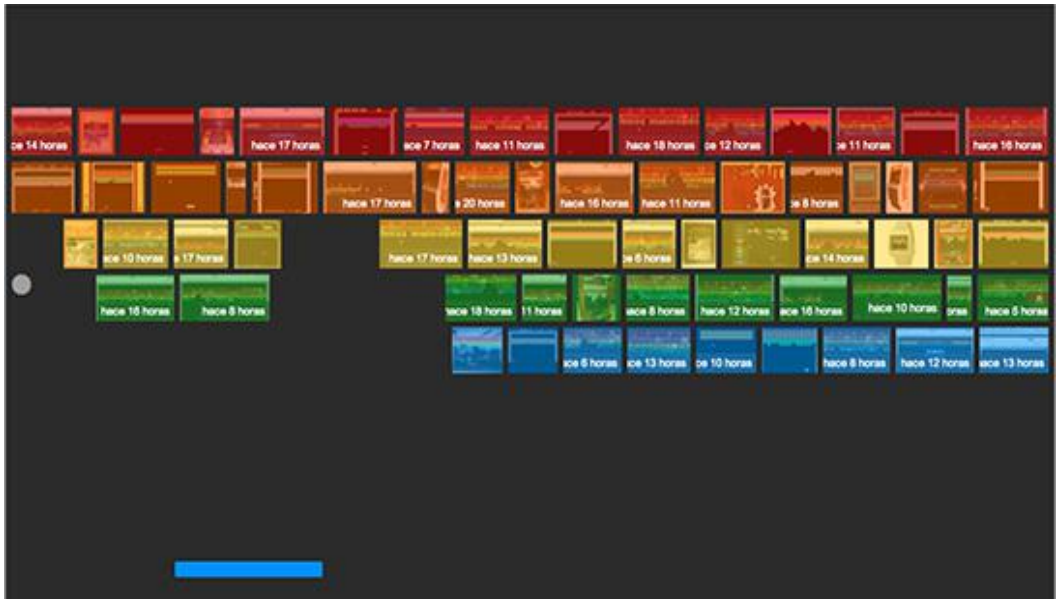
To create a modified console which is tangible and helps the user play the game in a more exciting way.

