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- ❑ Summer Internship Project May 2008
 - At **Desmania Design Pvt. Ltd. (Mumbai)**
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➤ About Desmania Design :

- Desmania is a Design Company based in Delhi & Mumbai
- A multi disciplinary design company functioning from 15 years.

• Promoter :

Anuj Prasad : An
alumnus of NID –
I.D.(N.I.D)



➤ About Desmania Design :

• Worked With :

- Mumbai office is headed by :
Mr. Sanbid Golui, - (I.I.T. Delhi)
- *The other team members comprise of :*
- **Kaustubh . Goswami (I.D.C)**
- **Subodh . R. More (I.D.C)**



Services

Packaging Design

Visual Communication

Toy Design (N)

Retail Design

Automotive Design (N)

Rapid Prototyping

Cad & Engineering

Industrial Design

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➤ Objective :

- Desmania is coming up with its own **in-house brand production**.
- **My Scope of Work** : To design numerous innovative lifestyle products.
- **It required** :
 - *quick and innovative designs.*
 - *Innovation in form, material, aesthetic details.*
 - *existing product problem identification and its solutions.*
 - *A tentative manufacturer identification.*



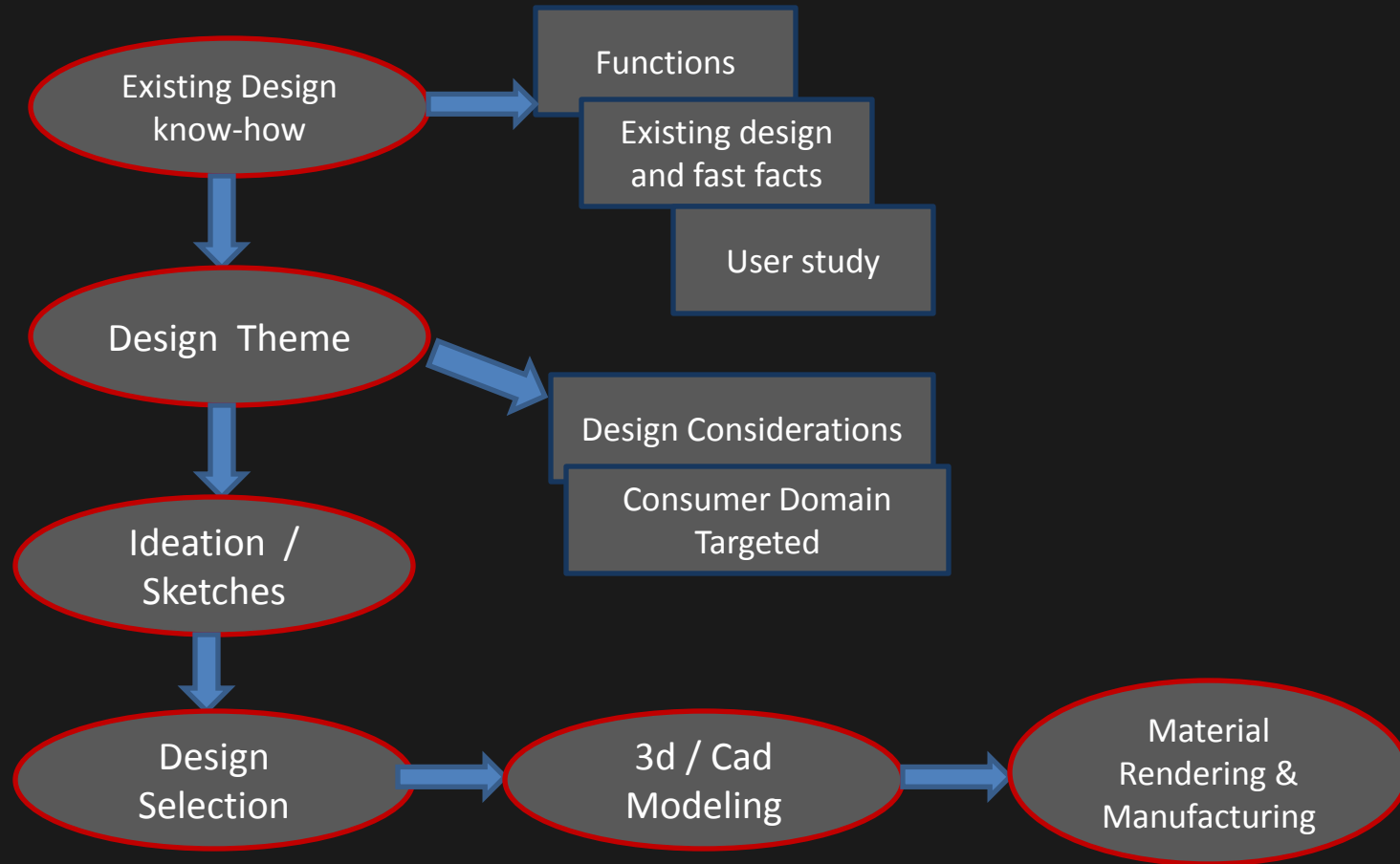
Mumbai branch



Delhi Branch

➤ Objective :

• Approach followed :



➤ Design 1 : • Assignment : a **coffee mug** as a lifestyle product.

Existing Design
know-how



- One of the oldest manufacturers of coffee mugs during the 1940s U.S. military – **The pentagon.**
-Broad base,
-rugged look,
-large handles,
-more volume.

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➤ Lifestyle Product -Coffee Mug :

Existing
Design
know-how

• Functions :

Though at first glance a very simple object, the mug serves a number of functions which make it especially suited to holding hot liquids:

Provides a handle:

- (i) for **grasping**, and
- (ii) **allows to hold** the cup avoiding the hot burns otherwise.
- thick walls separate the beverage from the cool external air,
- an **indented base** separates the beverage from the surface upon which the mug is set.
