



## Design Portfolio

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# Comb Design

## Ergonomic metaphor design

### Ergonomic combs

Situation for design - A comb with an abstract form much efficient and handy in comparison with the previous one.

Design Factors - primary Function - for air combing

Secondary function - dressing table accessory

Materials - comfortable to handle/ grip, durable light weight, strong( plastic with rubberized coating on it)

Safety - no sharp edges, easy to clean , non toxic

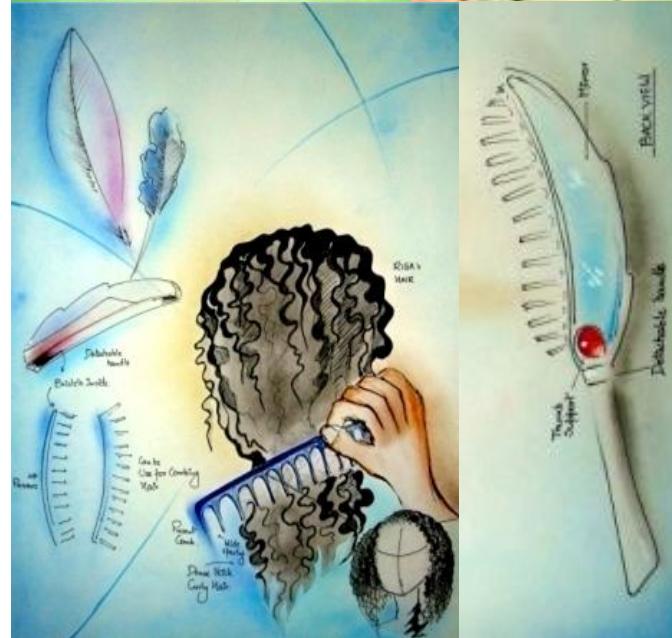
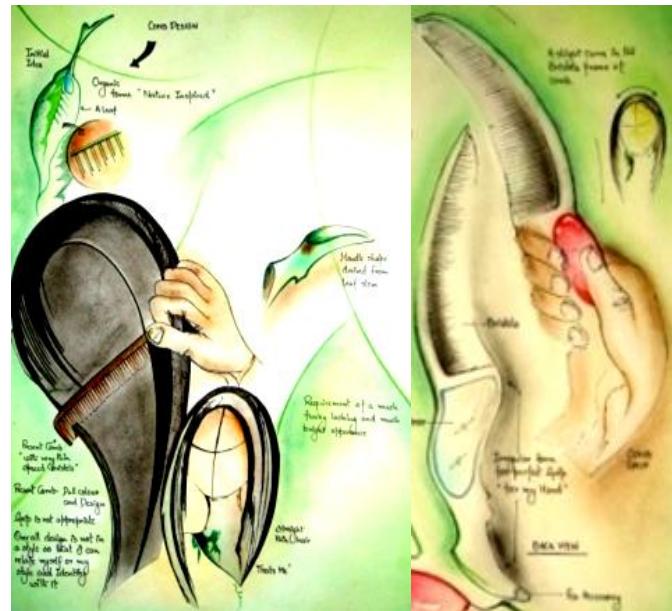
Material used in mock up (self made) :

Hip sheets

Chloroform

M-seal

Acrylic paints



# Redesigning of Sevian Sancha on the Design principles of Designer Richard Sapper

## Sevian Sancha

It is traditional Indian product which is used for making different kinds of snacks during festive seasons

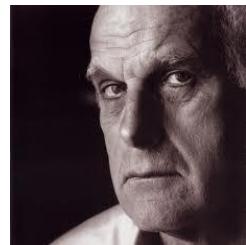
### Philosophy Involves:

Form  
Expression  
Beauty

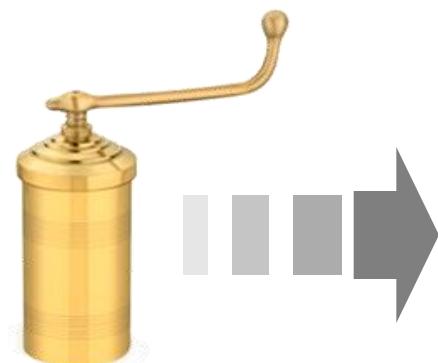
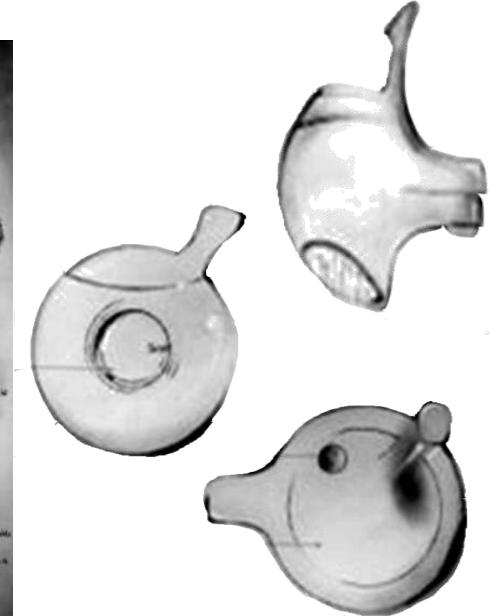
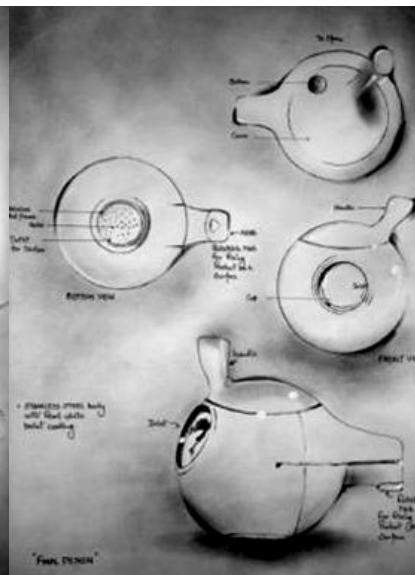
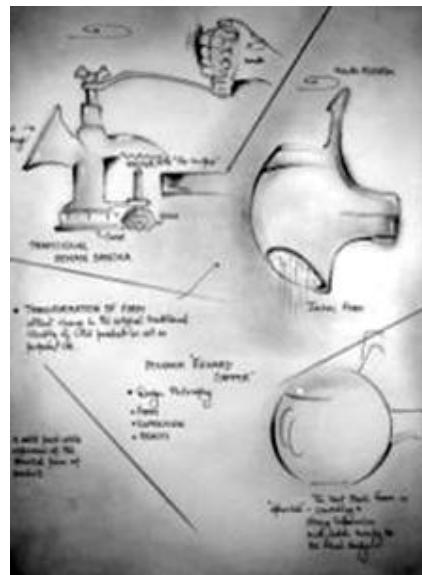
The complete design process involves study of traditional sevian sancha (Indian noodle maker) which works by revolving the upper handle in one direction.

The final product which had to be designed Comprises of a change in the Outer form of the traditional sevian sancha . The working principle of the product had to be the same..

Material used in mock up (self made) :  
MDF  
Auto putty  
M-seal  
paints



Renowned products designed by the designer



Mockup Model

# Sugarcane Juicer – JUGAAD redesigning and styling of traditional sugar cane juicer

## Sugar cane juicer (Ganne ke ras wali machine)

It is a typical Indian 'Jugaad', machine for crushing sugar cane and extracting juice, popular mostly in northern India and some parts of south also.