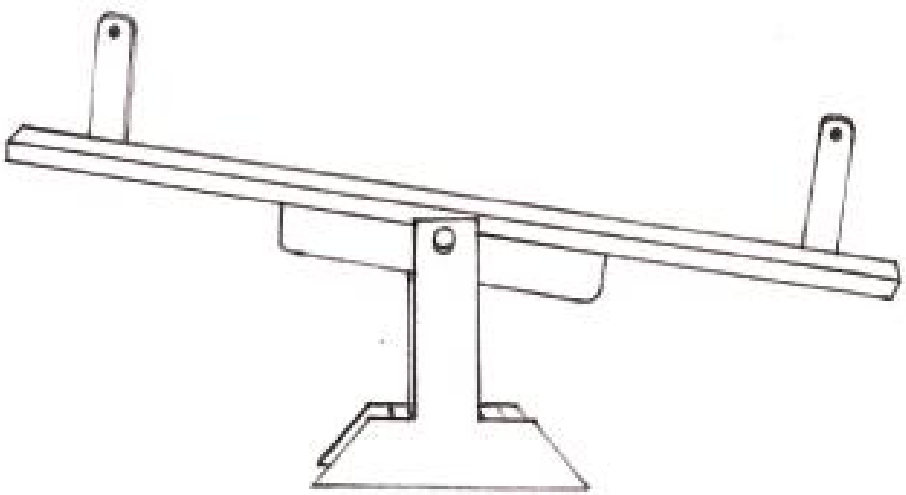
BRICK BREAKER

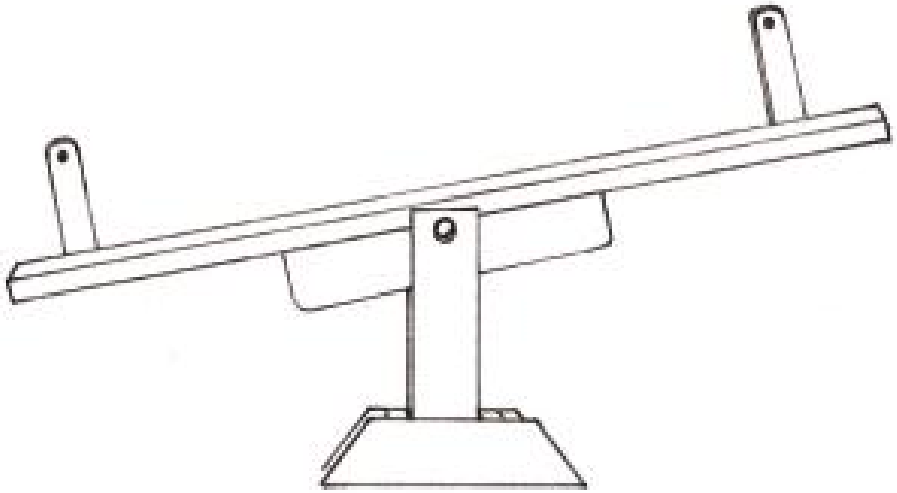


CONCEPT



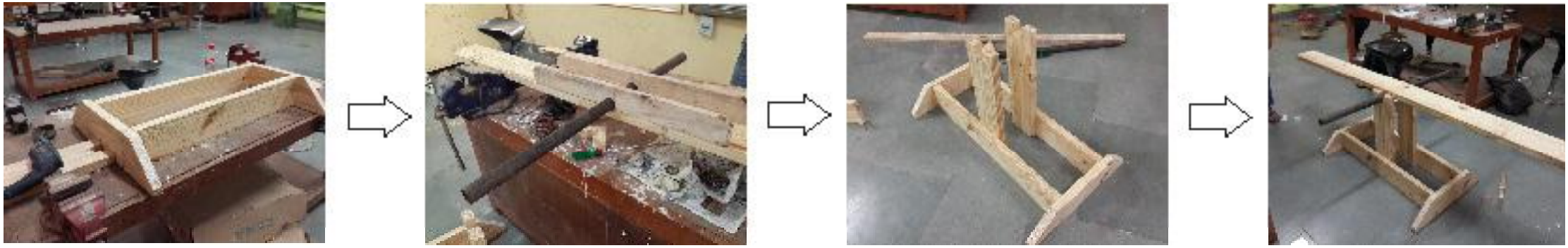






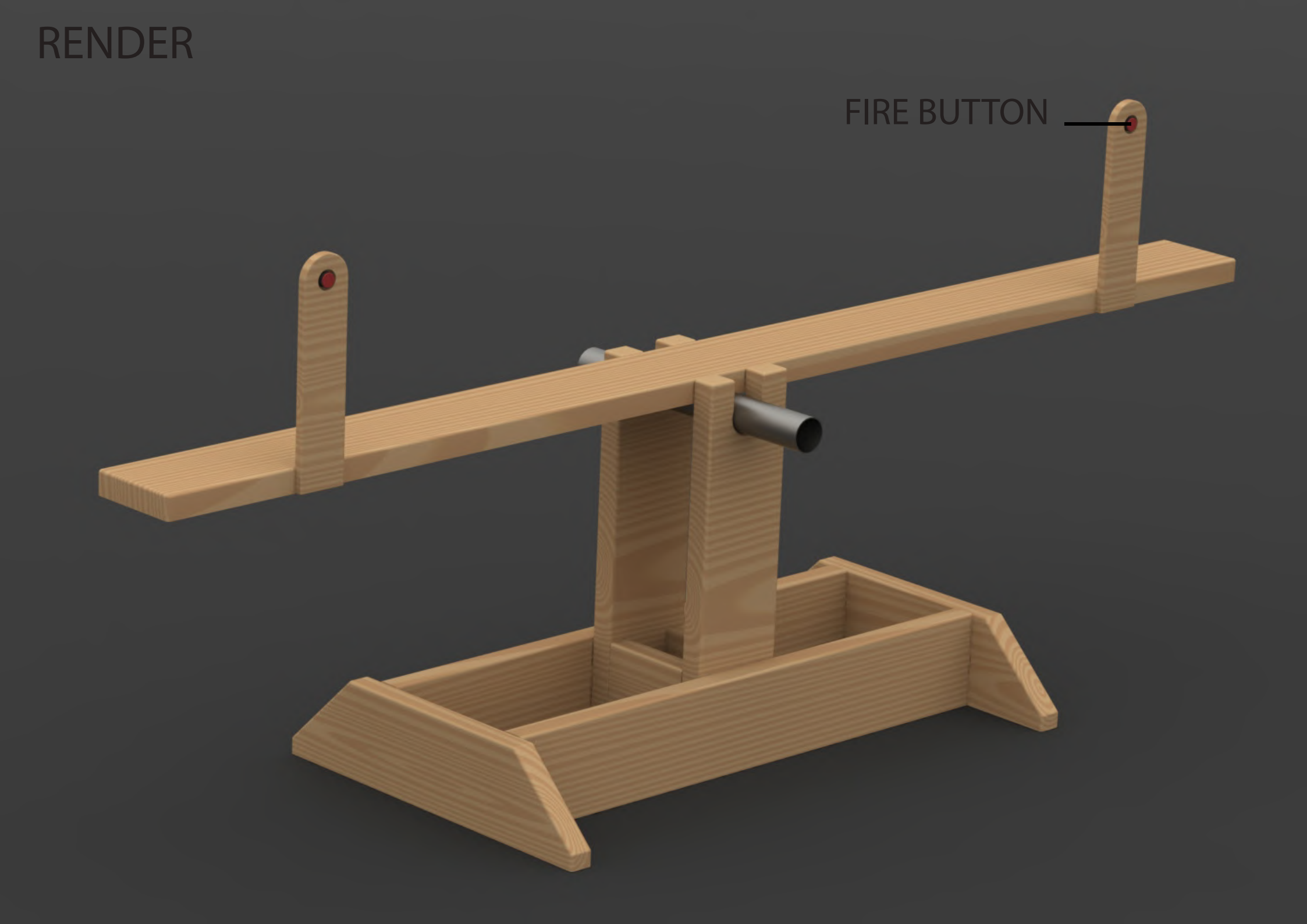
The downward right and downward left motion of the seesaw relatively results in the right and left movement of the paddle.

PROCESS



USER TESTING

RENDER



USER INTERFACE

WHY

It is a well known fact that the involvement of a child nowadays is shifting to a technological world much earlier than the desirable age.

What was an exciting new way to keep in touch has rapidly become a device that seems to be making kids feel more vulnerable and distant.

So , Kudoss is made with the intention of bridging the gap of communication between children and parents.

WHAT

Parents can't really stop their child from using their phones because their denial tend to create a rift between them and the child , eventually making the child feel too distant and alone.

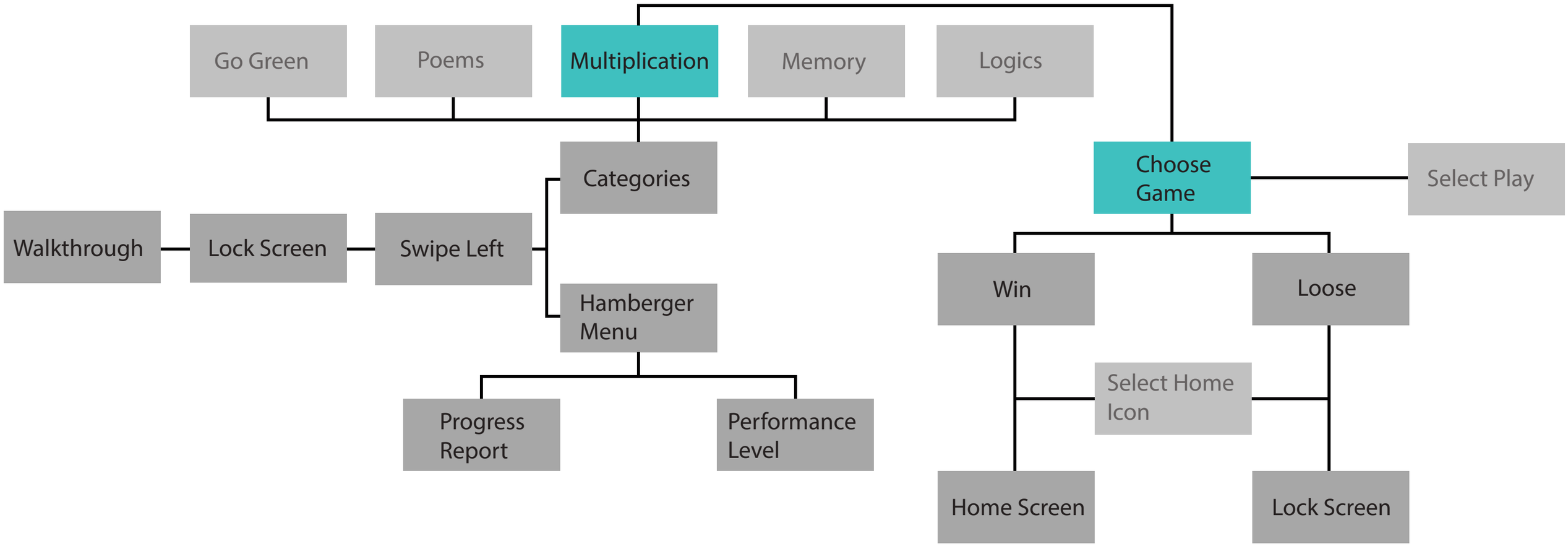
Kudoss is a learning based application which focuses on moral values , manners and basic communication in a pleasant and lively way.

And guess what , it allows parents to let their child use their phones as the child must have a walkthrough of the application and perform several tasks to unlock the phone and play.

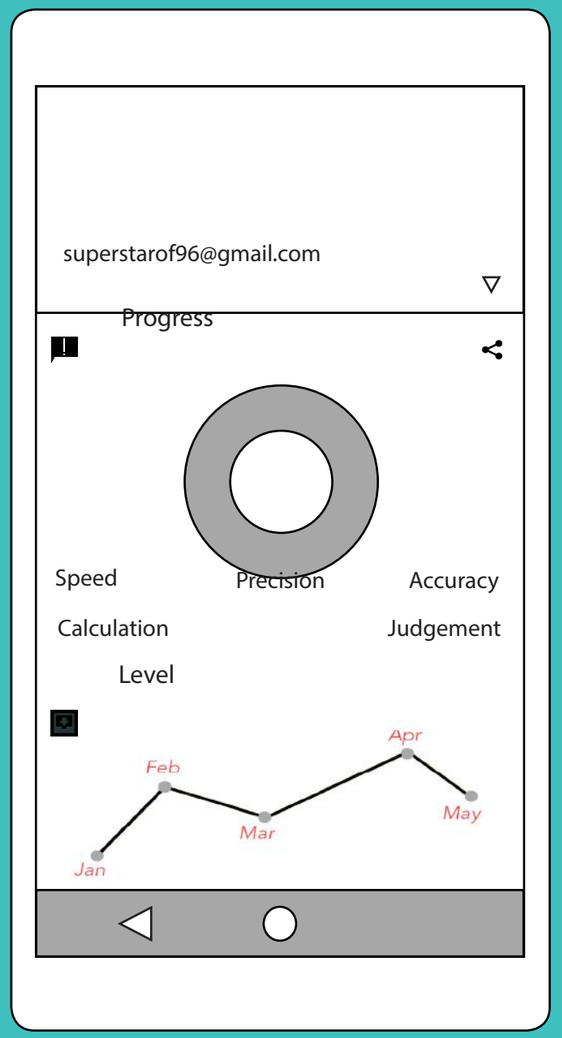
The target age group of the children is 4-10 years.

