

Portfolio



Product Design

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UG Third year

MAEER'S MIT Institute of Design

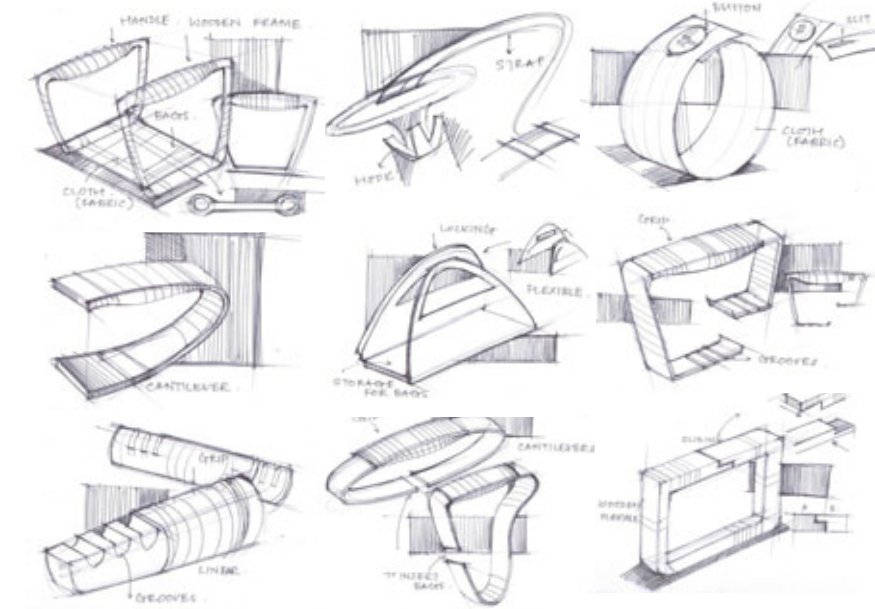
Shop easy

'Shop easy' is a handy assembly to provide ease in carrying multiple shopping bags while walking. The product is an outcome of analysis and synthesis of the related problem considering the constraint of minimal mechanical intricacy. It solves the problem of carrying heavy shopping bags as the user just has to pull the weight and not lift it.



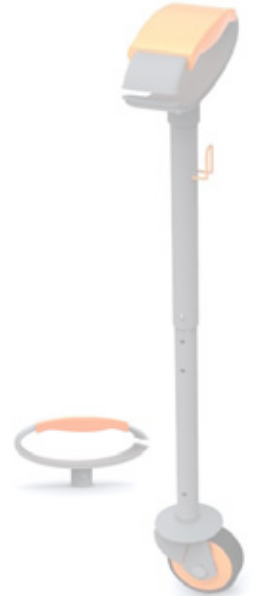
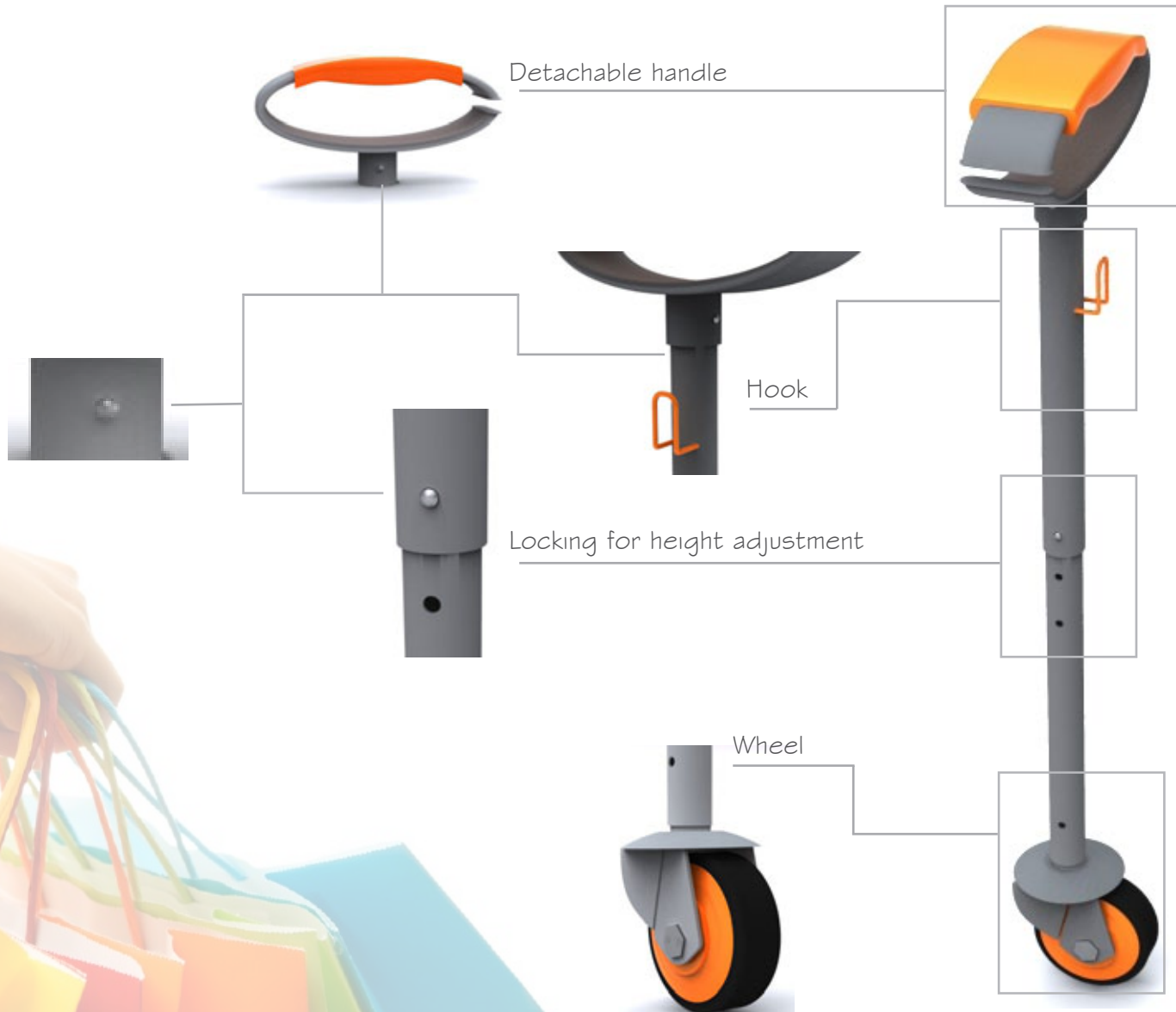
Key features:

- Detachable handle for light shopping
- Adjustable height
- Wheel for smooth maneuvering
- Collapsible rod to ensure less storage space
- Attractive color range



Initial concepts





Smart dry

Techno-aesthetic detailing



'Smart dry' is a compact portable hair dryer that is designed for those executive class who travel a lot. Its design mainly focuses on solving the problem of the mess created by the regular hair dryer wire and pulling of hair at the air inlet. In smart dry, the wire can be wound inside the body after use. The plug is designed in a way that it sits perfectly on the dryer body thereby making it more compact and easy to carry.



-Rotational knob to put the plug wire inside the dryer body.
-Air inlet.



3 point slide switch.



Plug with velcro that sits on the main body.



Buttermilk Churner

Technical Design

The buttermilk churner is an electro-mechanical appliance that will make extracting white butter easier for the Indian homes. The basic mechanism is an altered version of the mechanism involved in a bi-directional electric citrus juicer. The major focus of this project was to develop the technical aspect of the product by studying existing mechanisms and technologies.





Display & Control Design

The design is a combination of an interface and a kiosk. The design is generated considering the problems faced while issuing a driver's learning licence at the Regional Transport Office (RTO) and thereby making it more interactive, time efficient and user friendly enriching the overall experience. It involved detailed study of the correlation between the display and controls of any system design.



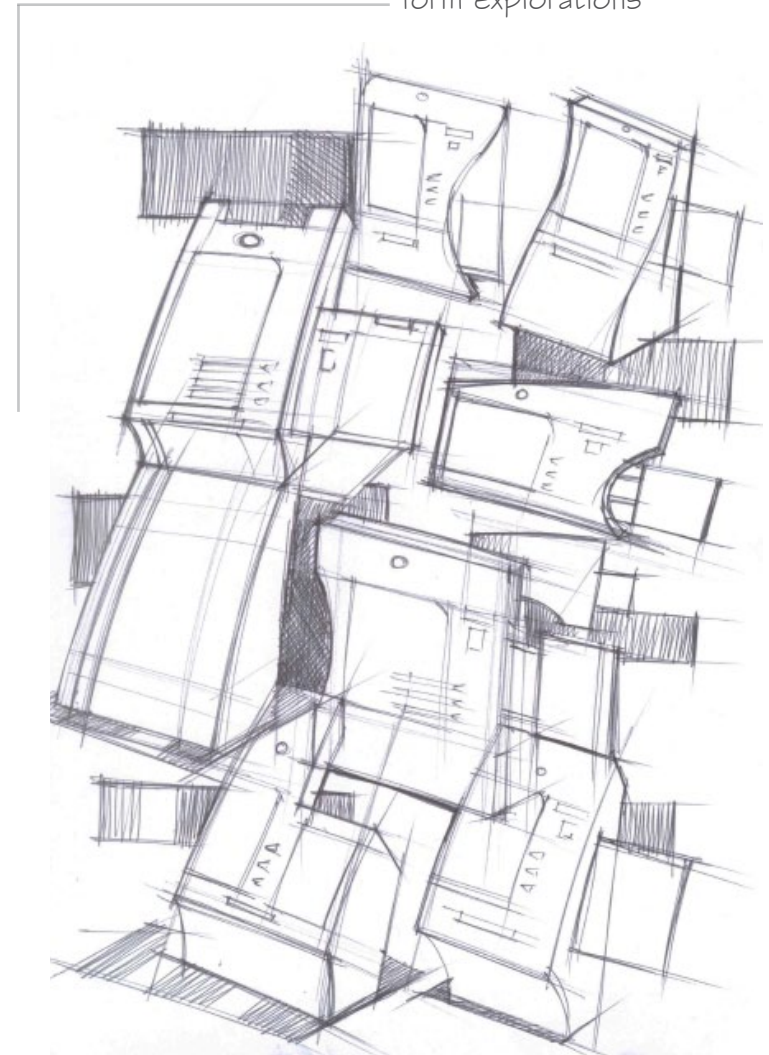
home screen

The major 9 steps followed by the user are described. The entire task flow consists of many other steps including re-confirmation screens, prompts and warning screens.