Usually the machine is placed over a 'Thela' or 'Redi' (wooden cart).

### Objective of Design

This sugar cane juicer is not only superior in functional aspect but also in aesthetics.

The machine will act as a complete set up including all the steps which are taken in traditional Jugaad machine.

It can be easily handled by one person, Moreover the cleaning of machine will be easier.

This concept is based on changing the whole scenario of making of sugarcane juice.

The only effort one will do is to just filling the mounted storage and later collecting juice in a jar.

A much more sophisticated version of sugarcane juice making.

The complete system comprised of five parts

1. Storage system
2. Selection/filling
3. Extraction
4. Waste collection
5. Power supply

Material used in mock up (self made) :

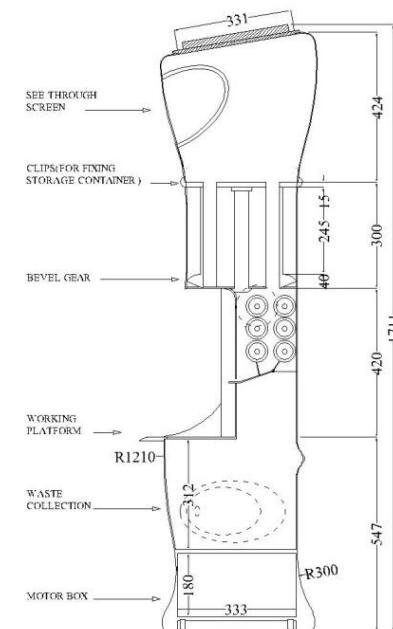
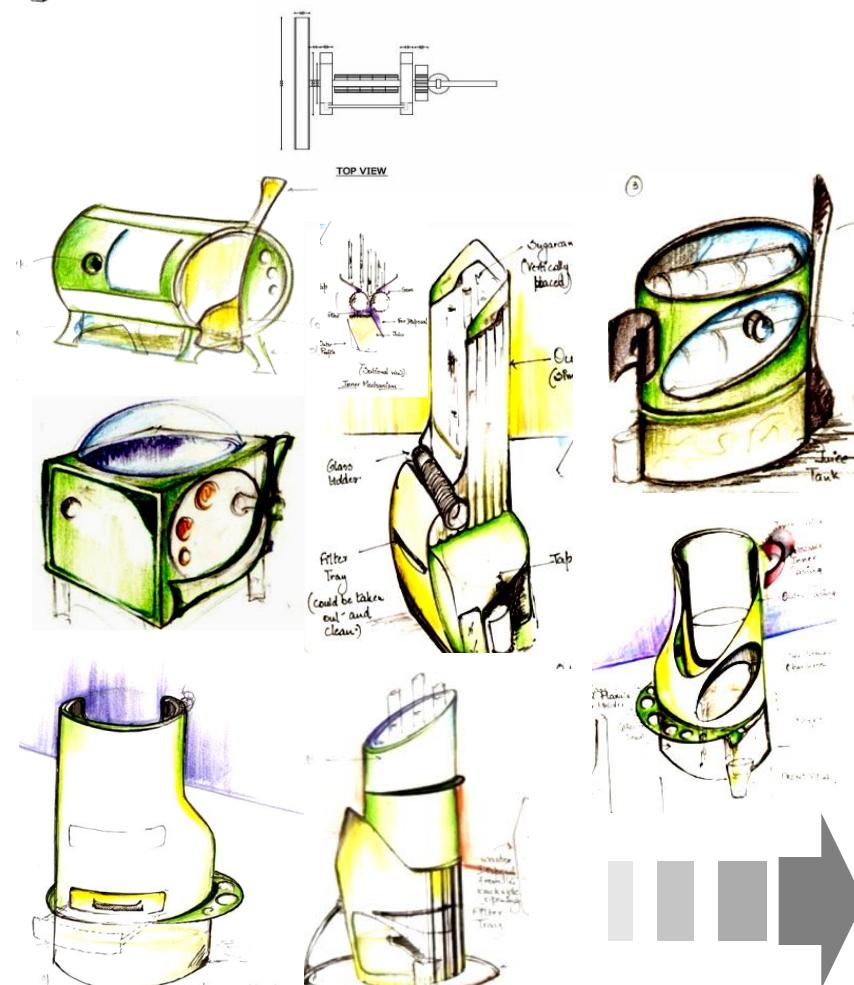
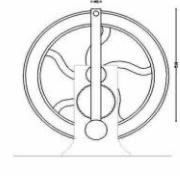
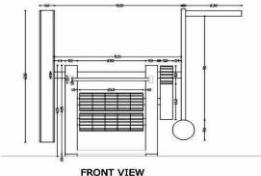
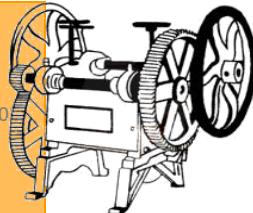
Hip sheets

Industrial chloroform

Auto putty

M-seal

Enamel Paints



Mockup Model

# Steam Cooker Design

redesigning of steam cooker on working aspects

## Steam Cooker

This project involves study of an existing steam cooker and redesigning it according to user demands and market survey.

According to the user survey I came to an analysis that

Users need a steam cooker which consists of...

Independent steam inlet

See through containers

Keep warm feature

Taste analysis

Interesting form

Online water addition facility

Analysis on

Market survey

Brands

Trends

User survey

Features:

see through top cover,

independent container,

Off centre steam vent connecting all container

Material used in mock up (self made) :