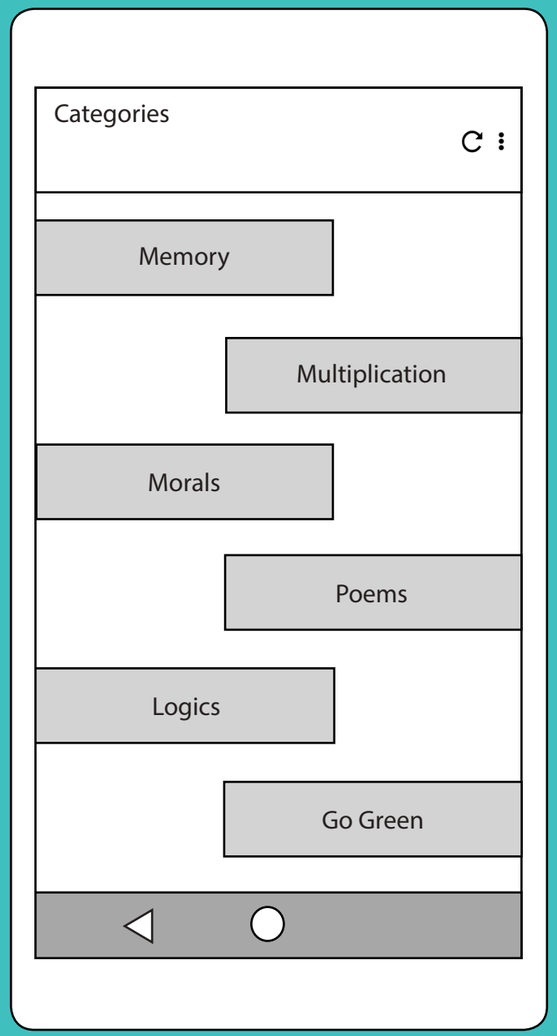
USER FLOW

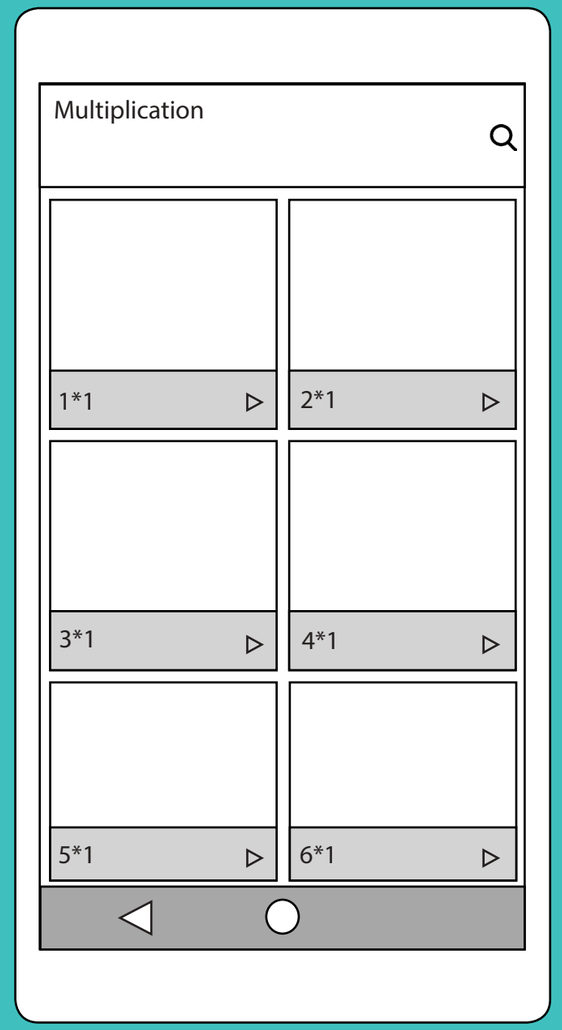
User flow is based on reaserch
and customer's needs.



WIRE FRAMES


superstarof96@gmail.com
Progress
Speed
Precision
Accuracy
Calculation
Judgement
Level
Jan
Feb
Mar
Apr
May


Categories
Memory
Multiplication
Morals
Poems
Logics
Go Green


Multiplication
1*1
2*1
3*1
4*1
5*1
6*1

Tables

Fill in the blanks

Tap the sqaures to
enter numbers

Instructions

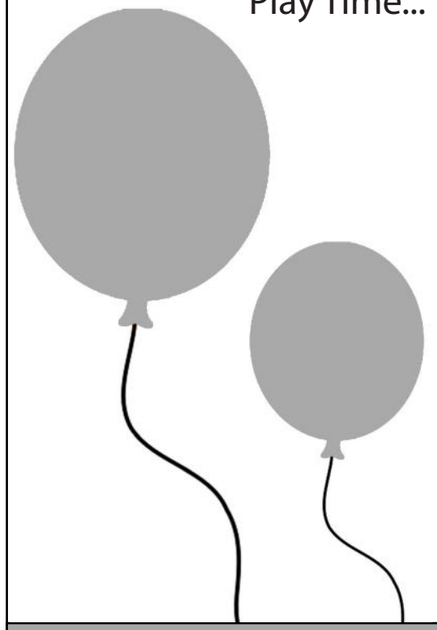
Score

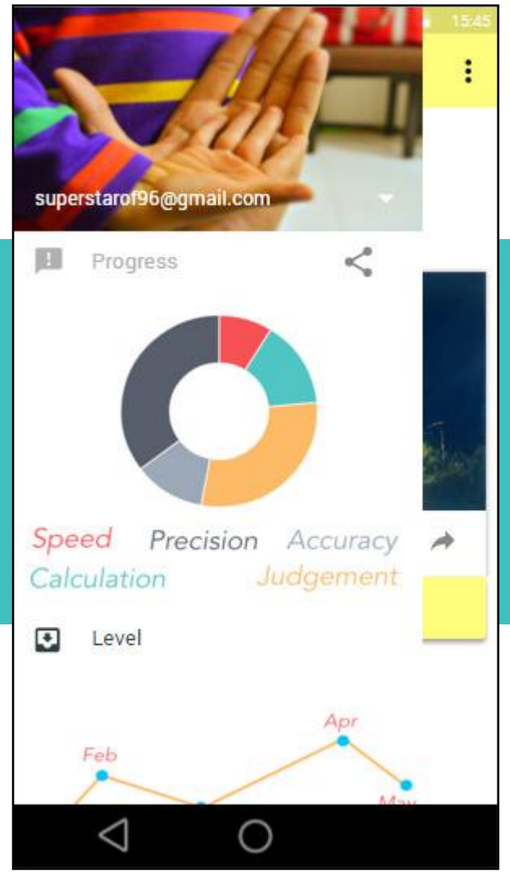
Hard Luck :(

4/7

Remember

Play Time...





01.