- The use of **decorative mugs** are often used as an expression of personality, (*many times a gift item*)
- also used for **promotional reasons**

• Specialist designs :

- **A travel mug** - for transporting hot liquids.

It may or **may not be a vacuum flask**, but is usually well insulated and completely enclosed, with an easily closed opening on the top.

- **A puzzle mug** -counter-intuitive. It will usually have several holes in the rim, making it impossible to drink from in the normal way.

➤ Lifestyle Product -Coffee Mug :

Existing
Designs



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➤ Lifestyle Product -Coffee Mug :

Existing
Design
know-how

- **Fast Facts:**

- **Features**

- A.Heavier cup
- B.Larger Handle
- C.Thick wall to prevent burning of hands
- D.Stores heat

- **Common Uses:**

- A.Drinking coffee, hot chocolate, hot tea.
- B.Hot beverages
- C.Occasionally soup

- Made from a variety of **materials** including **ceramic, heat resistant glass, porcelain, stainless steel.**

Existing products : Having been to many home stock and lifestyle product outlets and malls I got an awareness of the current existing designs, and its variabilities.

➤ Lifestyle Product -Coffee Mug :

User study

consisted of the following issues :

- the **amount of coffee** one would prefer,
- any **problems** occurring in existing designs.
- the **preferable grip** procedure,
- **aesthetics**,
- and **material** likeability.

Observations :-

- **more coffee drinkers** as compared to tea.
They would prefer **a higher amount of coffee as compared to the tea. =(approx. 150 to 200ml).**
- **main issue addressed** by a higher percentage of people was of the **hand grip**, and hence the **spillage**.
- The **preferable hand grip** was of the kind where the **2 fingers are tucked** within the handle and the rest used for support.
- **Glossy and plane colours** preferred.
- Ceramics and plastic were liked.

➤ Lifestyle Product -Coffee Mug :

Design Theme

essence of the
contained material
– **milk.**
- its semi
viscous, soft, true
white, flowy nature.