Hip sheets

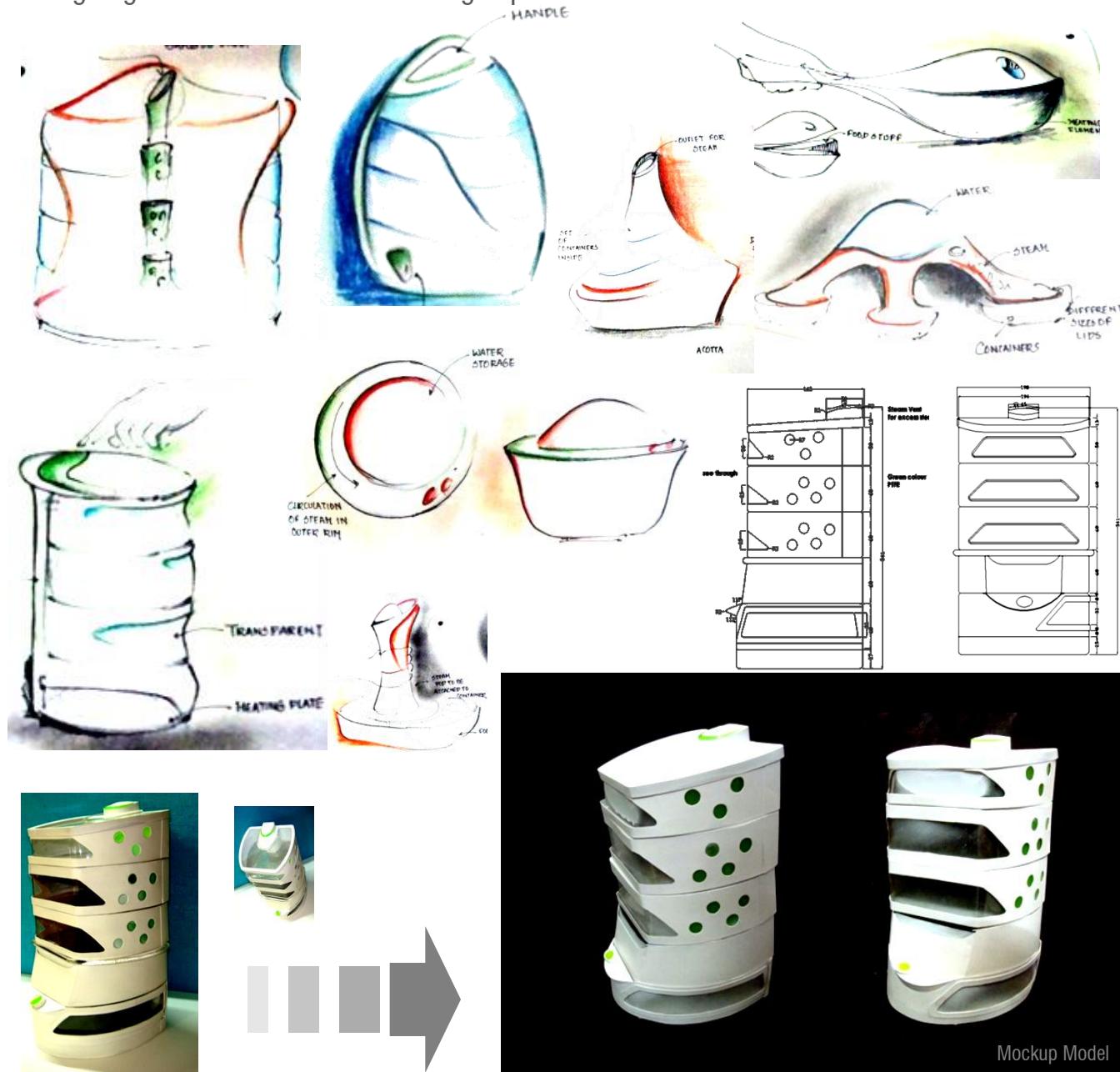
Industrial chloroform

Auto putty

M-seal

Enamel Paints

Acrylic sheets



Mockup Model

# Lighting Design Make up Light

Ever find yourself trying to put your makeup on in the back of a taxi that arrived too promptly?

Catching a glance in the rearview mirror as you're driven over a bump projecting the mascara brush dangerously close to your hair? Or want to do final touch up before arriving some place.

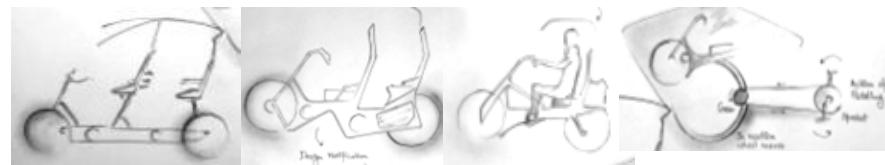
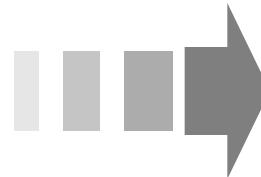
Portable led make up light for doing makeup touchups while travelling

Insulated stand that can be taken out whenever need would be there



# Human Powered Vehicle autoexpo 2010 for Old Age

Mechanism – Instead of simple center wheel, off centre wheel is given with a small gear to propel the wheel



Mockup Model

# Redesigning of OTG Oven Toaster Griller

## Product Detailing of Oven Toaster Griller

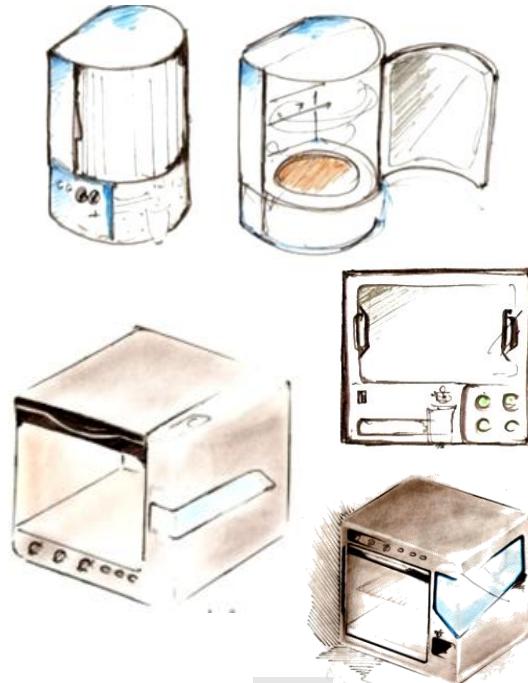
The designing and detailing of OTG is based on evaluating issues in the existing conventional OTG and redesigning it taking all the aspects with it.

Steps involved:

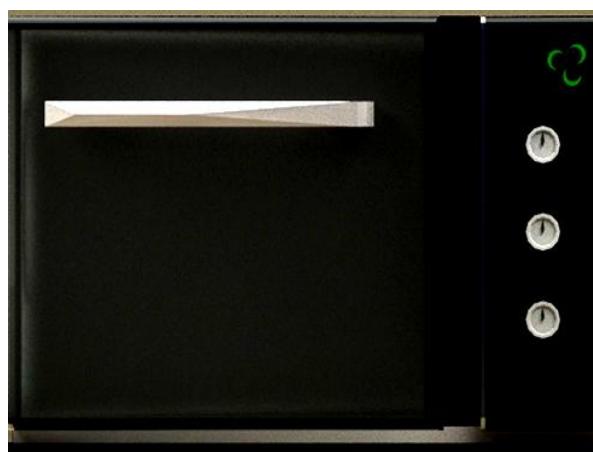
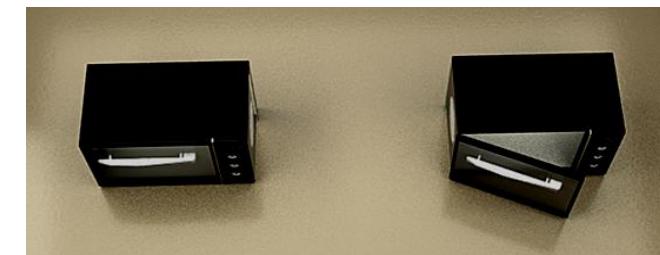
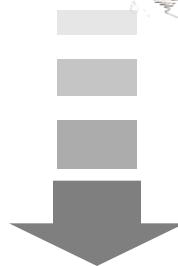
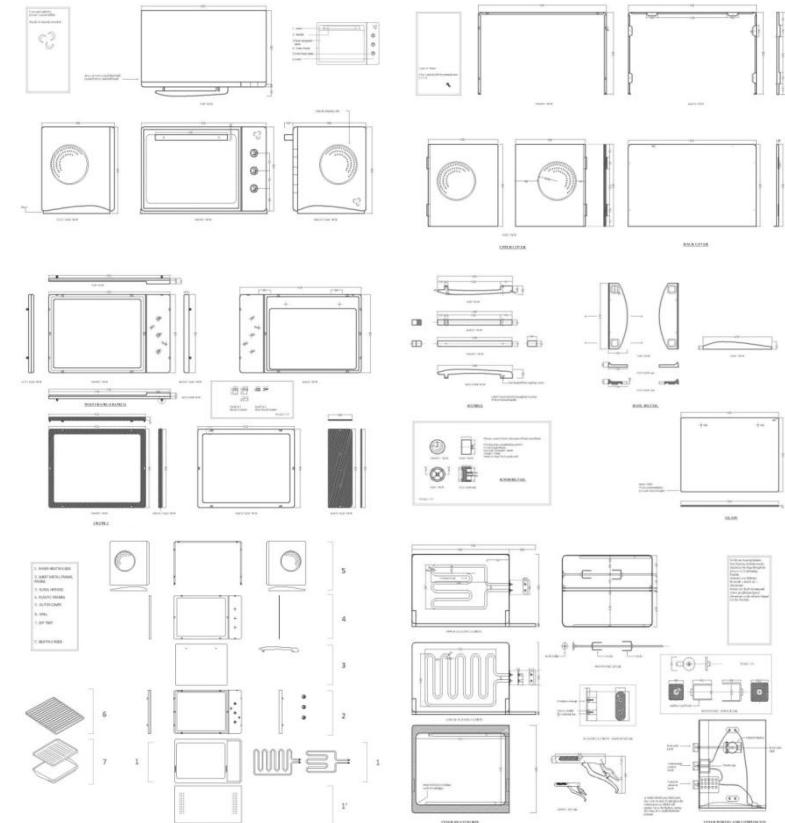
Study of existing otg  
Engineering drawings  
Mockup making