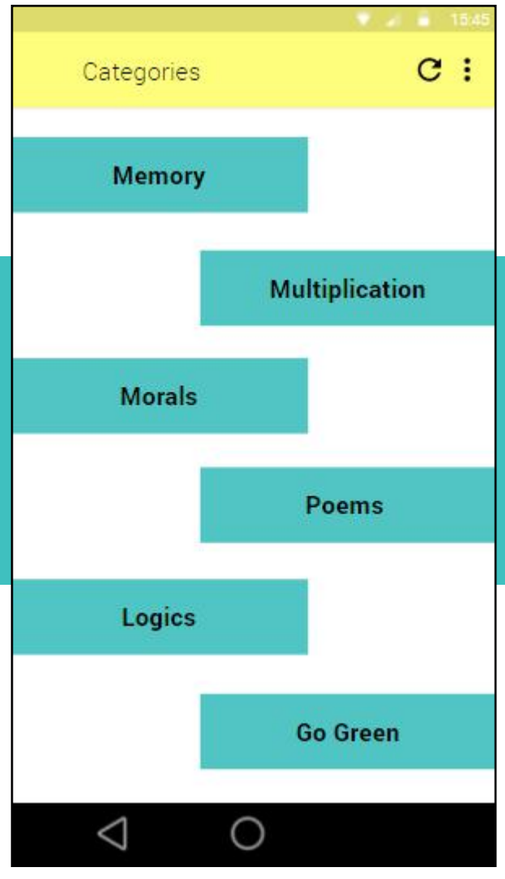
HAMBURGER MENU

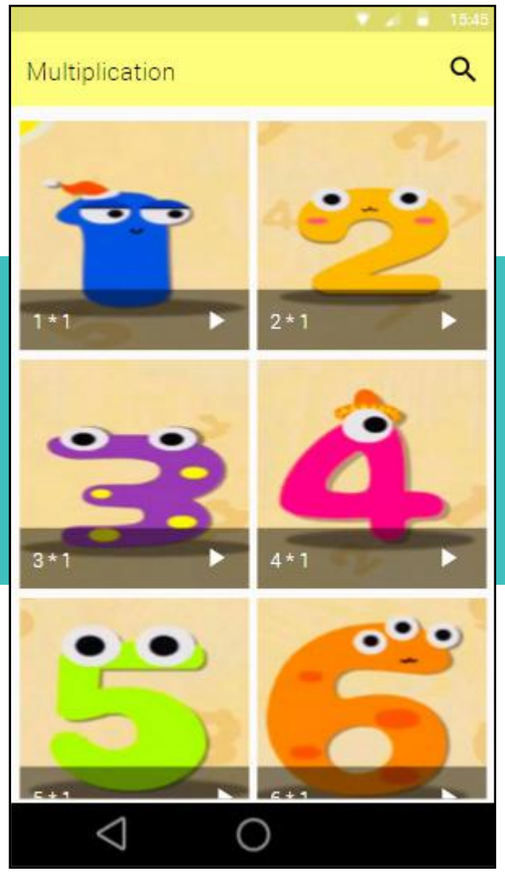
Parents can check out the progress report and the performance level of their child based on the tasks that the child performs.

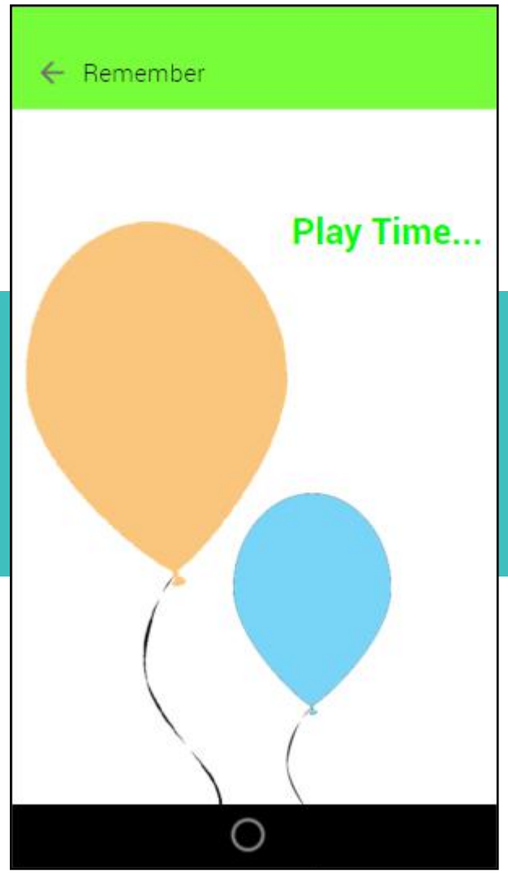
02.

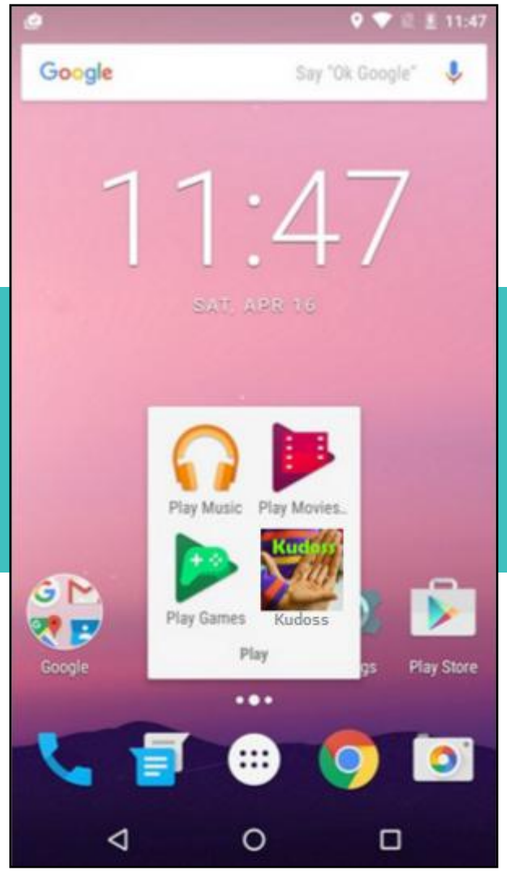
CATEGORIES

Choose the category and the game that interests the child.









03.

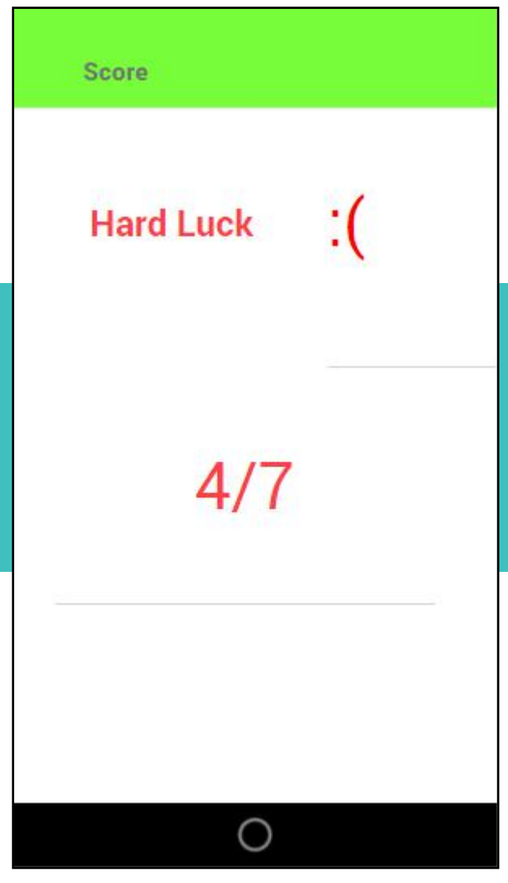
HOME SCREEN

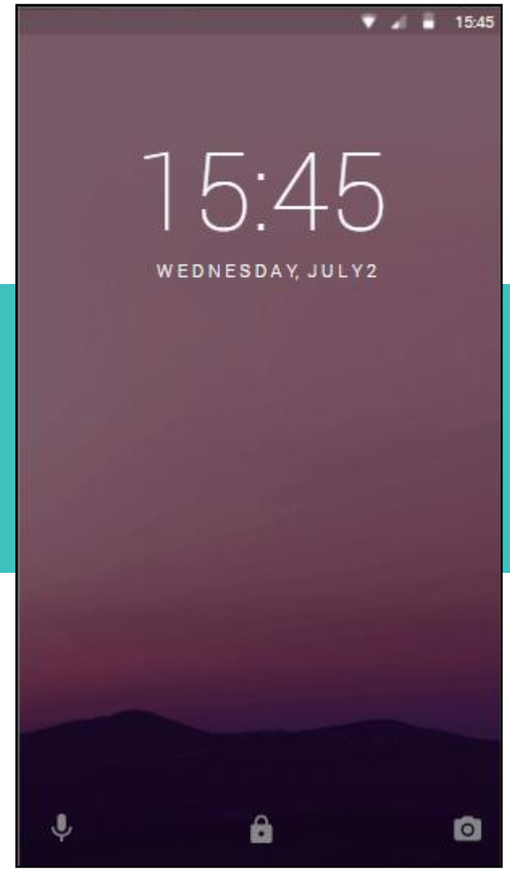
Win the task and the phone unlocks.