Task flow:

1. Scanning of barcode for access
2. Confirming personal details
3. Document verification
4. Test loading
5. 10 questions one after the other
6. Test results
7. Photograph clicking
8. Thumbprint scan
9. Licence printing

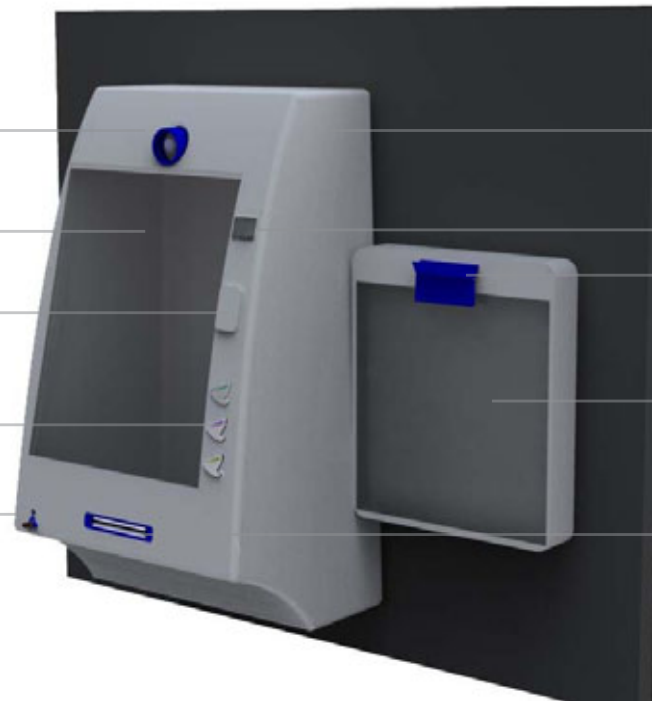
form explorations



Display & Control Design



- camera
- Display screen
- Thumb print scanner
- control buttons
- ear phones
- outer body
- barcode scanner
- clip
- document scanner
- licence slot

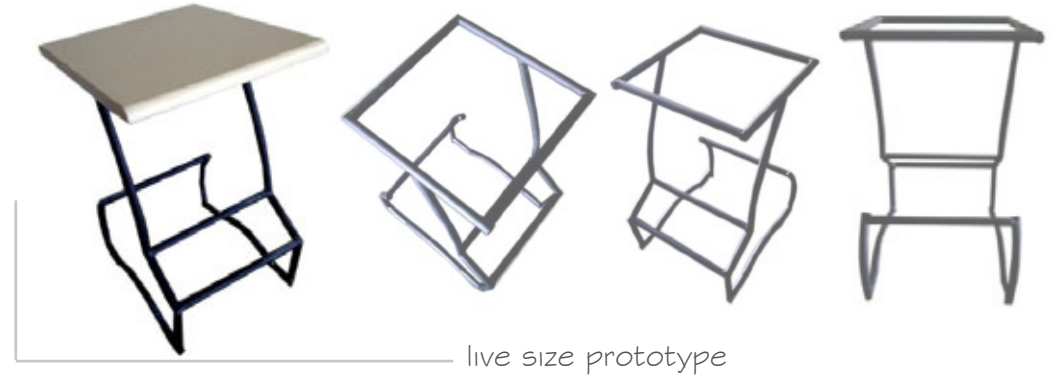
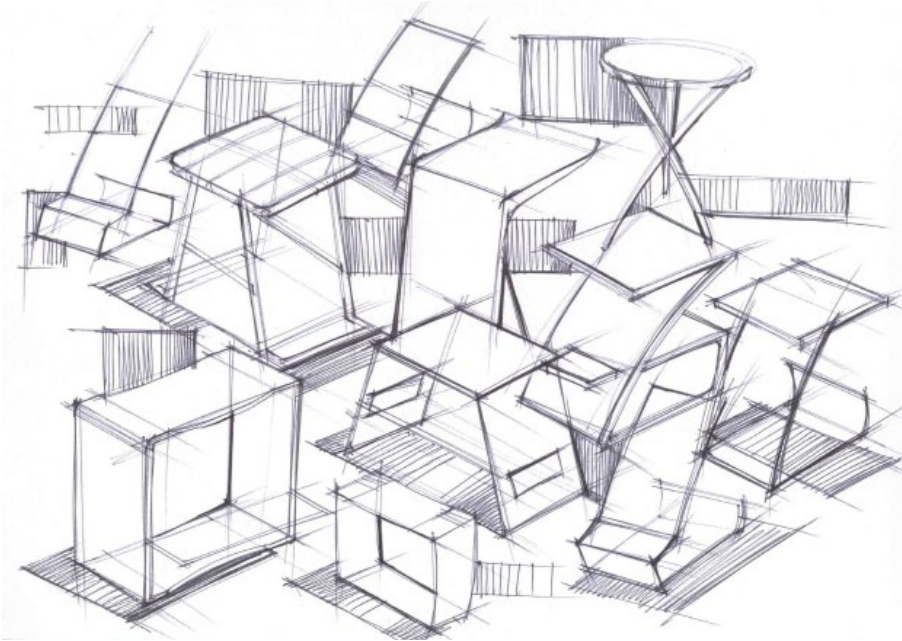




Furniture Design

ergonomics & design

The sitting stool is a customized design for the studios at MITID considering ergonomics as the major constraint. The study involved a validation through a live size prototype.



Key features:

- Foot rests at two levels
- curve at the base for sturdiness.
- optimum use of materials.
- support to the foot
- variety in color





crush.cut.contribute

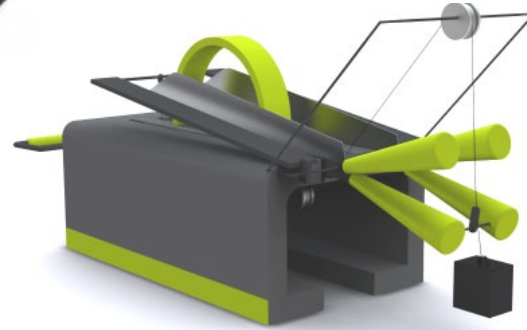
mechanisms & design

'crush.cut.contribute' is a domestic PET bottle crusher and cutter. The product is designed in order to avoid prolonged use of the bottles and making them ready for recycling. The main focus of the project was to detail out the mechanical working and intricacies as well as make them visible in the prototype.



Key features:

- one handle performing crush and cut.
- support for the bottle
- entire working made visible



bottle placed



bottle crushed



bottle cut



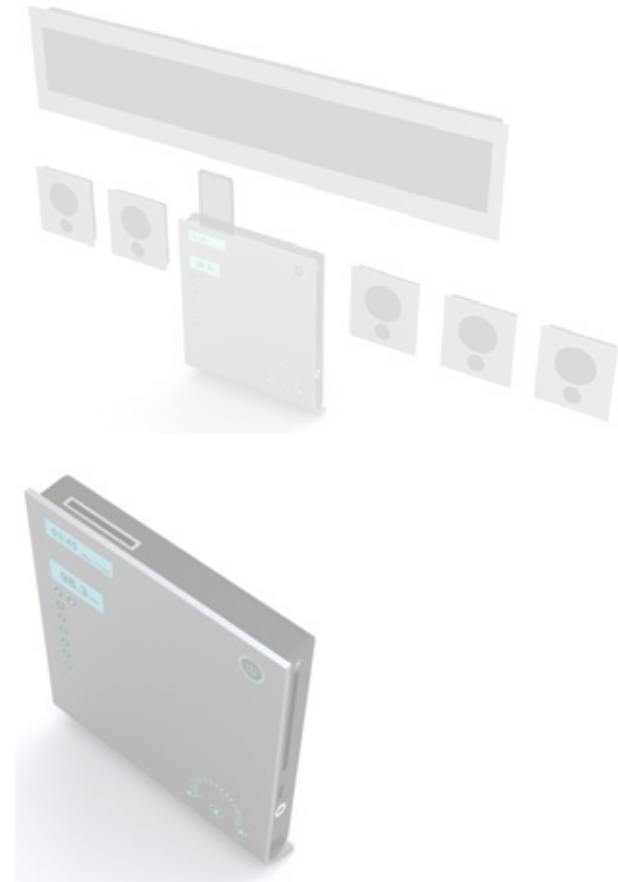
Multitainment

competition entry

'Multitainment' comprises of a disc player, FM AM tuner, iPod dock, USB port for all kinds of entertainment. Its feature of WI FI router allows the user to browse through the internet on the provided phone and see the output on the TV screen. Multitainment eliminates the need of having a separate residential phone and an internet connection in the homes. The body is designed keeping in mind the space crunch and trend of wall mounted televisions.