Material used in mock up (laser cutting) :

Acrylic sheets  
Fevibond



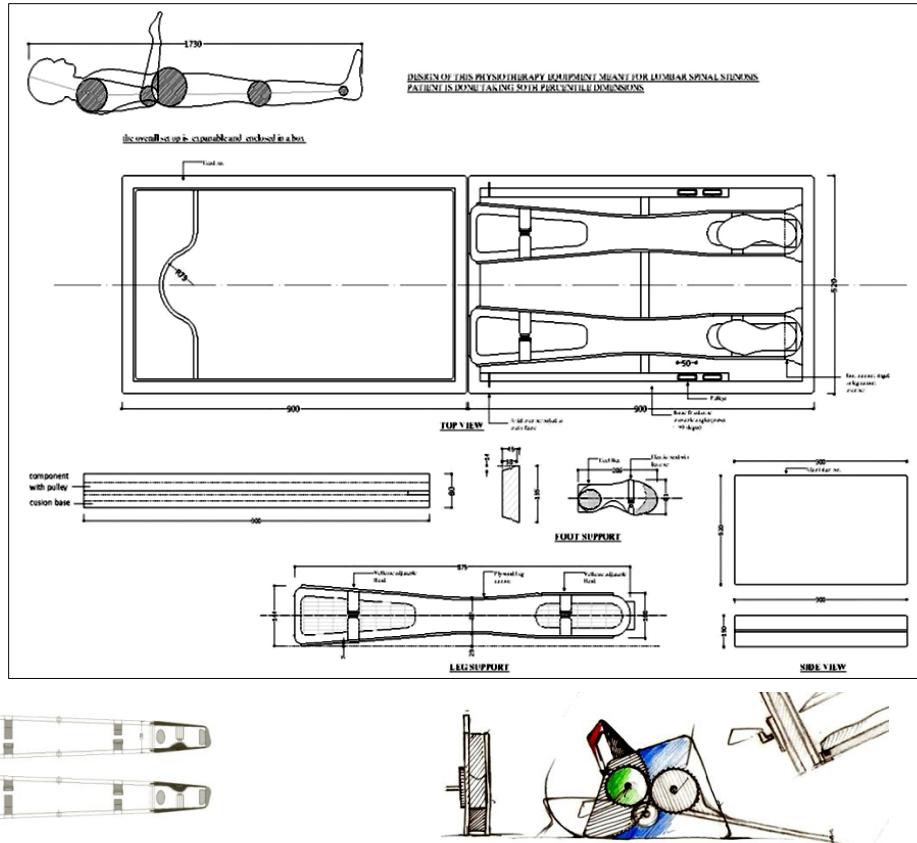
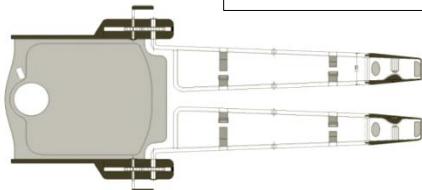
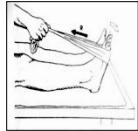
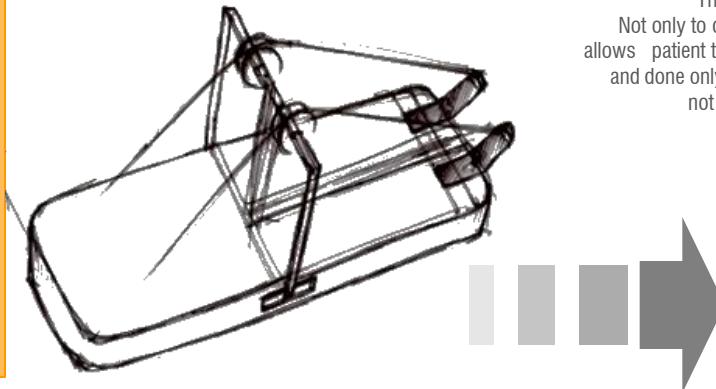
Engineering Drawing



# Domestic Physiotherapy Equipment

Exercising equipment/ system for 'Lumbar Spinal Stenosis' patients for the better performance and improved mobility of effected leg and foot.

Symptoms of patient :  
Pain, or numbness or cramping in the legs, with or without back pain.  
Weakness in the legs  
Foot drop



The objective of this product is  
Not only to cater all the exercises necessary ,but also  
allows patient to practice himself which are now possible  
and done only with the help of a physiotherapist and  
not by the patient alone at home.



This complete set up takes very less space, easy to Stack anywhere in home moreover as it is compact so the patient can also take it ,where ever he goes.