04.

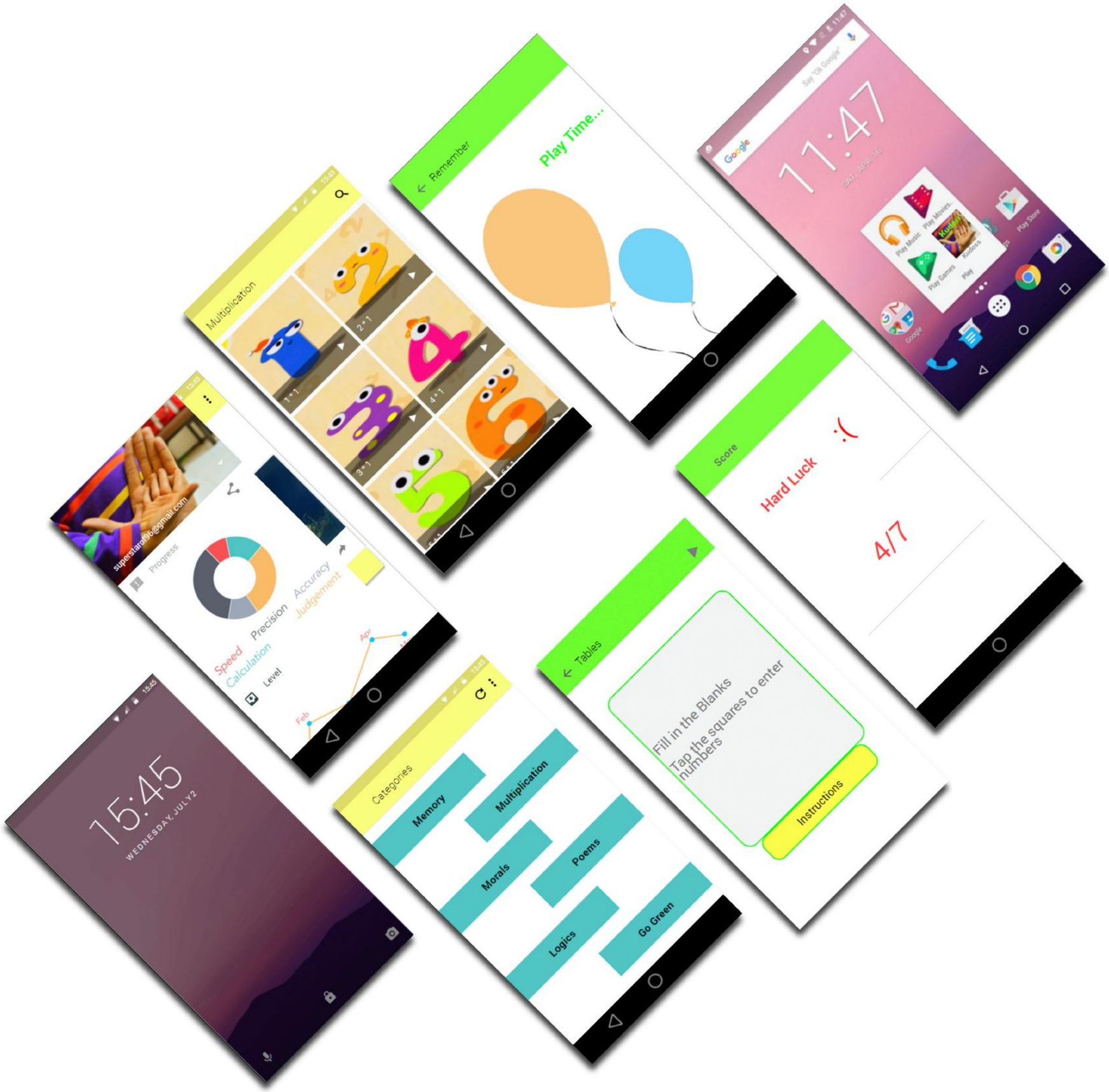
LOCK SCREEN

Failure , re - try or no play.





SCREENS


Remember
Play Time...
Multiplication
Score
Hard Luck
4/7
Tables
Fill in the Blanks
Tap the squares to enter numbers
Instructions
Progress
Accuracy
Judgement
Speed
Precision
Calculation
Level
Categories
Memory
Multiplication
Morals
Poems
Logics
Go Green
15:45
WEDNESDAY, JULY 2

THALI PARTITION

Brief :

To design a partition which holds thalis , stored in a kitchen drawer.

Overview :

Since , this was a company sponsored project , I was given the liberty to explore different materials which can be feasible for thali partition and further can be used for manufacture and production process.

Materials Explored :

Alluminum wire , Acrylic

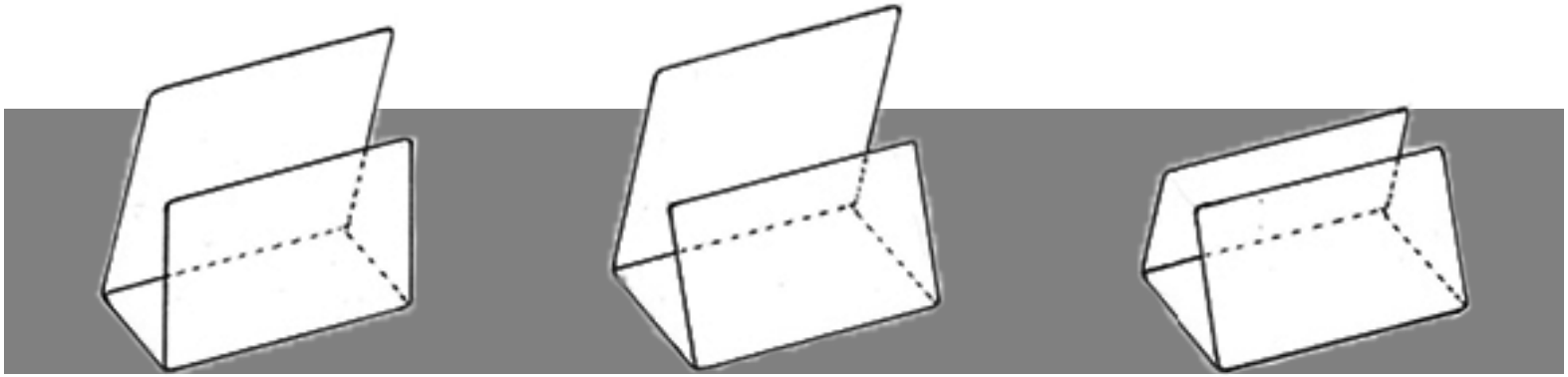
Final Material :