placed against the wall next to the television

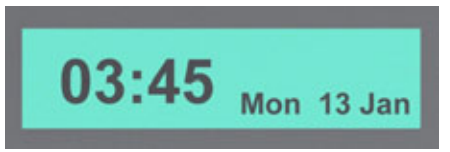


Key features:

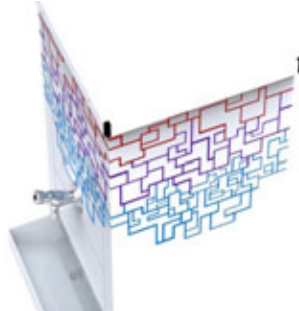
- 5.1 channel home theatre
- Blu-ray, DVD, Audio CD, MP3, MP4 disc player
- WMA files
- DivX files
- USB port
- iPod/MP3 player plug
- FM & AM tuner
- Internet connectivity
- WI FI broadband router
- Wireless phone
- Phone charger
- Touch sensitive controls
- Touch screen remote control cum phone
- sleek and compact wall mounted body
- wireless speakers

Multitainment

competition entry



Touch sensitive controls



Product Graphics

CAD models

The project involves applying graphics to the surfaces of an existing product to add emotional value, brand value, aesthetic appeal to the product. The chosen product is a blue star single tap water cooler. The graphics done is inspired from pipelines, flow of water, brand, illusion, water conservation, Mondrian painting.



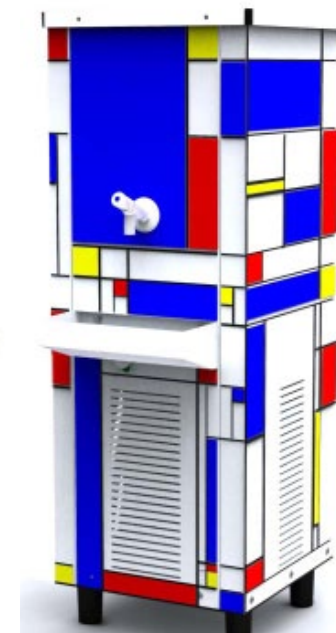
water flow through pipelines



brand emphasis



The text 'all the water that will ever be is now' is placed on the top panel one after the other to create illusion of the grill on the bottom panel.



mondrian painting



Pen & Card Holder

hand-lay up method

A table top pen and business card holder to be prepared using fibre reinforced plastic. The hand-lay up process was carried out at Mahindra Composites, Pune. The design had to be made in a way that it could be worked upon in the lay-up method.



1. MDF mould

2. coated with primer

3. hand lay-up



pen and business card holder





Trophy Design

live project

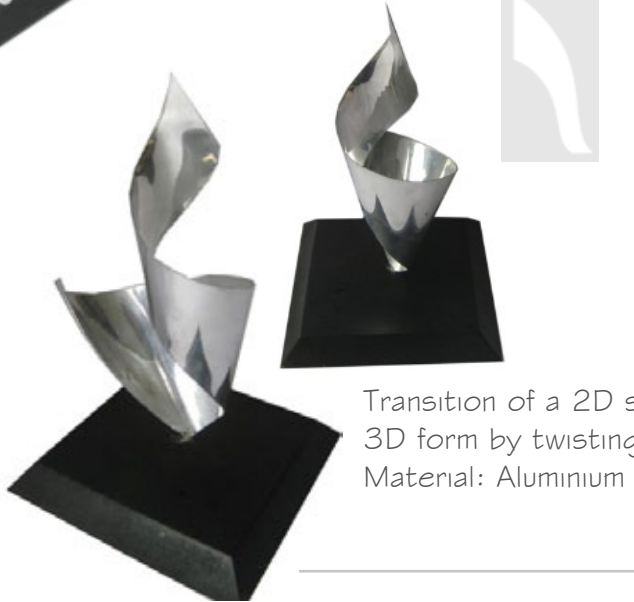
The Trophy is a live design project for C.H.M.E Society's Bhonsala Military College, Nasik. Its focus was to appreciate the young talent of their students. It involved generating an identity for the students and representing their contribution towards the society through a trophy for excellence.

Material: Glass

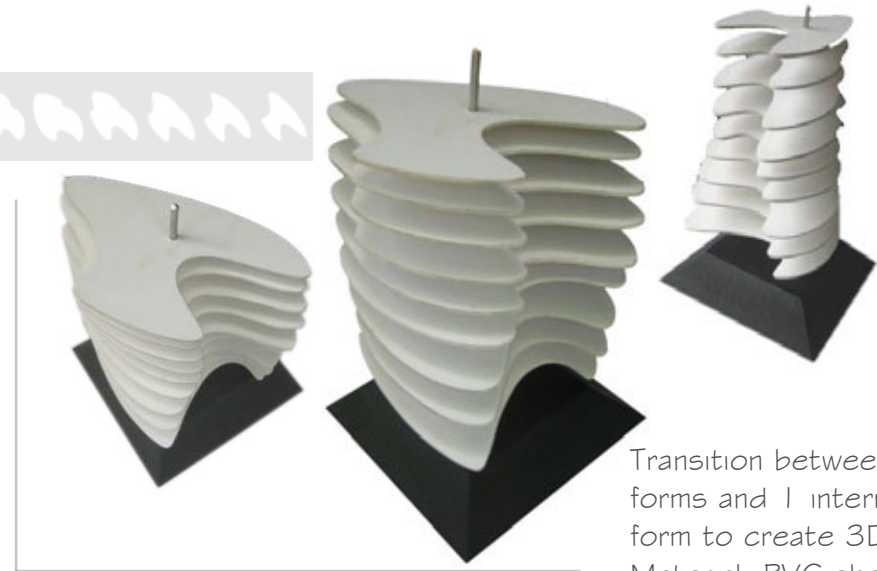


Form Transition

3rd Dimension



Transition of a 2D surface to a 3D form by twisting and forming.
Material: Aluminium sheet



Transition between 2 end forms and 1 intermediate form to create 3D volume.
Material: PVC sheet

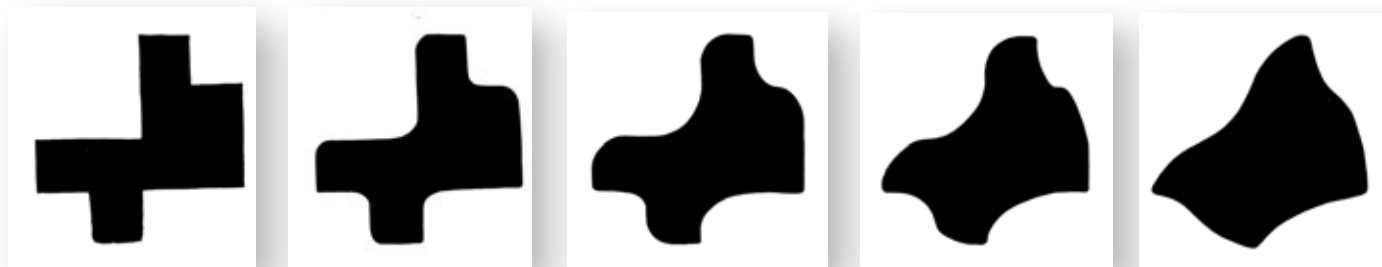


Transition between 2 3D end forms(cube and cylinder).
Material: Siporex

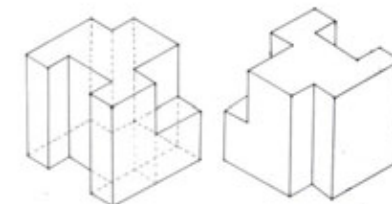


Form Manipulation

Radii manipulation



Parent form



Various views of the form



Edge distortion



Form Appreciation

Form translation



Siporex

Generating an abstract form from a natural form of a capsicum. Physical aspect of the distinct curves is retained and non-physical aspect 'secretive' is depicted through the unusual bulge which symbolizes a hidden secret beneath.



Medium density fibre

A perfume bottle based on the theme 'corporate'.
Inspired from corporate sky scrapers.



Form Language

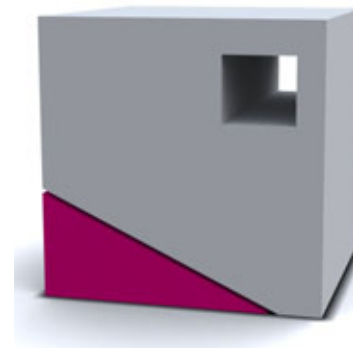
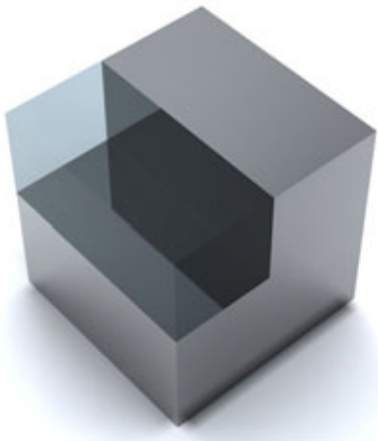
form manipulation

The objective was to study the key attributes of a designer's work and implement them on a cube the way the said designer would design. The designs were explored based on Philippe Starck's design methods.

Key attributes: balance through imbalance, clean and crisp, finished, futuristic, simple.