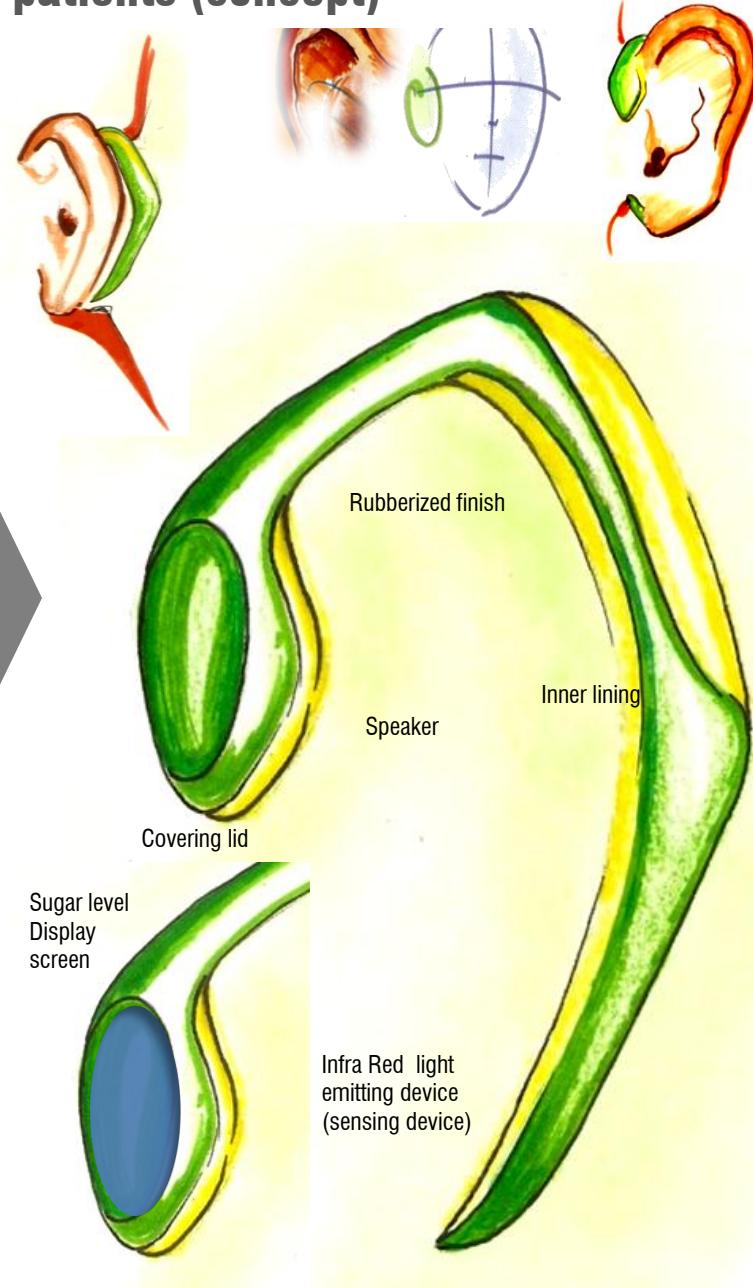
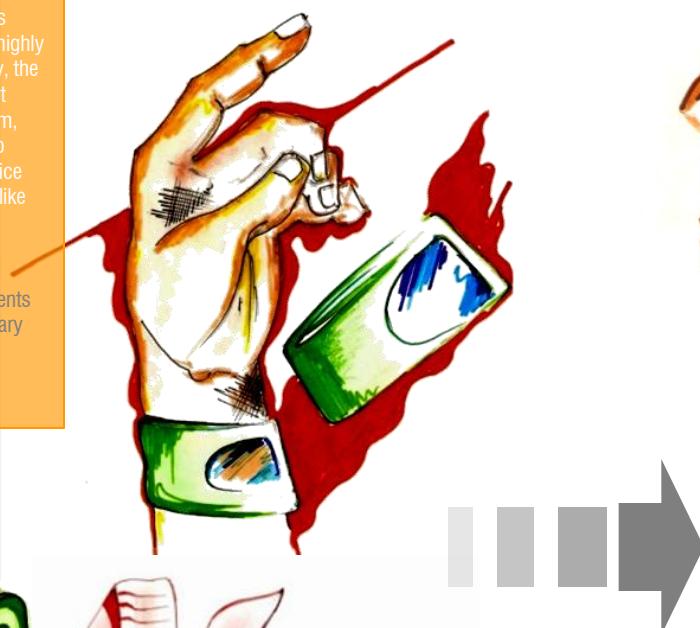
The patient has to lay down and has to place his feet on the foot support and with the help of simple pulley mechanism all exercises can be practiced one by one ,without any external help or support



# Tweet Bean - An alarming device for hypoglycemia patients (concept)

**Tweet Bean** is a blood sugar monitor that is both convenient to use (non-invasive) and highly portable as this utilising infrared technology, the Tweet Bean works by directing infrared light through the skin into the user's blood stream, with the reflected light being assessed by to discern current blood sugar levels. The device can be employed at any time, wearable, unlike more traditional invasive and somewhat unpleasant means of blood testing.

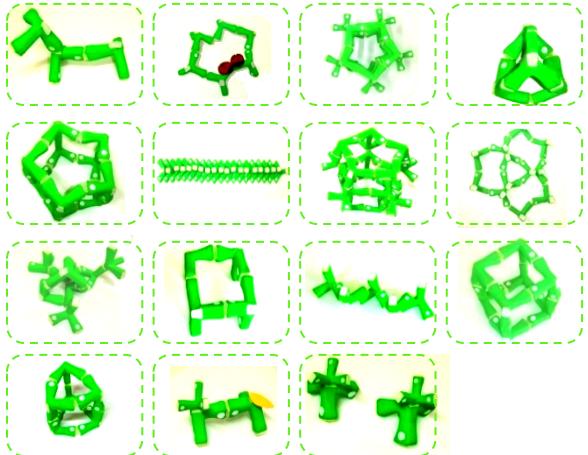
This product meant for hypoglycaemia patients is an Alarming device for indicating necessary content of glucose in the blood and helps patients in intake of sugar at the right time.



# Thesis Project – Toy and Packaging design for Autistic kids



The concept of this toy design is a plant which is a symbol for growth. The composition of the modules is such that when joined to a base it forms into a beautiful grown plant. It is in 3 basic parts- one planter, plant base and the sets of modules.



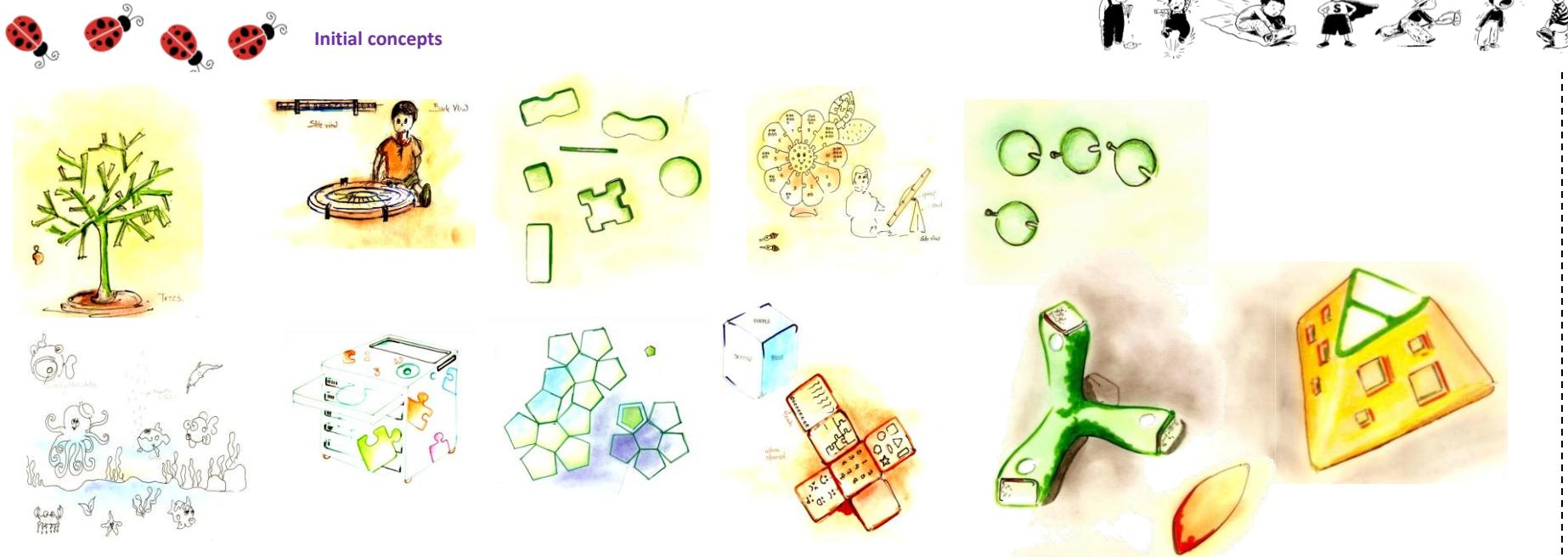
The surface of the toy is kept rough so the Velcro and texture of surface

Collectively give a sensory feel while playing which is an important factor for an autistic child.