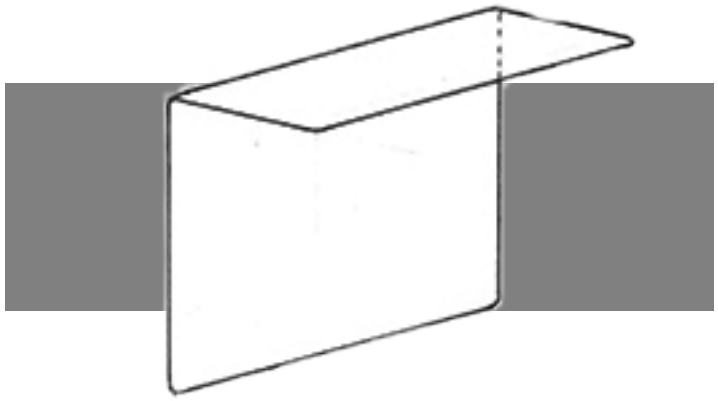
Plastic

EXISTING PARTITIONS

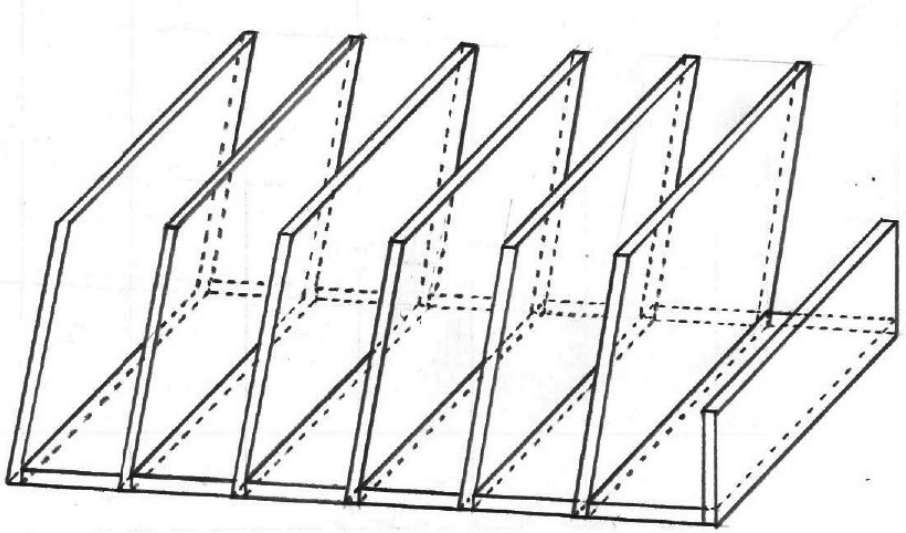
INSPIRATION

IDEATION

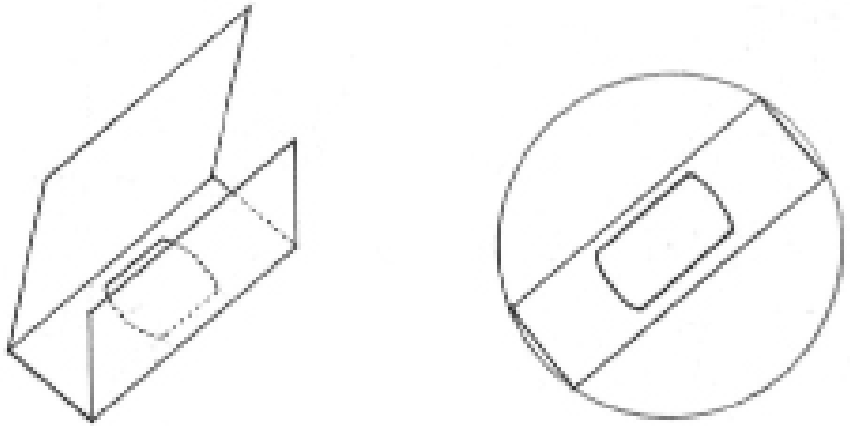




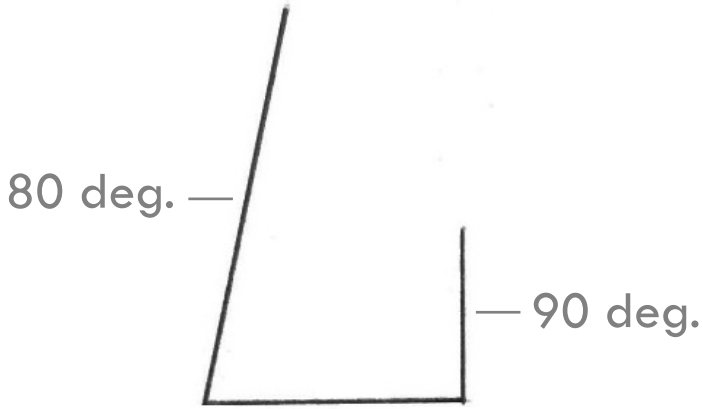
CONCEPT



- Allignment of multiple partition units as one single part.

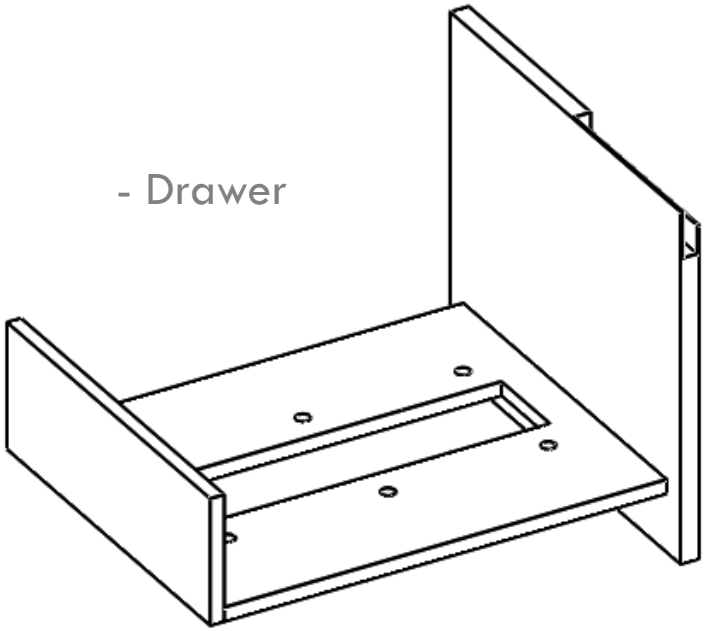


- Groove at the base of each unit to hold a particular portion of the thali thereby preventing it from rolling left and right while opening or closing the drawer.

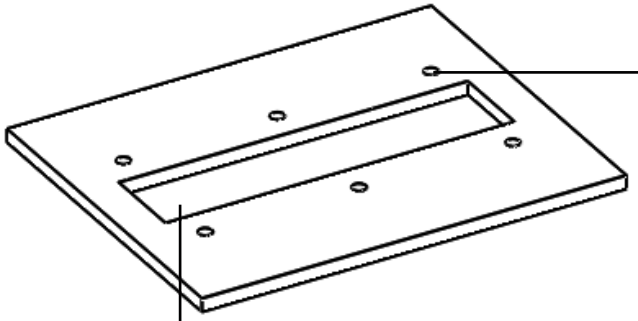


- Designed with specific angles to prevent the back and forth movement of the thali while opening or closing the drawer.

CONCEPT



- Drawer



0.5’ diameter extrusion on either side for screwing the partition unit on the base of the drawer.

Restricting the movement of thalis by making a particular portion of it pass from the groove at the base of the partiton unit through this space at the base of a drawer.

MODEL EXPLORATION

RENDER

SYRINGE PUMP

Brief :

To identify the opportunity to re-design a product to the minute detail of it.

Application :

For people who have difficulty in swallowing tablets , syringe pump helps in gradually infusing small amounts of fluids (painkillers & other drugs) to a patient's body.