Design Considerations

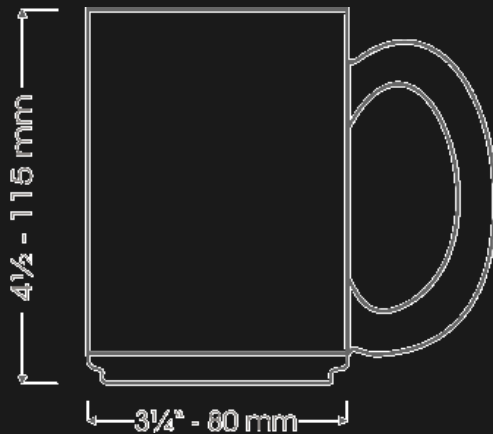
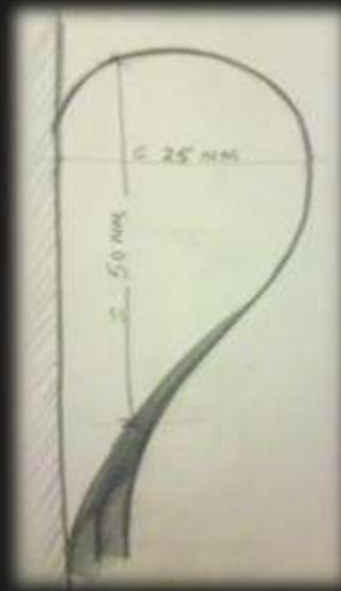
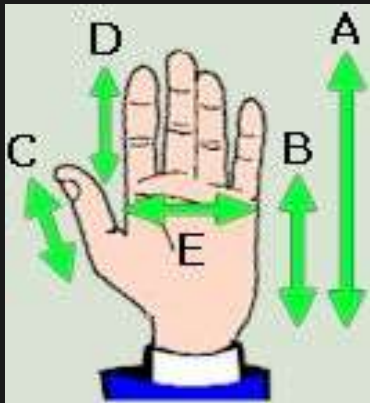
- **comfortable**, as well as **strong hand grip**.
- **the middle finger** within the handle gets **burns** due to the hot coffee within.
- **Anthropometrics and ergonomical** factors
*The hand grip also brought to light the amount of **twist** during the drinking.*
- **Manufacturing constraints and capabilities** if any within the material.

Consumer Domain Targeted

- **middle and upper class income group.**

➤ Lifestyle Product -Coffee Mug :

Anthropometric



	50th %ile Male	50th %ile Female
A Hand length	189	174
B Palm length	107	97
C Thumb length	51	47
D Index finger length	72	67
E Hand breadth	87	76
F Maximum grip diameter	53	48

➤ Lifestyle Product -Coffee Mug :

- **Manufacturing process and material knowledge :**

- **Porcelain** : made by blending clay with other substances and firing it at high temperatures so that it achieves vitreous, or glasslike, qualities.

- The Chinese discovered that a mixture of **kaolin clay** and a substance called **petuntse**

- The **kaolin clay** is **elastic and strong** so that it holds the shape of the porcelain object during firing, while the petuntse turns to glass and fuses with the kaolin to finish the piece.

- **Bone china** is hard paste porcelain which has been mixed with bones and ash.

- **General Process :**

- grinding the ingredients into uniform small sizes.

- magnet is run over it – remove traces of iron.

- water added to create a slurry which can be molded or cast.

- porcelain is bisqued in a kiln,(to set shape and prevent shrinkage) and then glazed.

- fired at extremely high temperature (here components are permanently fused)

- allowed to cool.