The complete toy set is made of colourful Pu-foam sheet painted with coats of non toxic acrylic paint. The module primary attachment is Velcro which are given on 3 dimensions so as to give full use of the form .the secondary attachment are the magnets which are fused into foam parts. This gives a feeling of mystery and excitement during play.

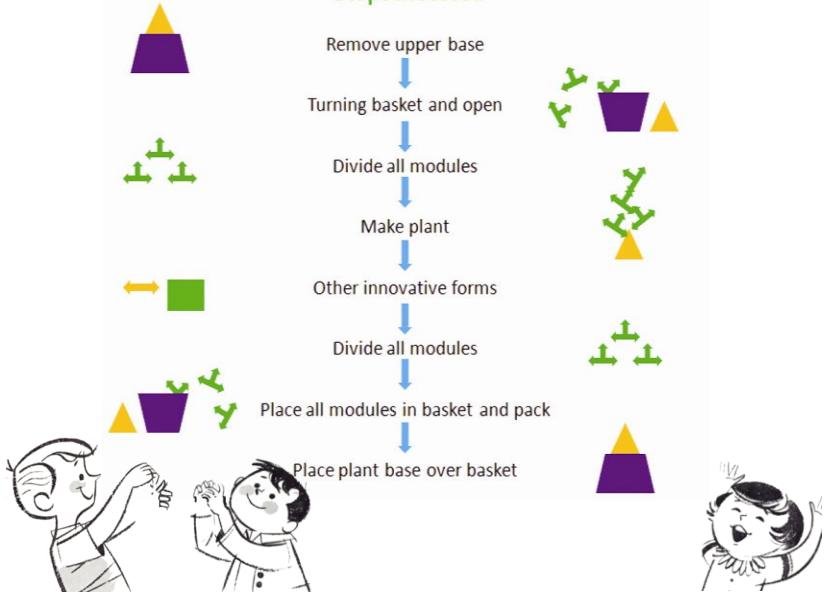
This toy design is helpful in improving sensory intellect, motor skills and communication skills for an autistic child.





### Initial concepts

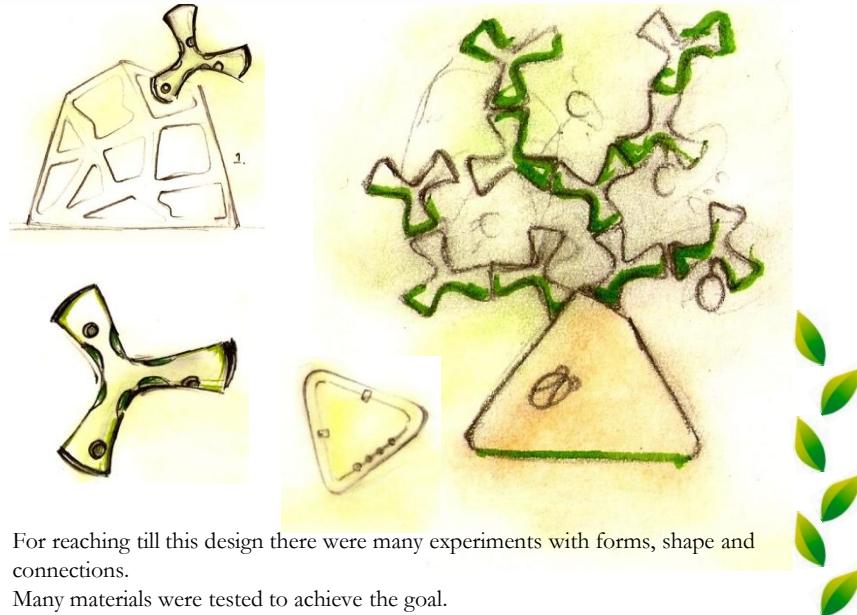
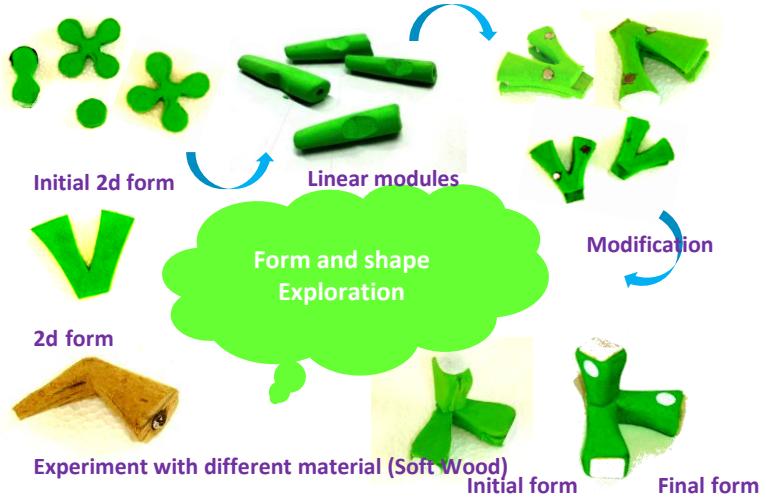
- Remove upper base
- Turning basket and open
- Divide all modules
- Make plant
- Other innovative forms
- Divide all modules
- Place all modules in basket and pack
- Place plant base over basket



### Achievement through Design

- Social interaction, sensory development, motor skills
- Development, Imagination Skills
- Colours
- Stacking, Counting
- Motivational                    -Selfconfidence  
Pre vocational                 -Coordination  
Fine motor skill tasks      -match ,assembly, package  
Pre academic tasks          -counting
- Visually highlighting the relevant details
- Easy understanding, Independence