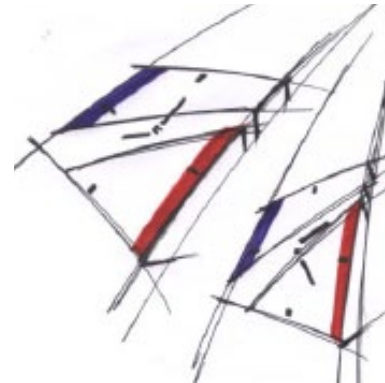
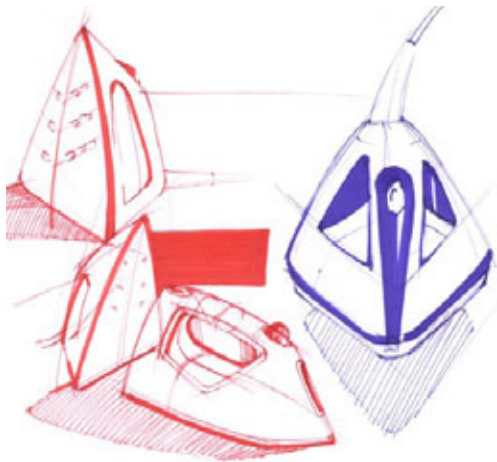
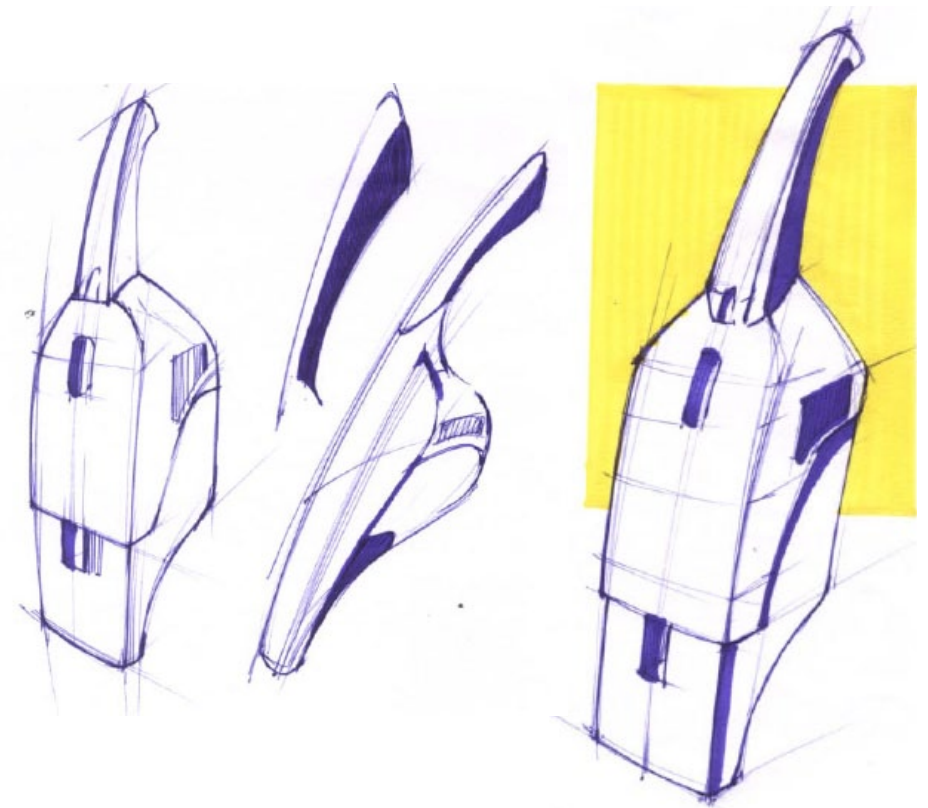
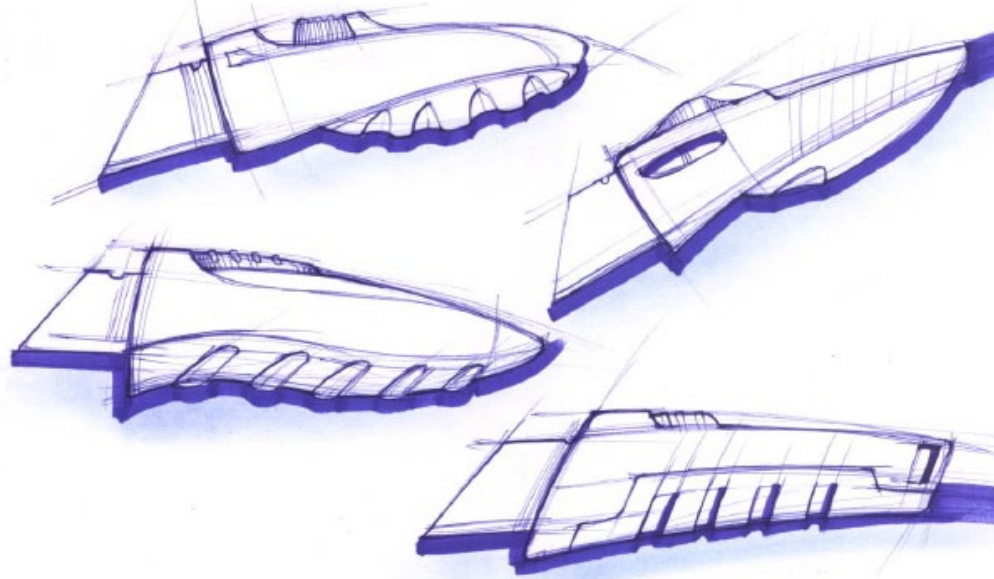
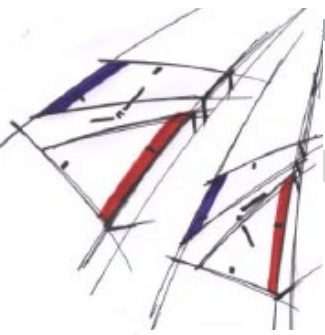


Philippe Starck



Design Sketching

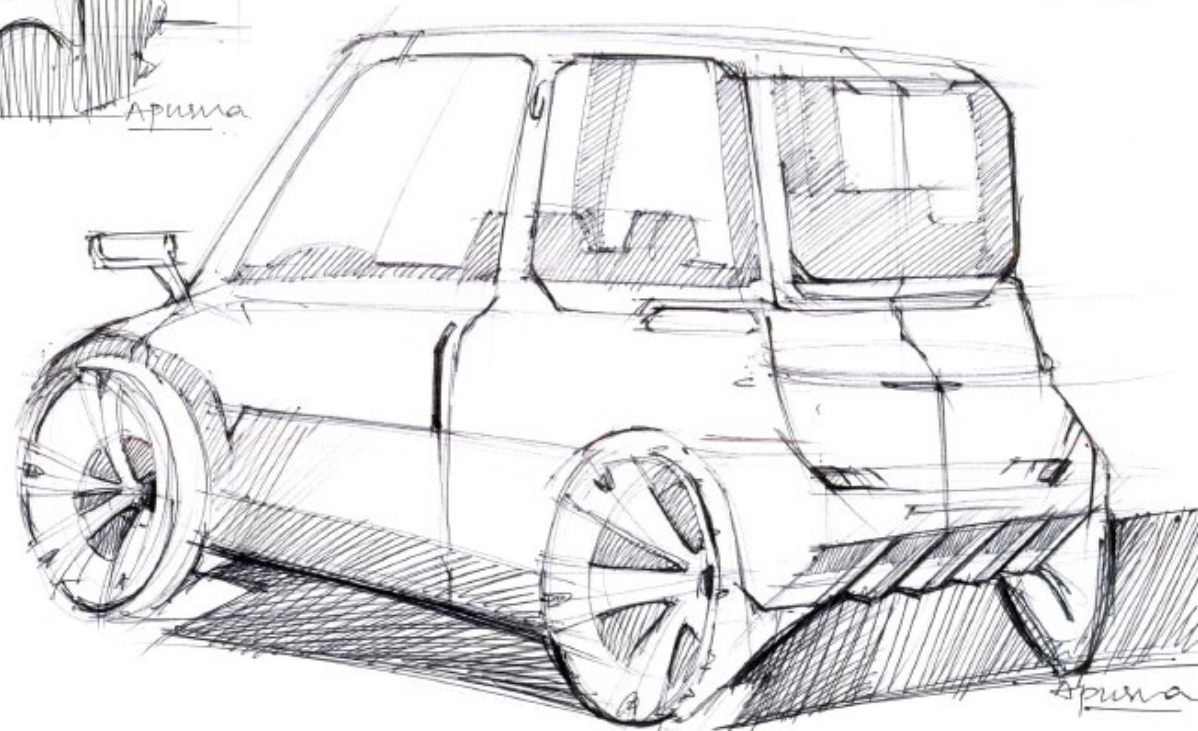
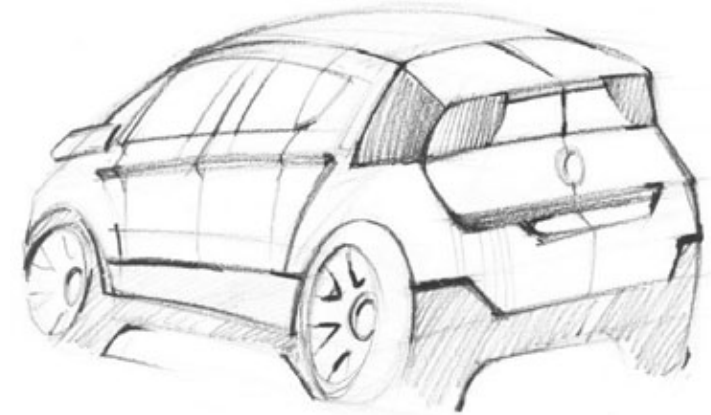
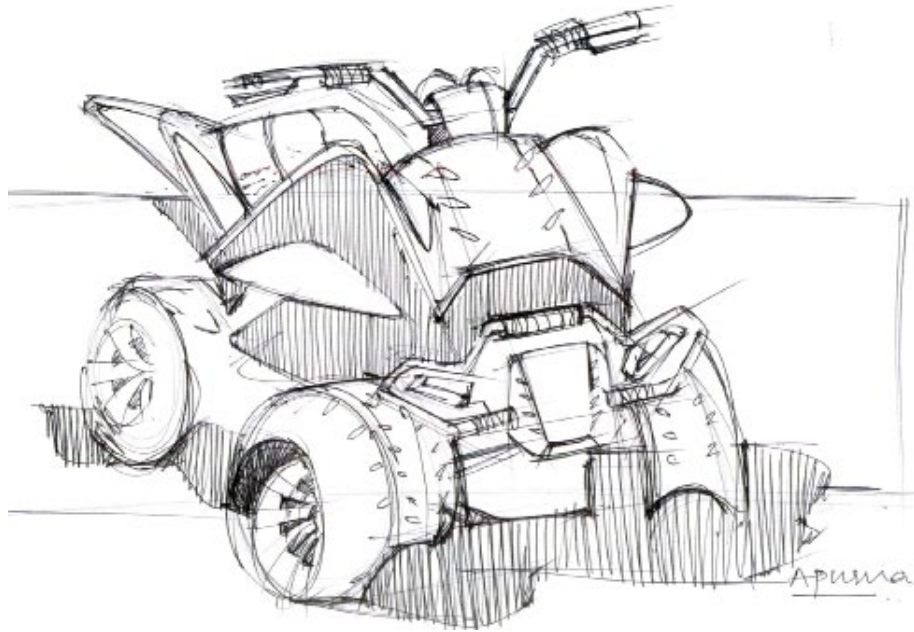
Product