➤ Lifestyle Product -Coffee Mug :

Ideation /
Sketches

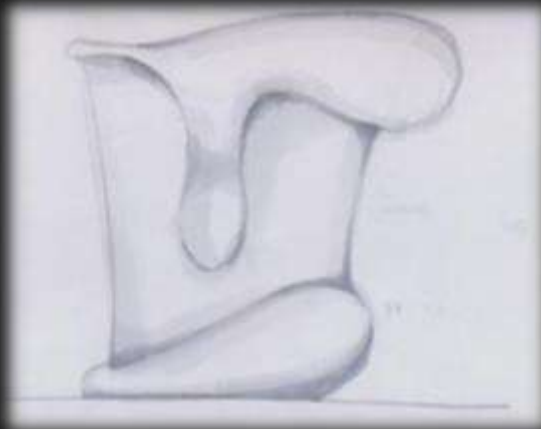
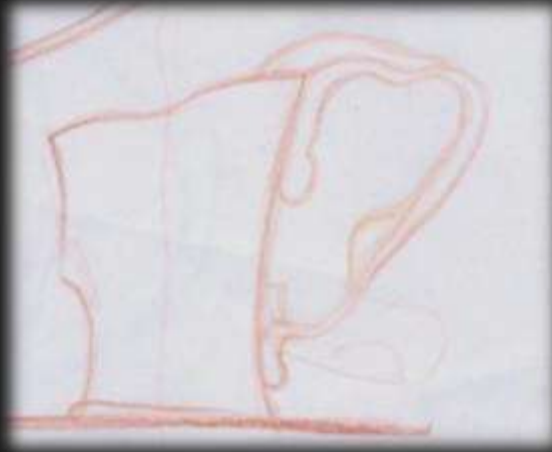


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➤ Lifestyle Product -Coffee Mug :

Ideation /
Sketches



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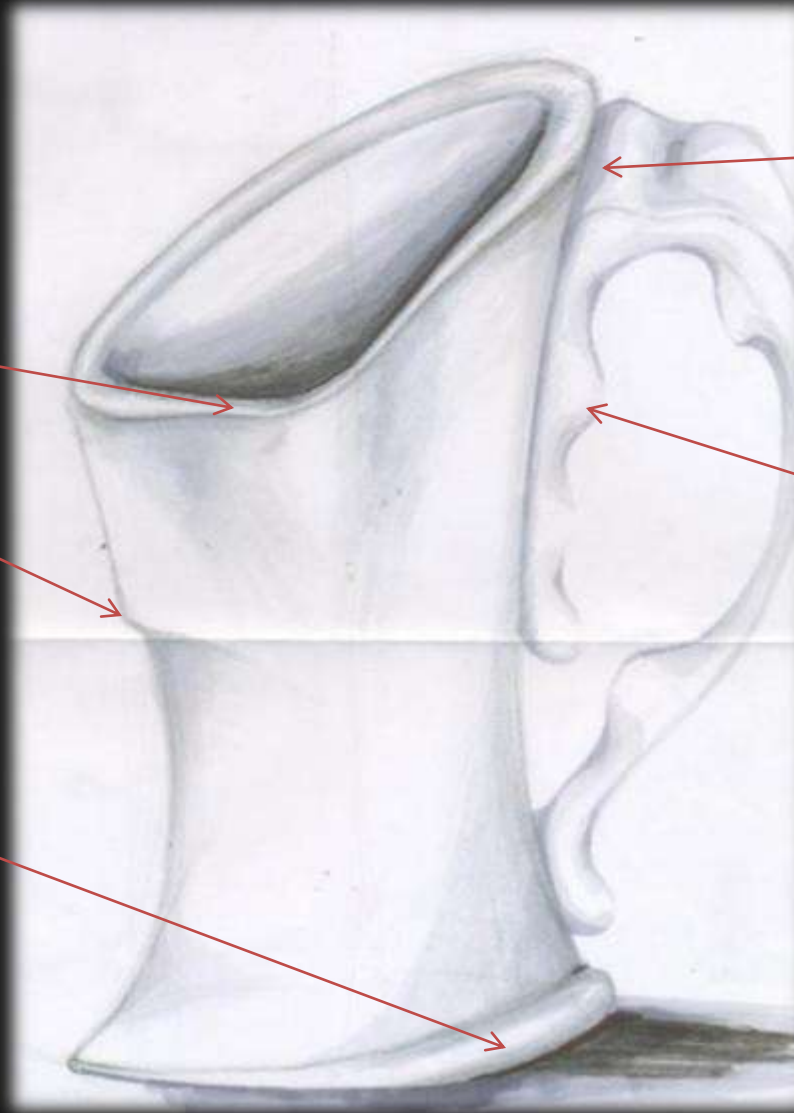
➤ Lifestyle Product -Coffee Mug :