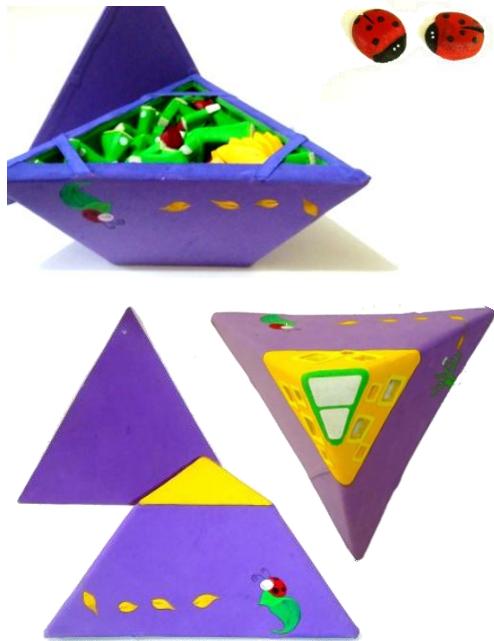




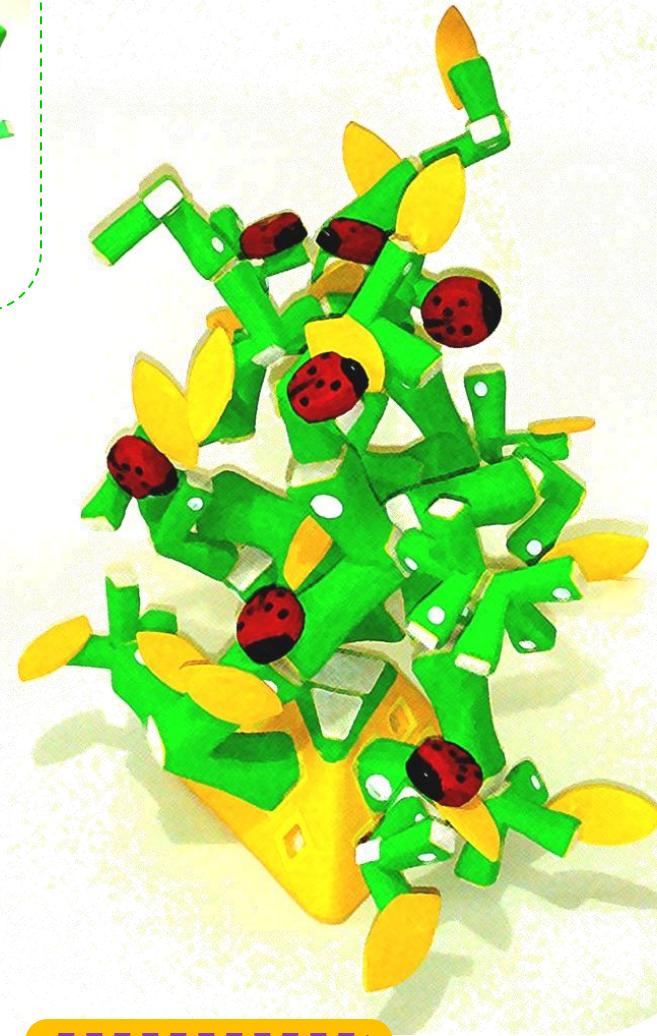
### Planter : for special kids

56 pieces

- 8 3d big modules
- 20 3d small modules
- 20 leaf
- 8 lady bug
- Plant base
- Module basket with lid



Packed "planter"

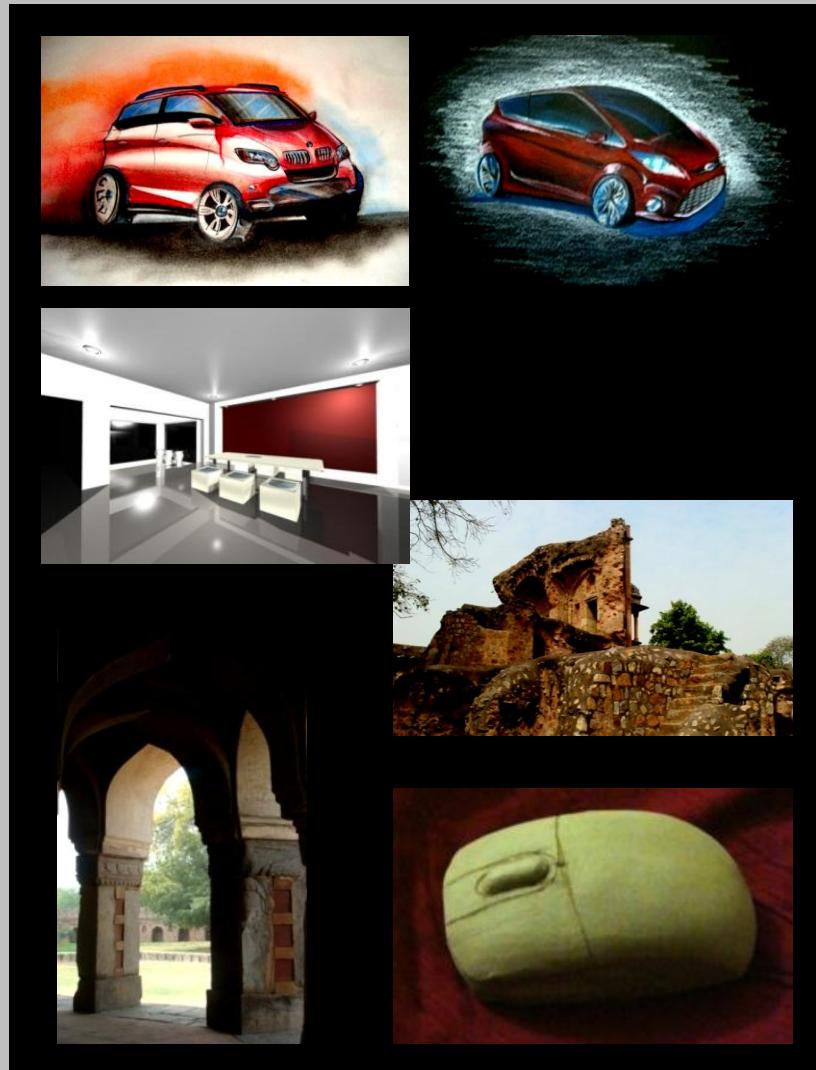
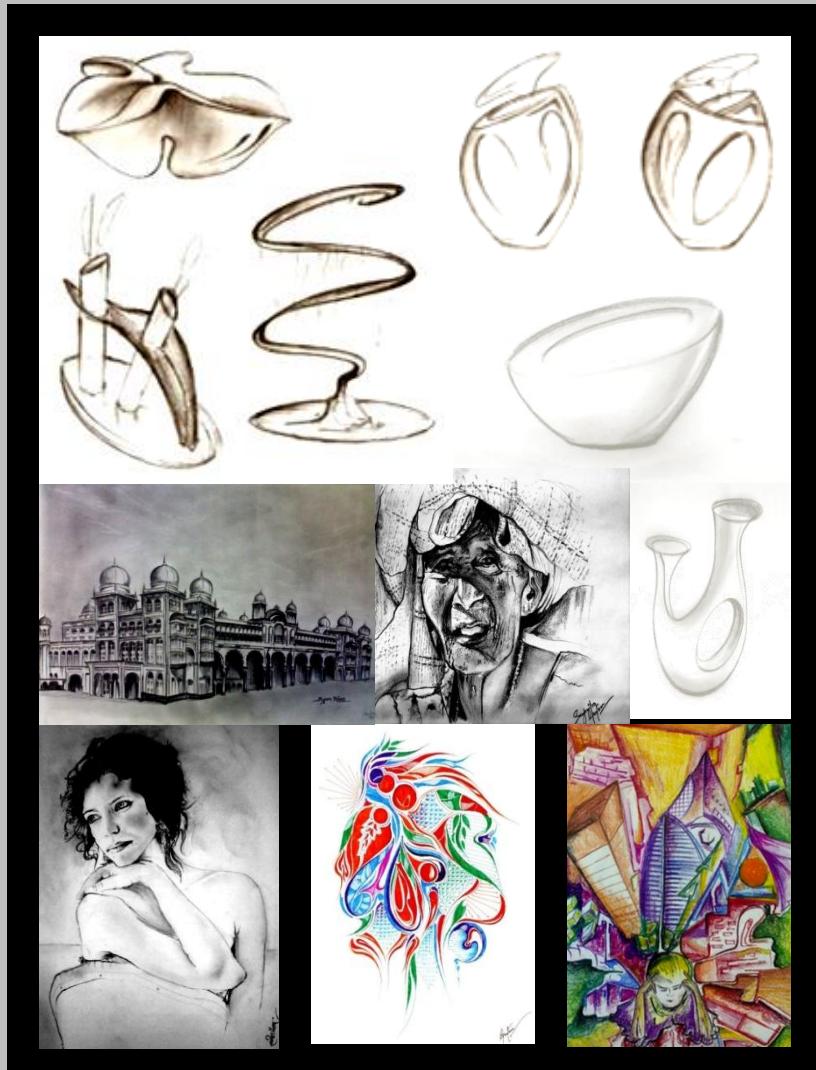