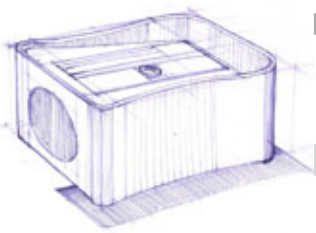




Design Sketching

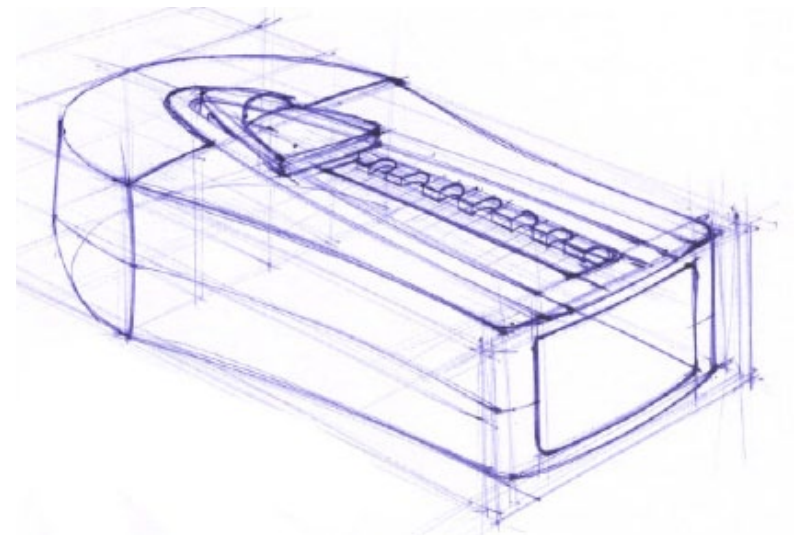
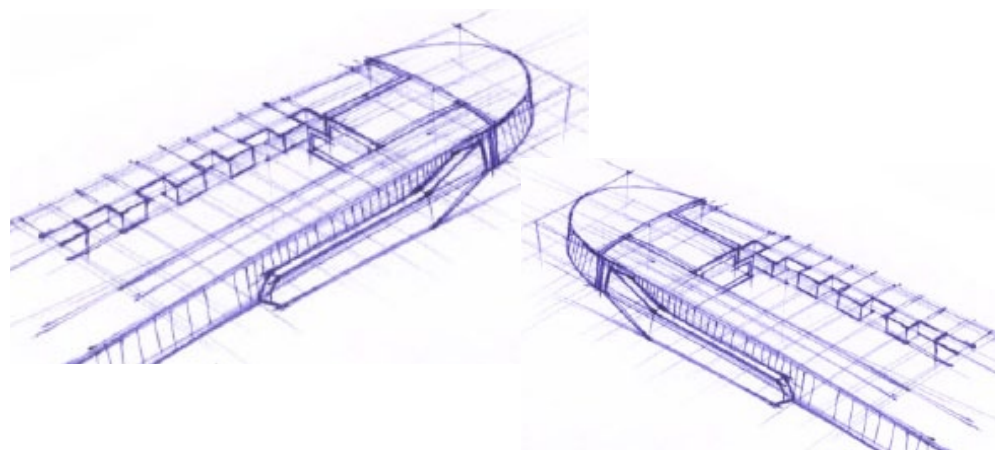
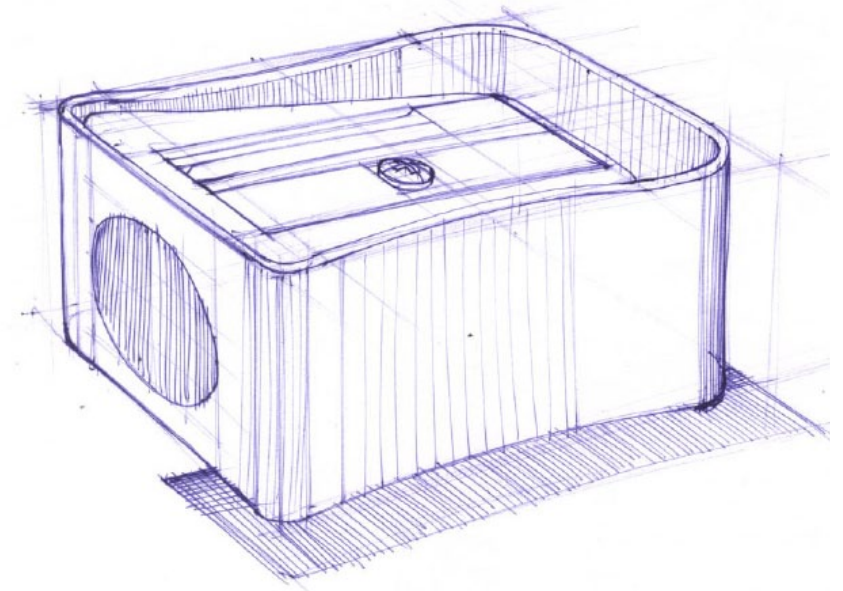
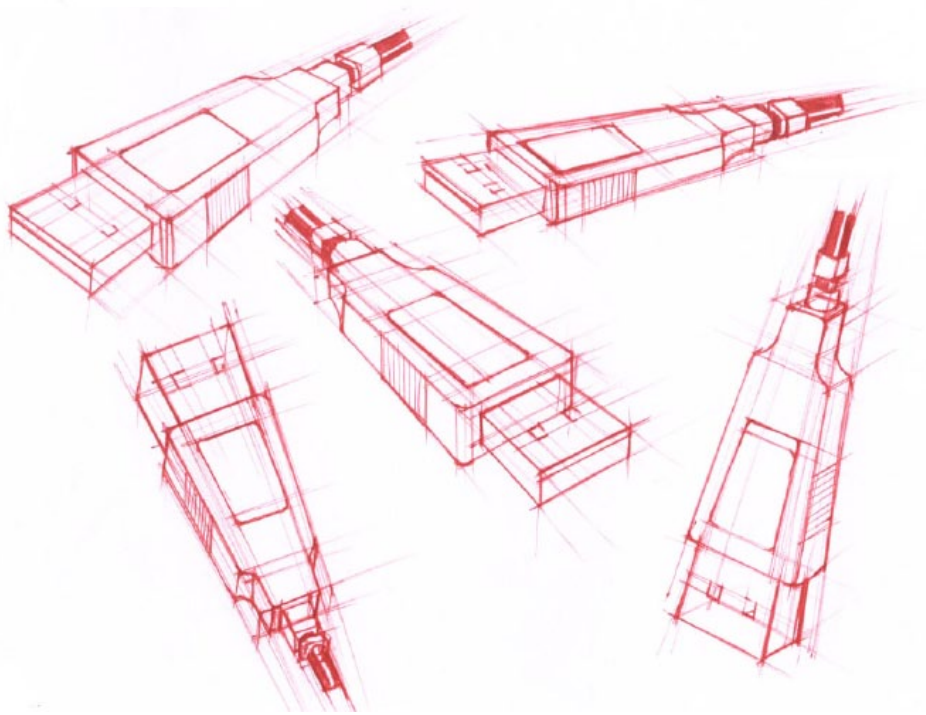
Transport