➤ Lifestyle Product -Coffee Mug :

Design Selection :

- **Thickness variation** in the lips of the mug make it more flowy & soft.
- **The dent** – grip during empty cup
- **Thickness variation** in below bulge gives a soft base look
- a slight **inclination** for thumb position.
- **The curvy pattern** of the hand which also enhances the grip & contributes to the **soft milky feel**



➤ Lifestyle Product -Coffee Mug :

3d / Cad
Modeling



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➤ Lifestyle Product -Coffee Mug :

Material
Renderings &
Manufacturing



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➤ Lifestyle Product -Coffee Mug :

Material
Renderings &
Manufacturing



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➤ Design 2 : Salt & Pepper Dispenser :

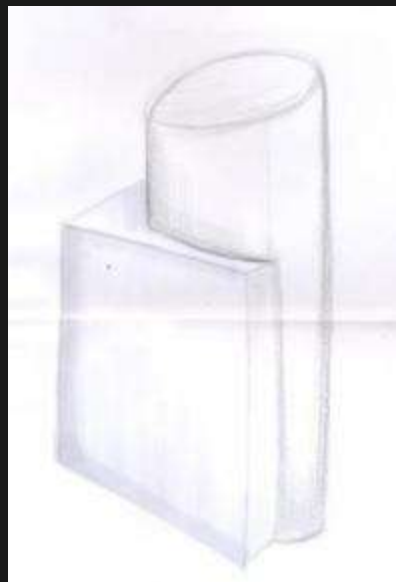
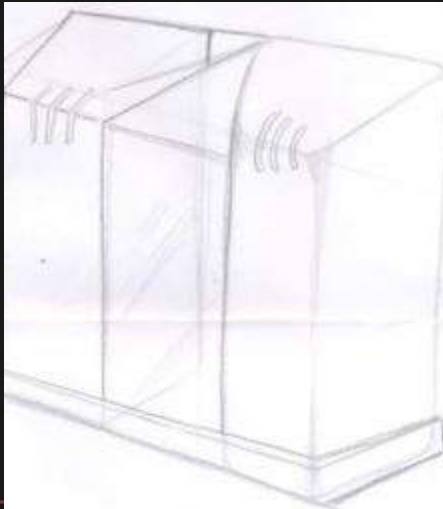
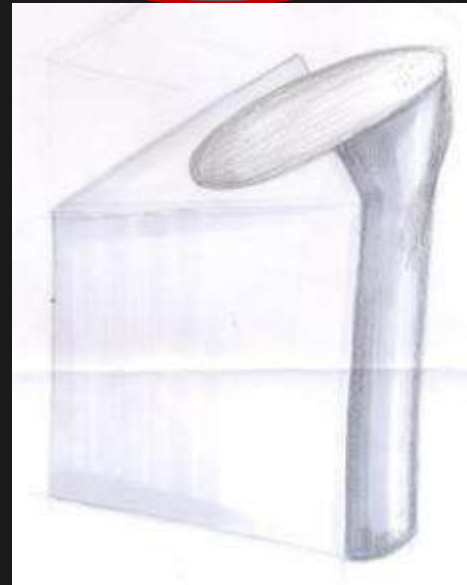
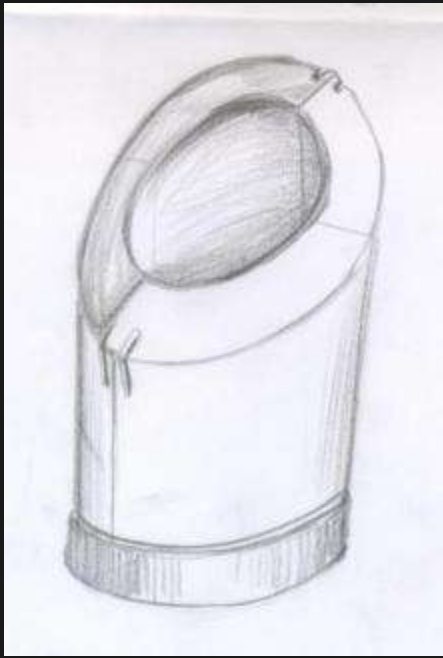
Existing
Designs