# Planter

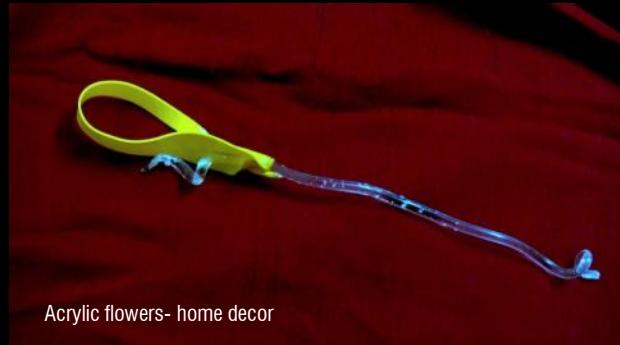
Imagine and Create your own world

# An Artistic side of mine : Side work and skills pages

Doodling, Rendering, Clay modeling , photography, painting



## Side work and skills pages



Acrylic flowers- home decor

Clay Sculpture



## Side work and skills pages

Cutlery Design



M seal  
decor



Paper Mache  
stand



Paper  
furniture



Art Work



Napkin Holder



Stationary kit from  
from waste cold drink  
bottles

Foldable wall hanging  
painting frame cum  
portable sketch pad set



Wall mounted  
stand

## Writing skills

### Indian Product - Imam Dasta

**Abstract:** Indian is vast...So are the cuisine of here and some traditional utensils which have a special importance and identity.

#### **Introduction :**

Working with the right materials would yield to a right and successful work. This saying is also true in cooking. This means that when you have the right cooking utensils, you'll most probably end up with a nice and delectable food. This goes for all cuisines, including the Indian cuisine. In India, utensils are simply not only used for preparation of food. They are used in prayer services and also make excellent gifting solutions for Indian marriages - it's one way to helping someone set up their home. India has a huge body of beliefs about the effects of various metals and minerals on the body and it was naturally felt that food cooked in various metals absorbed certain trace minerals and elements beneficial to health. The kitchen was, and still is the central part of a woman's life but the amount of time spent in the kitchen has reduced remarkably over the years. Indeed one feels the dying of a leisurely way of life, most, in the context of the kitchen. There are many kitchen utensils used in India which has a strong impact on our style of cuisines and delicacies. Indian cuisine has been known around the world because of its exceptional flavour. That's why, people around the world, not necessarily from India, are becoming fond of knowing how to cook Indian recipe. But before doing so, one should bear in mind that firstly have to have the weapons to win the battle, that is, the correct Indian cooking utensils and one of them is "Imam Dasta".

#### **Why the product is chosen? :**

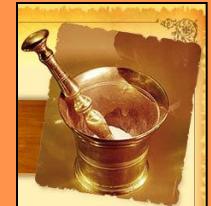
I choose this product for the explanation of an Indian traditional product because it is used in every Indian traditional kitchen and having a very strong presence from the past. And I personally think that it is one of the most suitable Indian traditional products. Although the word "Imam Dasta" is a Turkish word whose origin and adaptation in India is still unknown but the word is completely absorbed here and the existence of this product in this country backs thousands of years.

This product has many uses. From making masala chai (Indian tea) to Bhang thandai (festive drink of India during Holi) this product has a very unique purpose and identity of itself. Even our mothers, grandmothers are using this product and seen her great grandmothers pondering dry chillies and turmeric in it during day hours.

Preparation of wet spice mixture for daily routine food was somewhere incomplete without this product and still is in use in certain regions of the country.

It is traditional in various Hindu ceremonies (such as weddings) to crush turmeric in these mortars.

Moreover preparation of medicines, oils in Ayurveda is somewhere unimaginable without Imam Dasta. In India, it's used extensively to make spice mixtures for various delicacies as well as day to day dishes.



### **Does the product identify spirit of Indian Design?**

This product is being used from ages and still existing without any major change in the appearance. A favourite in every Indian kitchen, a Imam-Dasta is generally known as mortar-pestle, is perfect for pulverizing and grinding herbs and spices into seasoning pastes and spice mixtures. An Imam-Dasta unlike a food processor which only shreds and tears ingredients, allows fragrances and flavours to be beautifully blended.

The origin of Indian spices dates back to thousands of years. From time immemorial spices have played an important role in Indian cooking, imparting amazing flavours to extensive Indian dishes and so is the use of this Indian product from that particular time period. As per its design is concerned it is still available in the same antique design and form. Usually Imam-Dasta's is made up of brass and wood.

As Steel is now most commonly material used for domestic purposes. So it has now given way to steel and also to ceramic ones. The traditional style and the design of this product are still maintained properly.

### **Form and Function**

As per form of Imam Dasta is concerned it is still exists in same peculiar shapes and form. Since Indian spices can be bought in most supermarkets and what can't be had there is always available in specialist Indian or Asian grocery stores. So in today's modern times people are not in much use of this product and have technologically refined food processors and grinders at their home and have a perception that indian food does not require special cooking utensils like Imam Dasta. "Form follows function" the statement totally suitable on this product and this is the main reasons for the existence of Imam Dasta in this era in same form and design.

### **Representative of Indian design**

Taking all the aspects qualities and relevance of this product in our culture and cuisine it can be said that it is one of the true representative of Indian design. Although Imam-Dasta is not only used in India but also in some of the Asian countries. But the bonding which it has with the Indian cuisine is inseparable especially with mughal and southindian cuisine. It is still handcrafted by craftsmen and made by skilled workmen in small scale industries of India in various materials like wood, brass, stone, marble that too specifically for specific purposes. In a way it also gives employment to workmen.

Image 08: Ceramic Imam Dasta

### **Bibliography:**

#### **Journals and Articles:**

Demystifying Indian cuisine

**Websites:** [www.indianfood.about.com](http://www.indianfood.about.com)

[www.kitchensofindia.com](http://www.kitchensofindia.com)

[www.indianfood-recipes.com](http://www.indianfood-recipes.com)

**Thank you !!**