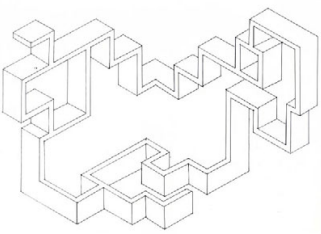




Technical Drawing

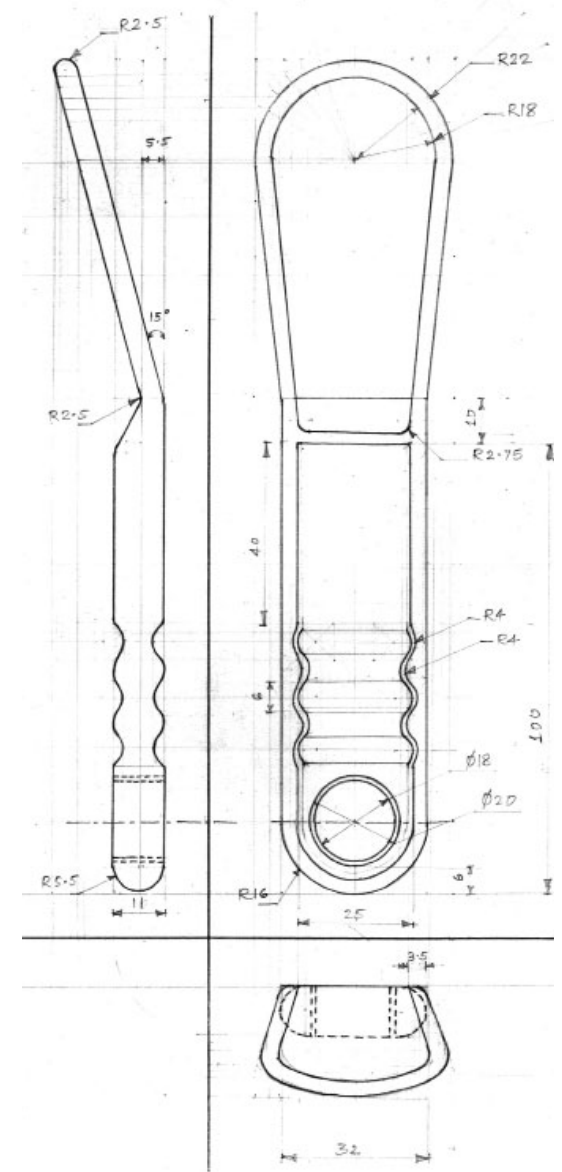
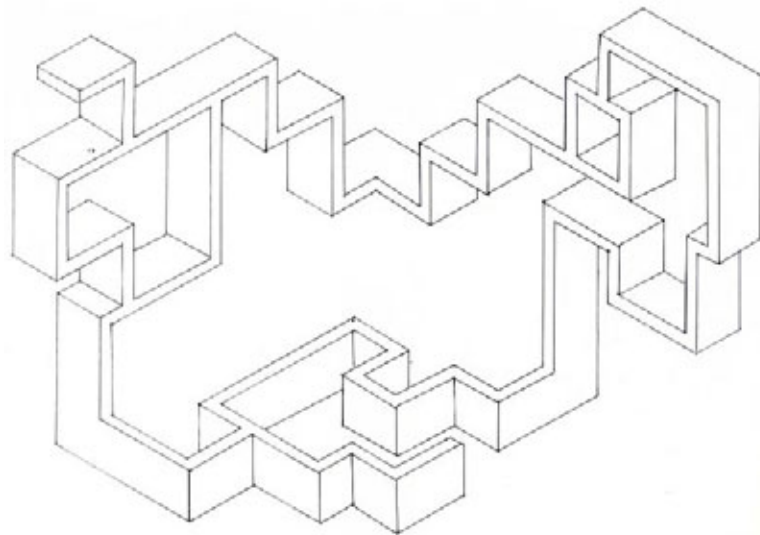
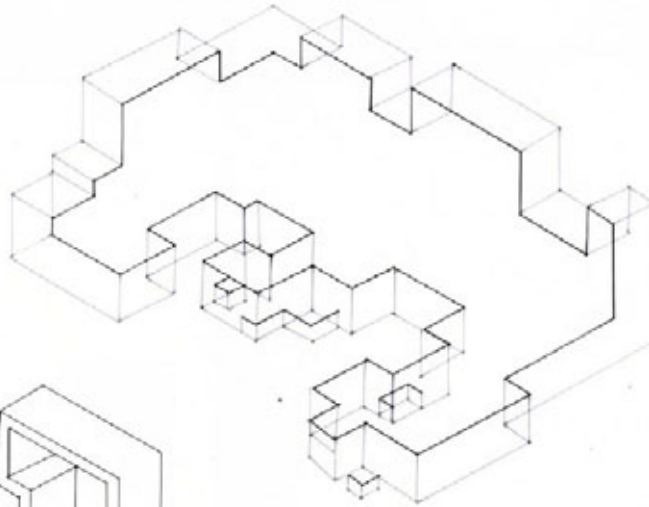
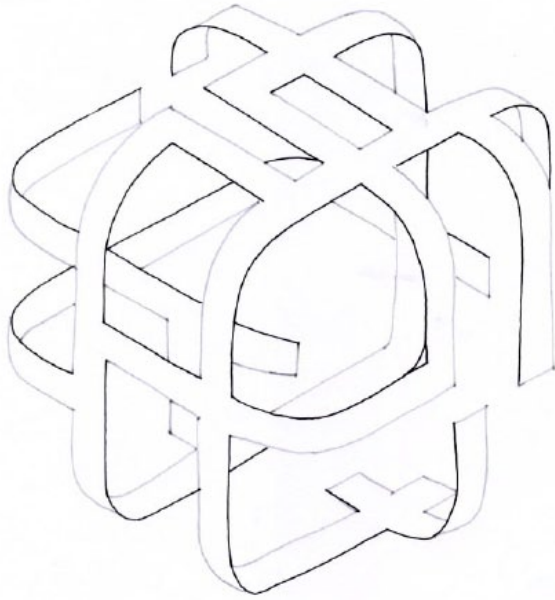
Perspective drawing and Parallel projection





Analytical Drawing

Isometry and Orthography





Model Making

1 : 2 scaled up model..staple remover

2 times scaled up model of a staple remover.

Materials:

- High impact polystyrene
- Acrylic
- Medium density fibre
- Aluminium
- Vinyl sheet
- Automotive paint.