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➤ Design 2 : Salt & Pepper Dispenser :



➤ Design 2 : Salt & Pepper Dispenser :

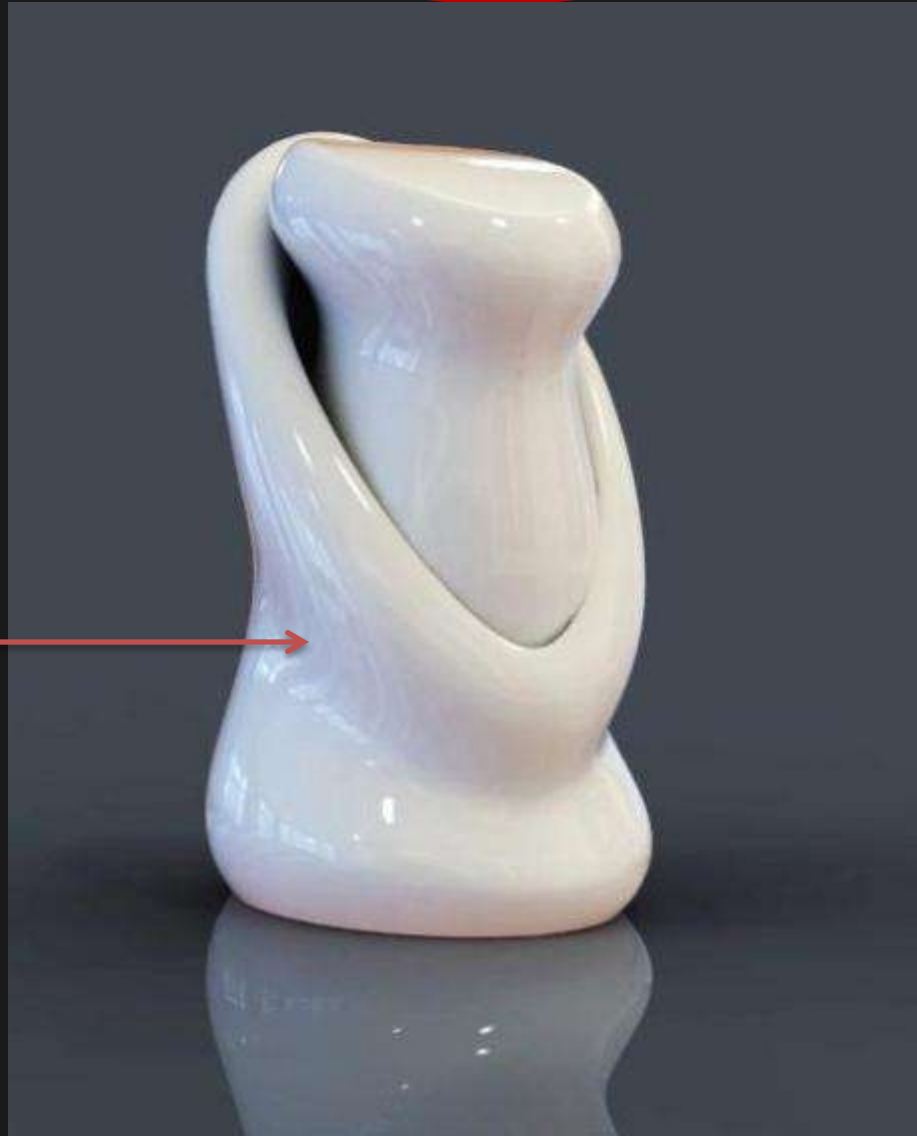
Design
Selection :



➤ Design 2 : Salt & Pepper Dispenser :

3d / Cad
Modeling

- **The dug**
 - brings inn the **soft harmony** with the coffee mug
 - Also **provides a good grip** to the smooth glossy product.