Working :

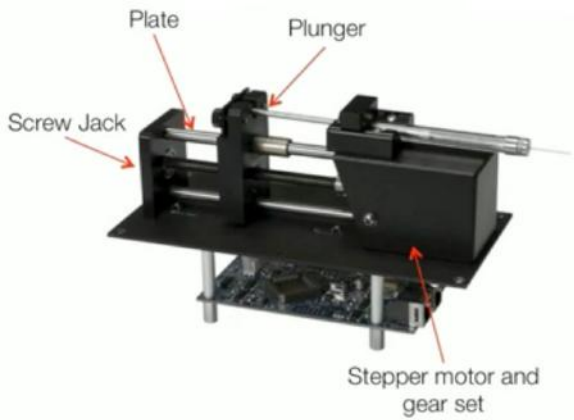
Battery powered

Materials Explored :

- High density thermocol
- Wood

EXISTING PRODUCT

MECHANISM



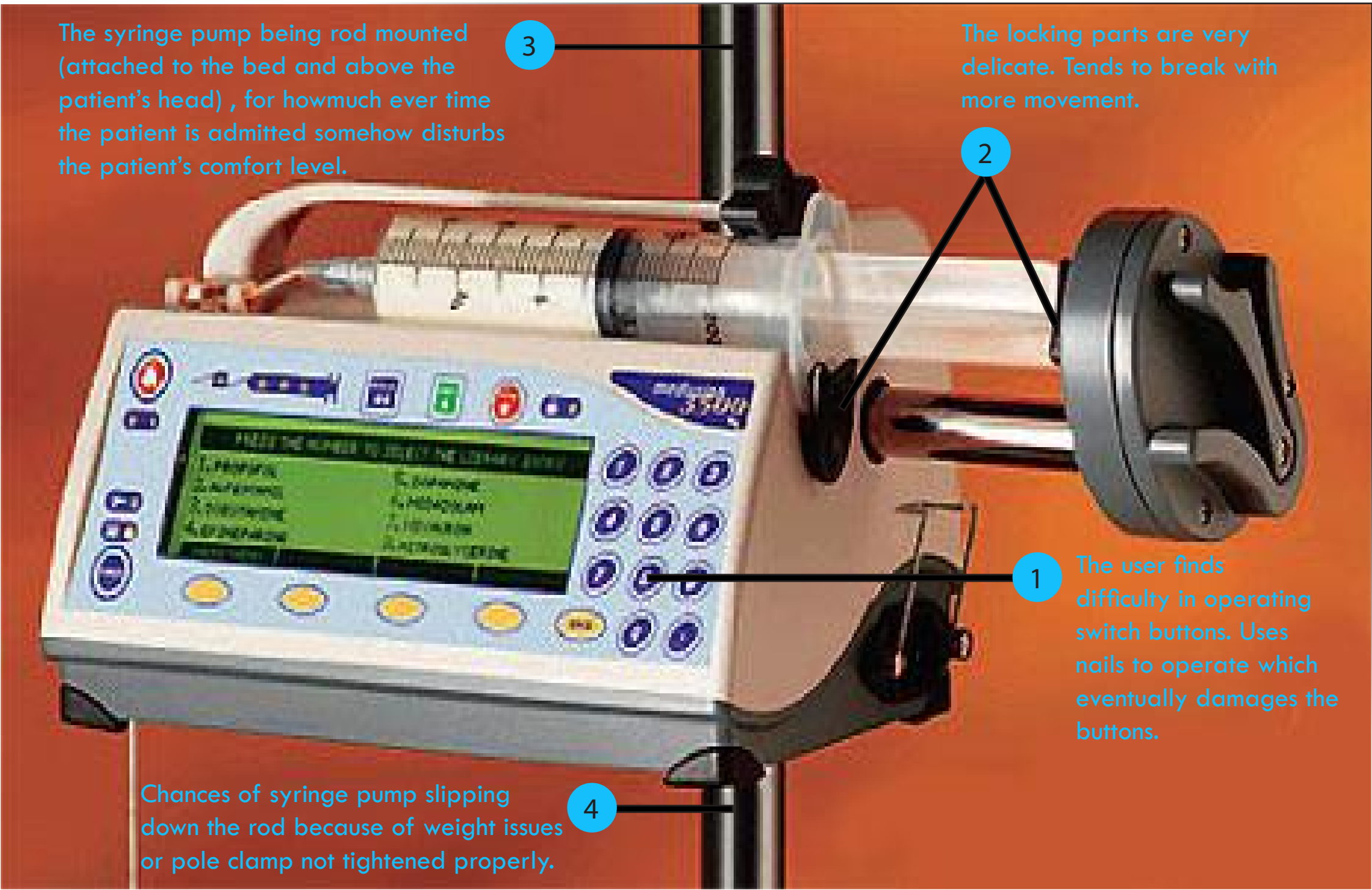
FUNCTIONS

Step 1. Syringe plunger is pushed by a middle plate.

Step 2. The middle plate is contolled by a screw jack.

Step 3. The screw jack is eventually turned by the stepper motor and a gear set.

PROBLEM AREAS



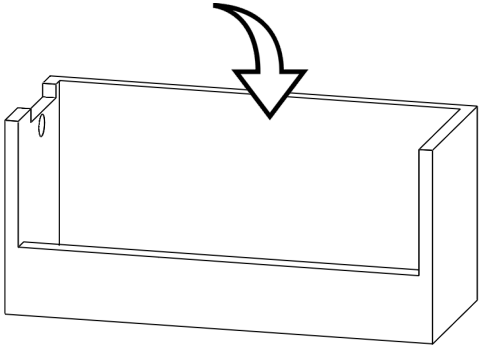
CONCEPT GENERATION

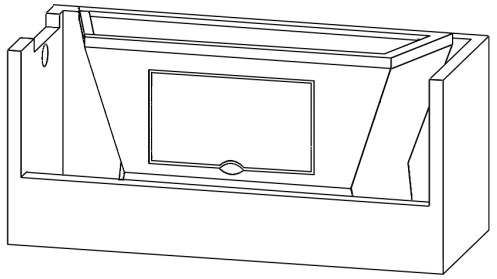
The phenomenon due to anxiety in which patients exhibit a blood pressure level above the normal range in a clinical setting.

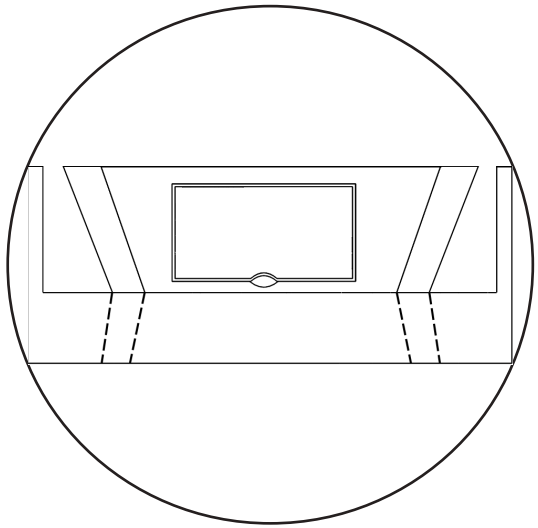
SOLUTION

Eliminating the concept of rod mounted syringe pumps and using customised drawers or customised bed sections for keeping the syringe pump , completely hidden from the patient's sight.

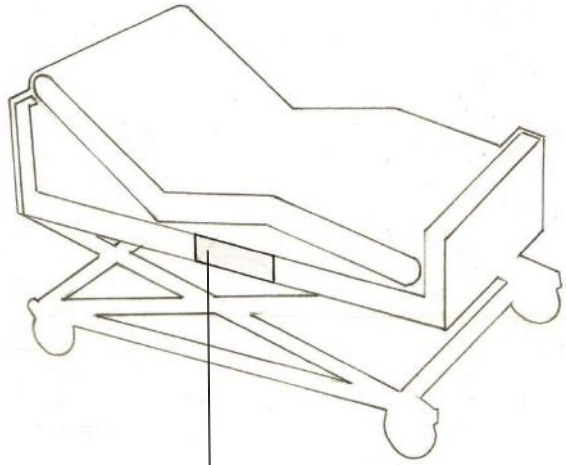
Drawer



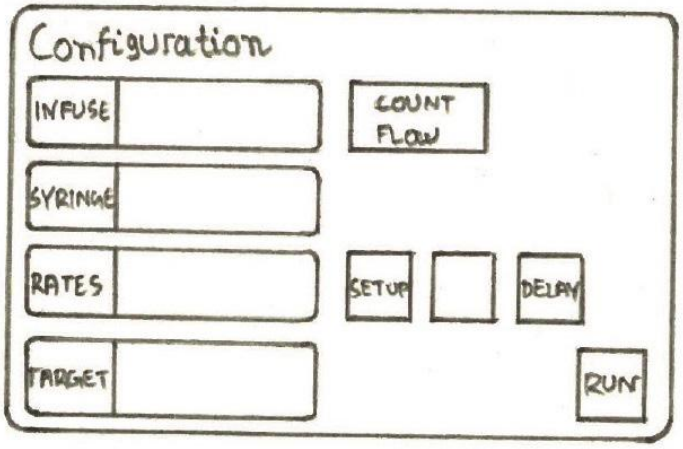




View when the drawer will be closed with syringe pump kept inside it.