Material Handling



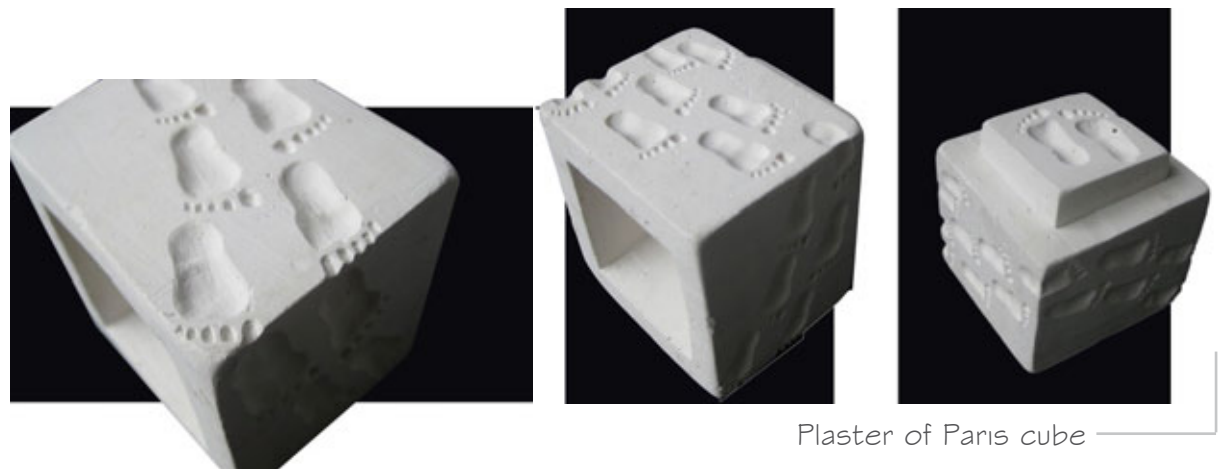
paper cubes



clay tiles



4 feet tall stable paper structure using A1 size single sheet without adhesives



Plaster of Paris cube



Material Handling



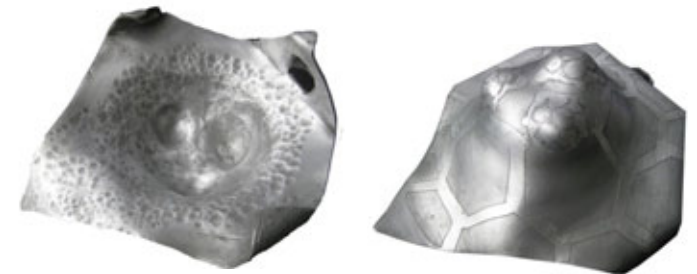
Paper mache



Bridge to hold 3 kgs of weight, no adhesives



Rubber wood



Aluminium sheets



Workshop Practices

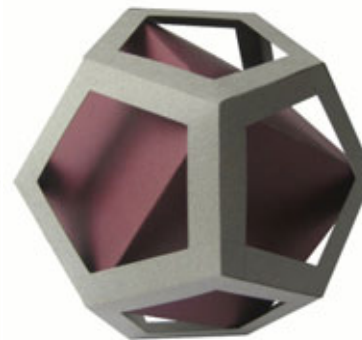
Workshop tools and techniques



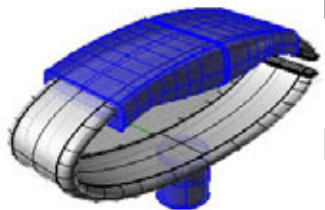
Rubber wood, manual lathe



Mild steel, automatic lathe

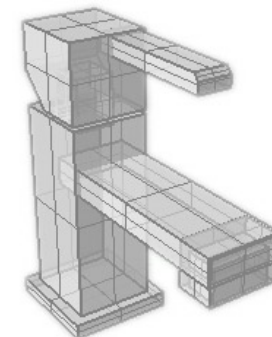
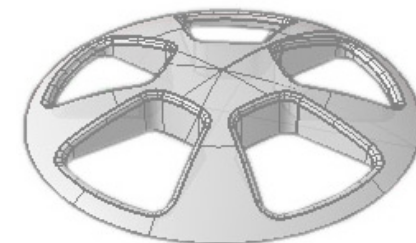
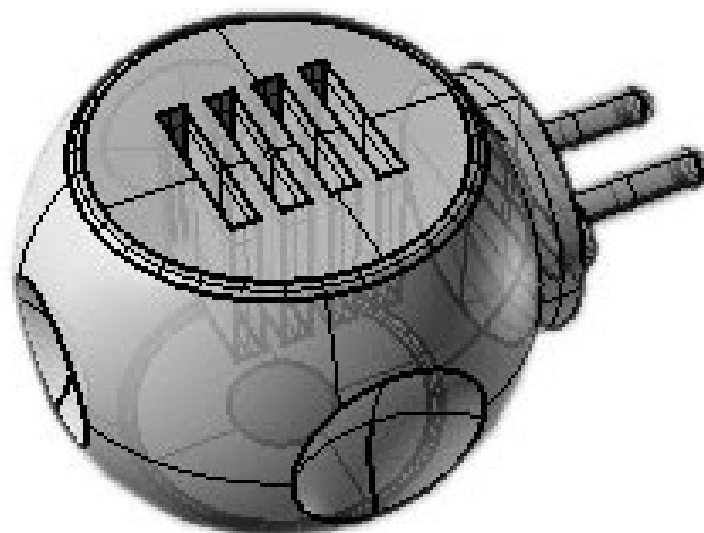
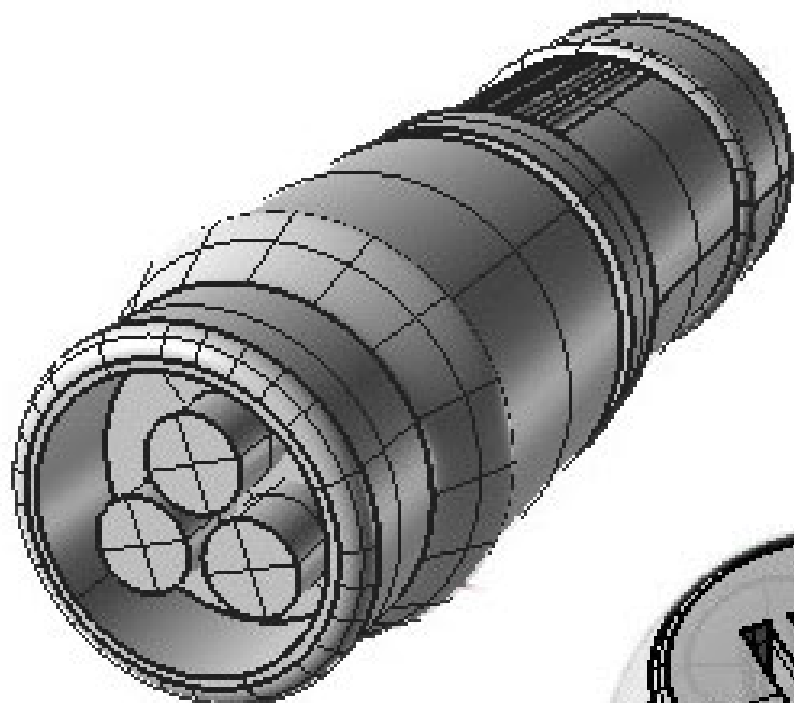


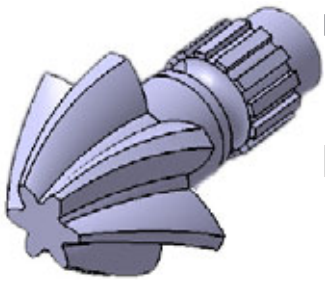
solids in paper



Solid Modelling (3D)

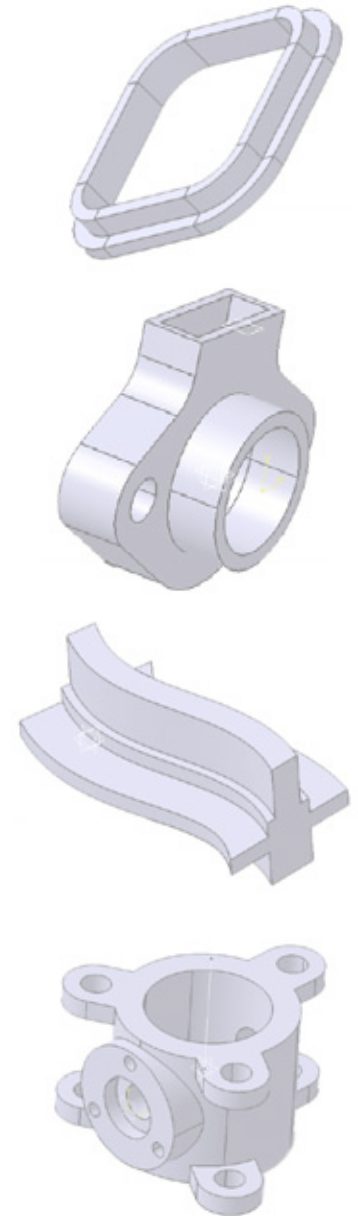
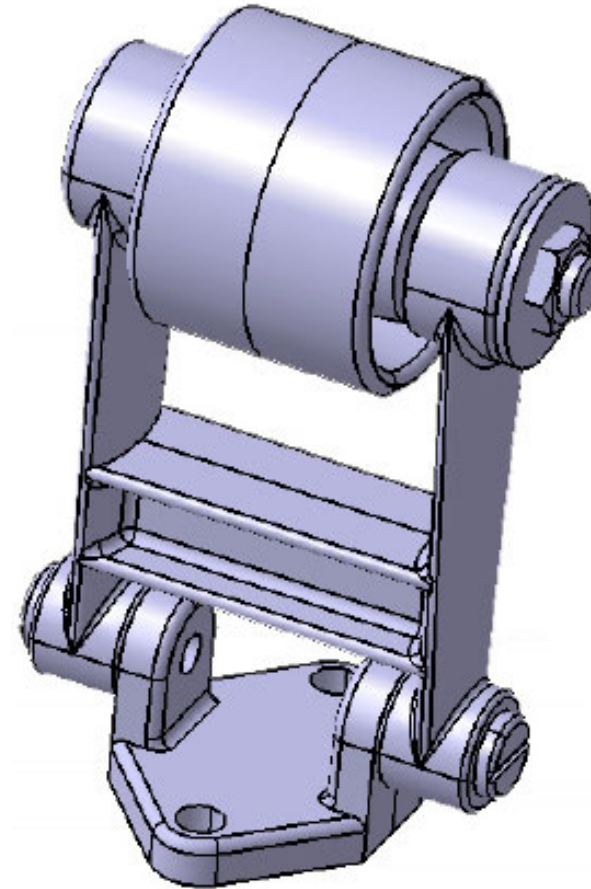
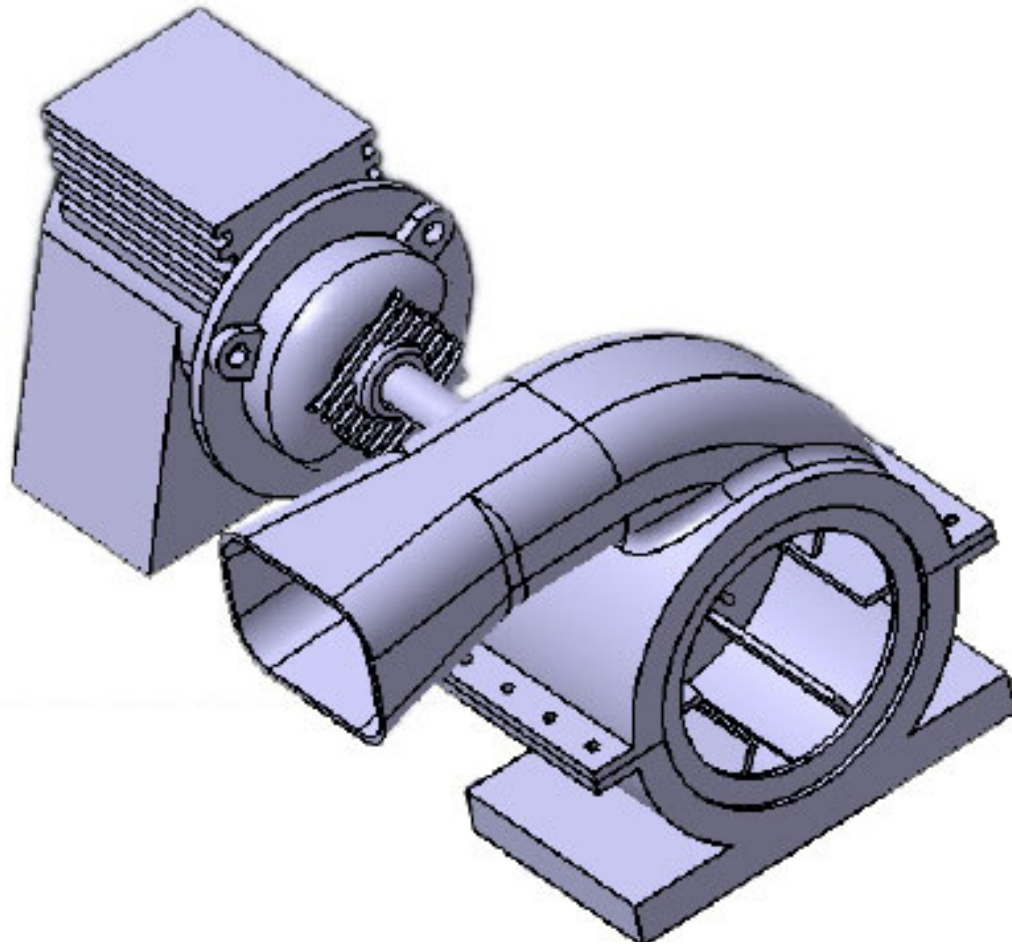
Rhinoceros