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➤ Design 2 : Salt & Pepper Dispenser :

Material
Renderings



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➤ Design 2 : Salt & Pepper Dispenser :

Material
Renderings &
Manufacturing



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➤ Design 2 : Salt & Pepper Dispenser :

Material
Renderings &
Manufacturing

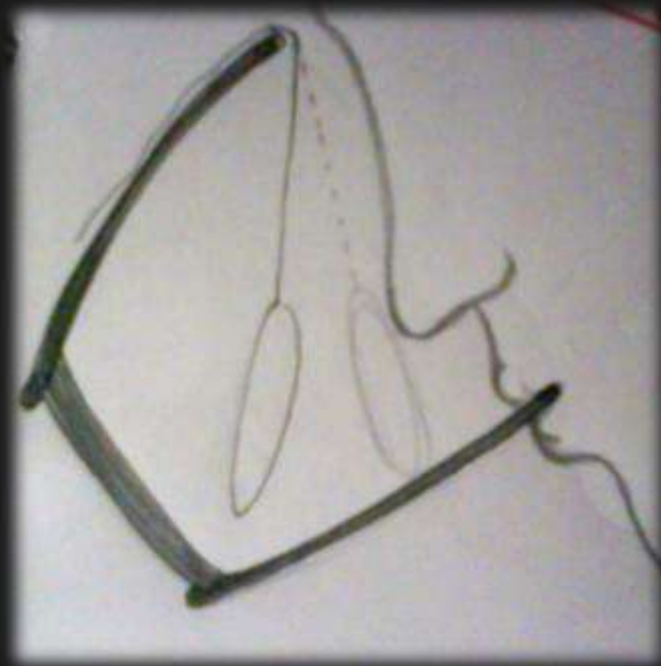


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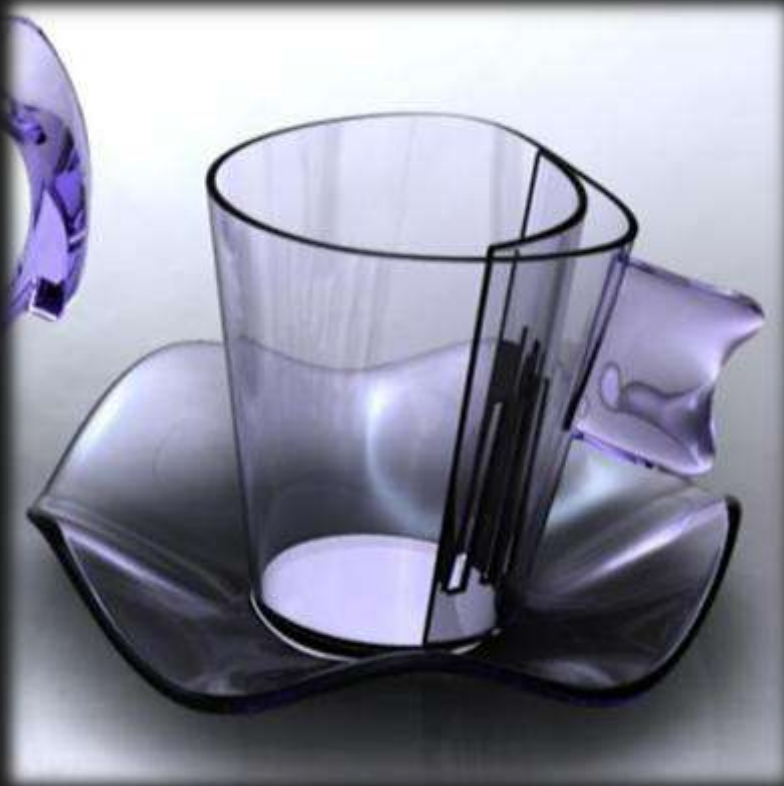
➤ Design 3 :

- **Assignment** : an **Office Tea cup** as a lifestyle product.
- **Problem Identified :**



➤ Design 3 :

- **Assignment** : an **Office Tea cup** as a lifestyle product.