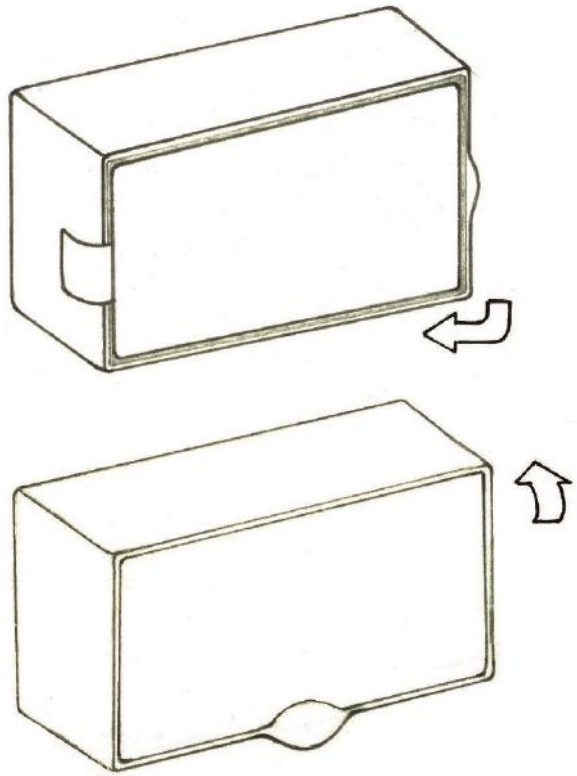


Section to fit the drawer and syringe pump.



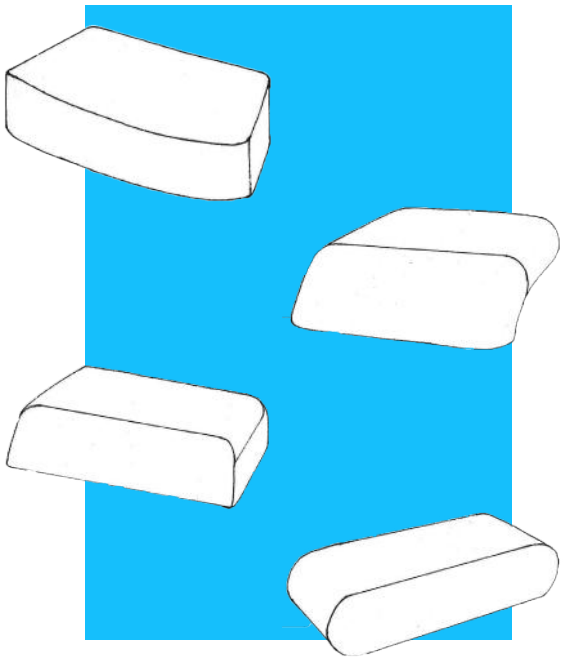
— Display Screen

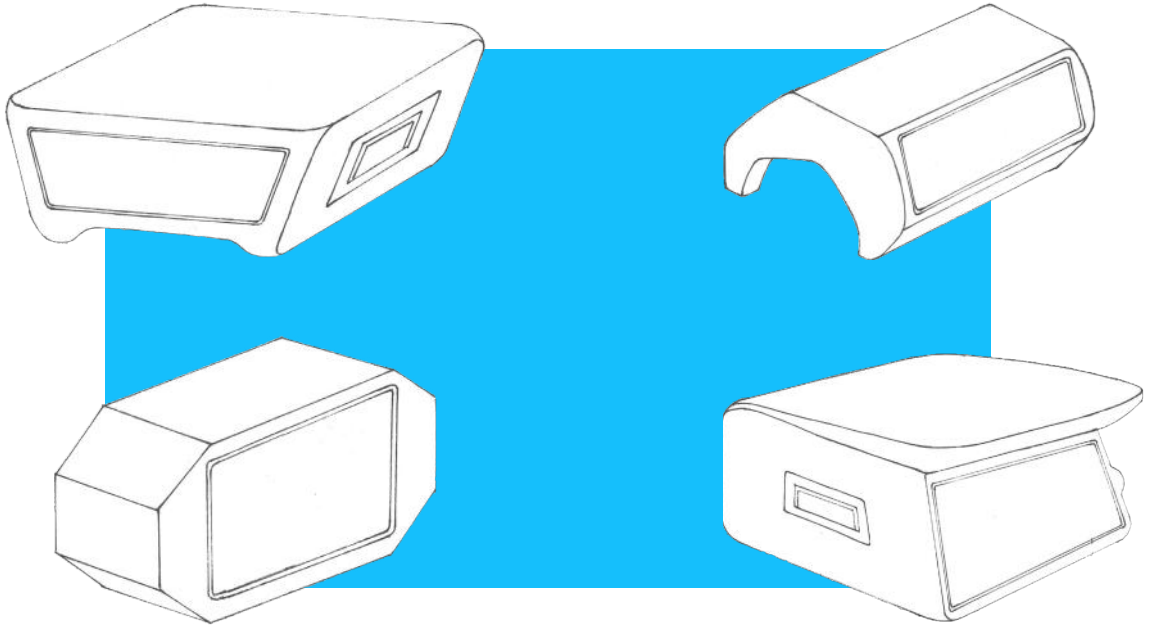
- Gyro sensor mechanism is incorporated in the digital screen which records the data and is operated by the doctor; that is the data shows up on the screen once it is opened 180 deg. or titled to a certain angle.



- Inspired from camera screen , the screen of the syringe pump is designed.

FORM EXPLORATION





MODEL EXPLORATION



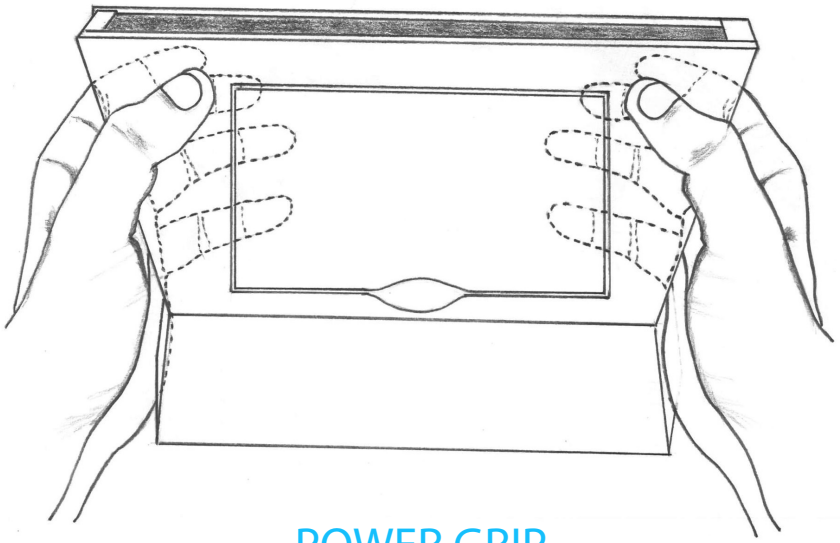
High Density Thermocol models

Wood model



ERGONOMICS

- Since , syringe pump is a medical equipment , it should be handled with care and if required to carry from one place to other , use of both hands is advisable.



POWER GRIP

- The designed form enables the person to use their complete palm space without any strain to hold the pump.

RENDER

THANK YOU