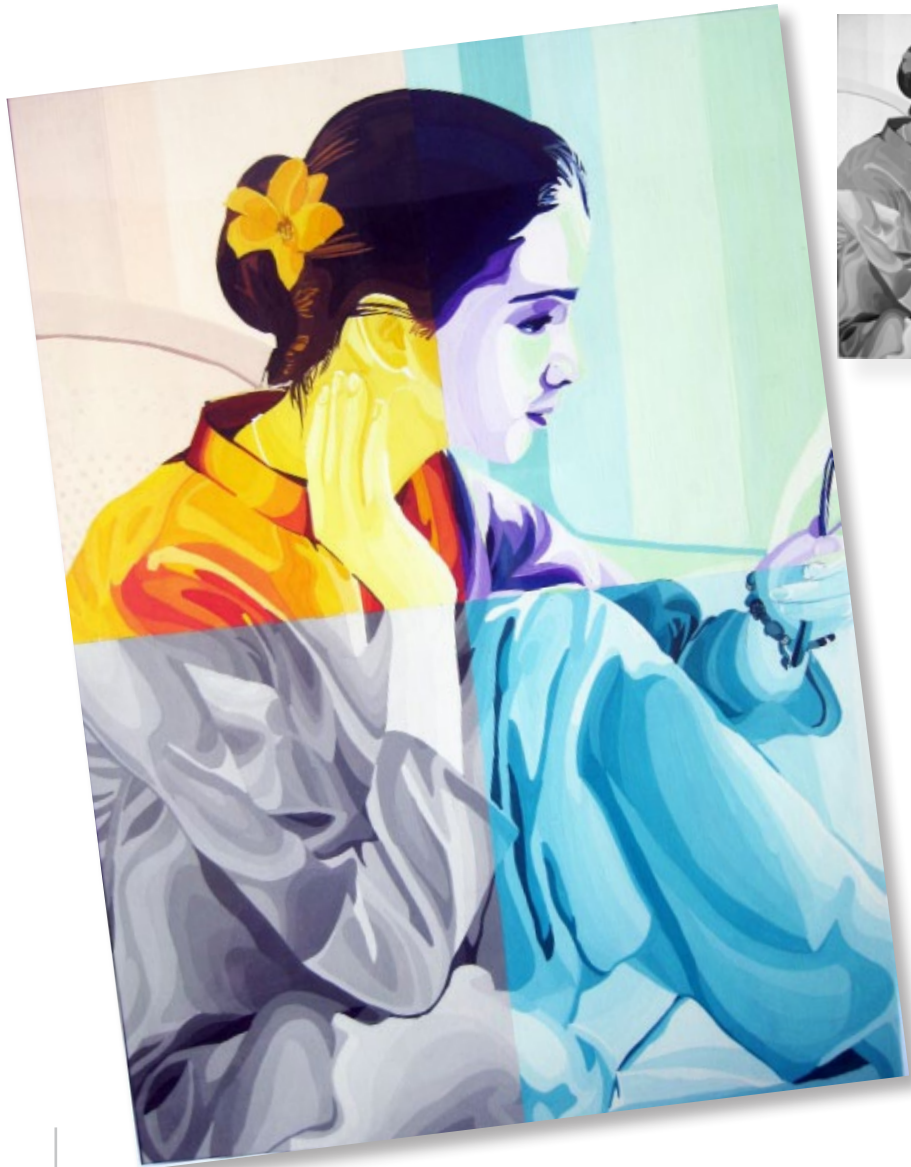




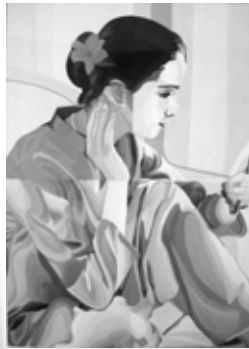
Solid Modelling (3D)

CATIA

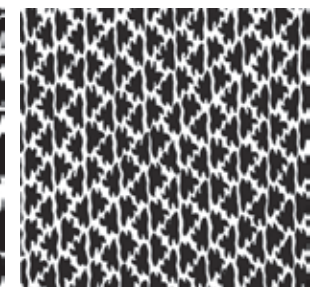




Posterization: painting 4 quadrants in 4 color schemes retaining the basic grey tone



Pixalation: Disintegrating the picture into small pixels understanding the color tone



creating textures using a motif

Logotype & Symbol Design

Identity design

indofurn



Furniture store



indofurn

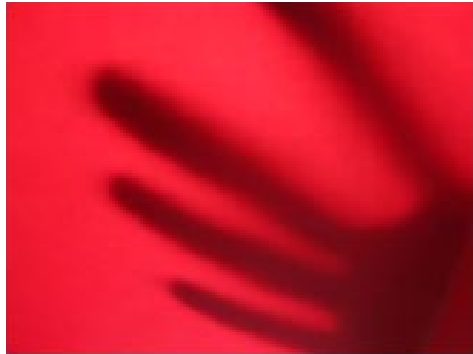


Zodiac signs



Photography

Canon Power Shot SD1100 IS



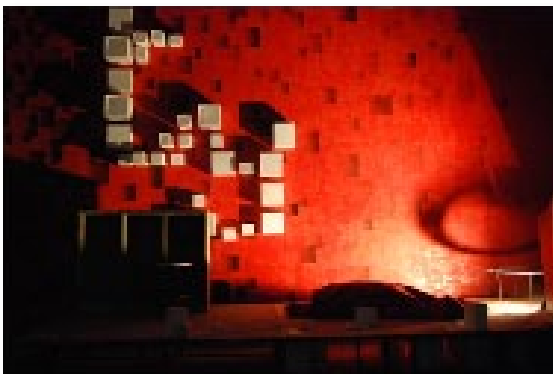
Capturing textures, reflections, translucence and perspective.



Installations & Stage drapery

Part of the team

Stage drapery for International Typography conference 2009 held at MITID



Installation at Pune Design festival 2009



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Address: 12, Gharkul, Anandvan colony, Opp. Boy's Town high school, College Road, Nasik 422005.

Date of birth: 13th July 1990

Age: 20 years

EDUCATION

- Currently an exchange student at the School of Design, The Hong Kong Polytechnic University, Hong Kong.
- Currently pursuing an under-graduate diploma programme (3rd yr) in Product Design at MAEER'S MIT Institute of Design, Pune.
- Passed HSC with Distinction in Science from R.Y.K. college of Science, Nasik.
- Passed SSC with Distinction from Fravashi Academy, Nasik.

ACCOLADES

- Selected to attend one semester (Jan-May 2011) at the School of Design, The Hong Kong Polytechnic University, Hong Kong.
- Passed with an A grade in both Elementary and Intermediate drawing grade examinations.
- Awarded Silver medal for best entry at the Shankar's International Drawing competition in 2000.
- Awarded many prizes in drawing competitions held at School, District, Zonal, State and National levels.
- Won various Badminton tournaments at District, Zonal, State levels.
- Awarded as the 'most upcoming Badminton player' of Nasik at the age of 10.
- Won various prizes in school level sports such as Kho-Kho, Throw-Ball, Shot-put, Cricket, Shuttle-relay.
- Been a part of Students administrative body at school level.
- Passed Hindi Rashtra Bhasha examination with distinction.
- Work exhibited on the installation in Pune Design Festival.

OBJECTIVE

To get exposure towards working techniques of the design sector, enhance my skill sets and at the same time contribute maximally to the assigned job with utmost perfection in an organization that would exploit my design skills and sensibilities in the best possible manner.

WORKING STRENGTHS

- Attitude to learn and improve.
- Ability to work in groups or individually.
- Deep aesthetic and form sensibilities.
- Multi disciplinary design approach.
- Ability to innovate on representation techniques.

DESIGN SKILLS

- Research and analysis.
- Concept building and execution.
- Material handling and finishing.
- Industrial design sketching and technical drawing.
- Rendering
- 3D software modeling.

SOFTWARE SKILLS

- Rhinoceros.
- Adobe Photoshop, Illustrator, InDesign
- CATIA
- Corel Draw.
- Bunkspeed Hyper-Shot renderer.

PERSONAL INTERESTS

Sketching, Branding and Identity Design, Badminton, Table Tennis, Photography.