➤ Design 3 : A tea Cup :

Material
Renderings



- Twist angle given to handle.

- Shaped in accordance with the drinking position. (also creates the required softness)



➤ Design 3 : A tea Cup :

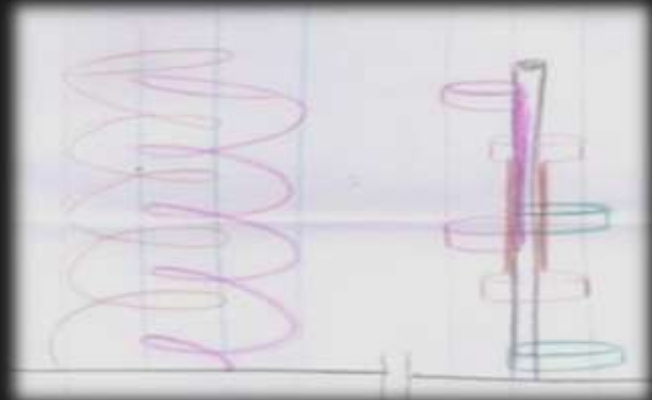
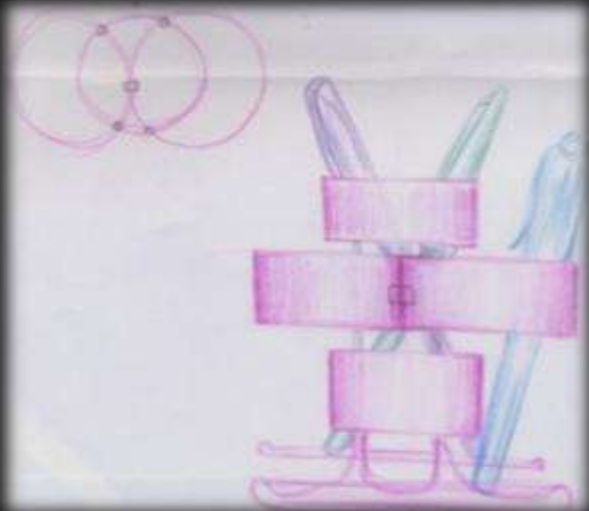
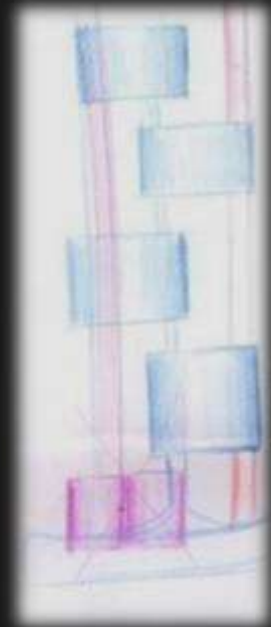
Material
Renderings



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➤ Design 4 : Pen Stand :



➤ Design 3 : Pen Stand :



➤ **My Learning and Conclusion :**

- *The internship helped me understand the **process of fast output** in the ever demanding commercial world.*
- *The internship also brought me close to my **seniors of I.D.C. Mr. Kaustubh Goswami and Subodh More.** I have great regards for their support during my internship at Desmania.*
- *Besides, I would also not forget the **tools of design** expressions that I learnt at Desmania. I underwent a rigorous training under my seniors in learning the **softwares of Rhinoceros Nurbs, and Hypershot** that shall help me deliver my design output and expression in a more professional and correct manner.*
- *The training provided me an excellent exposure in the field of Industrial Design.*