

Knock Down Bar Stool in Bamboo

Project II

Guide

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Submitted by

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Knock down bar stool in bamboo

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Presentation format

Information about KONBAC

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The project aims at designing a knock
down Bar Stool for KONBAC in
Kudal.

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Bamboo

Knock down nature

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Bamboo



Knock down nature

- fastest growing biomass
- exclusive and unique look
- positioned as a premium range

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Bamboo

Knock down nature



-transportation ease

-reduction in cost

-opens up distant markets

Lack : limitation to business expansion

increase in end cost

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About KONBAC

CIBART : (Centre for Indian Bamboo Resources and Technology) established an office in Kudal to -

Strengthen the bamboo sector in Konkan Region

Experiencing Bamboo

Field trip to Kudal

Two major varieties of bamboo are used at
KONBAC



Knock down bar stool in bamboo

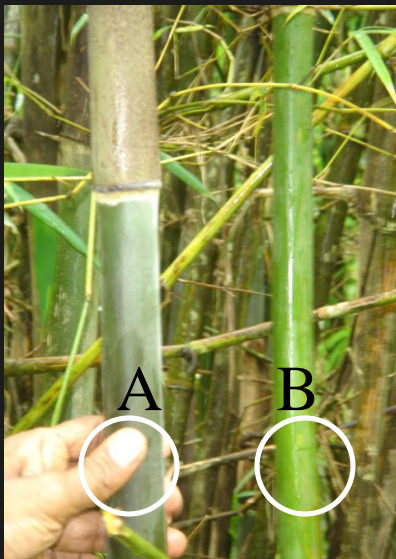
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Experiencing Bamboo

Two major varieties of bamboo are used at
KONBAC

1. *Pseudo oxytenanthera ritcheyi*

Local name: Manga



A : 3-5 month old

B : 1 year old

C: 2years old

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Experiencing Bamboo

Two major varieties of bamboo are used at KONBAC

2. Bambosa Bamboo

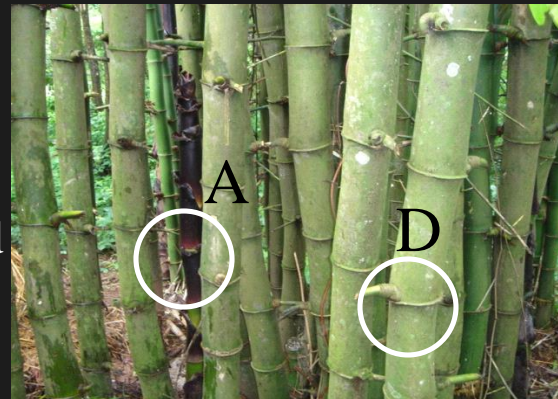
Local name: Kanak

A : 2-3days old

B : 3-5 months old

C: 1year old

D: 2-3 years old



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Furniture manufactured at KONBAC



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Infrastructure at KONBAC



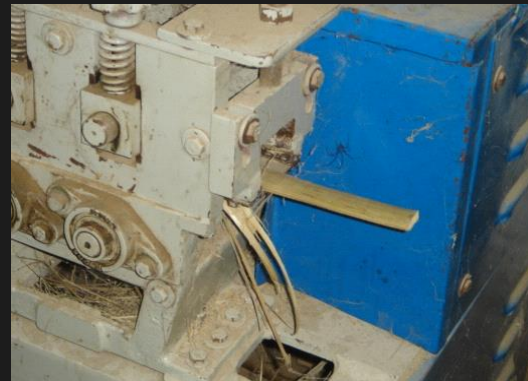
Chemical treatment



Splitting Machine



Knot Removing Machine



Sizing Machine

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Why Bar stool??

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Why Bar stool??

- a. Interviewing Architects and Interior Designers
- b. Taking feedback from users
- c. Feedback from Manger of KONBAC
- d. Expectation from project

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 - Corporate / Office Interiors
 - Residential Interiors
 - Restaurants/Hotels/ Resorts

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- Residential Interiors
- Restaurants/Hotels/ Resorts

- Breakout Areas, Executive Lounges, Libraries, Cafeterias, customer care areas
- gives informal look due to unfinished joinery, difficult to procure, transport is difficult

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- Corporate / Office Interiors
- Residential Interiors
- Restaurants/Hotels/ Resorts

- Semi open patios, Dining areas, libraries, Informal living room setup, Family room
- finishing is not up to the mark, not available in furniture showrooms

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- Corporate / Office Interiors
- Residential Interiors
- Restaurants/Hotels/ Resorts



- Cafes, Coffee joints, theme based restaurants, semi open areas in resorts etc
- from where to procure is not known, transport becomes expensive

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- a. Interviewing Architects and Interior Designers
- b. Taking feedback from users
- c. Feedback from Manger of KONBAC
- d. Expectation from project
 - Breakfast stool or dinning table since it gives an ethnic look, similar to wrought iron. Outdoor chair, theme based living room

- a. Interviewing Architects and Interior Designers
- b. Taking feedback from users
- c. Feedback from Manger of KONBAC
- d. Expectation from project

- Targeting International market
- Need for work in knock down possibilities
- Possibility of immediate market demand : for wine bars being setup by Mr. Chaugule of Indage wine



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- a. Interviewing Architects and Interior Designers
- b. Taking feedback from users
- c. Feedback from Manger of KONBAC
- d. Expectation from project
 - Good learning potential with respect to material exploration, form and expressions
 - Scale of project : limited time span

Bar Stool

- Wider application : pubs, bars, cafeterias, Fast food center, ice cream parlors, breakfast stool
- Immediate market demand
- Within the scale and scope
- Learning and experimentation with respect to form and expression as compared to other furniture types

A stool is essentially a seat with no back or arm intended for one person.

Bar stool is a type of stool often with foot rest which, due to their height and narrowness, are designed for seating in a public house or bar.

Bar Stool
By Eileen Gray



Bar Stool By
Karim Rashid



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Pubs/Bars

Pub is an establishment that sells alcohol for consumption on premise. These were the social places based on scale and consumption of alcoholic beverages.

Bar is also referred to the Specialized Counter on which drinks are served and from this term, the establishment itself derives its name.

Customers normally would sit across the bar counter, facing the bar tender and use the counter as a table for support as well as keep their drinks.

The height of bar counter is according to the convenience of the standing bar tender.



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Image Board



Knock down bar stool in bamboo

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Image Board



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Knock down furniture

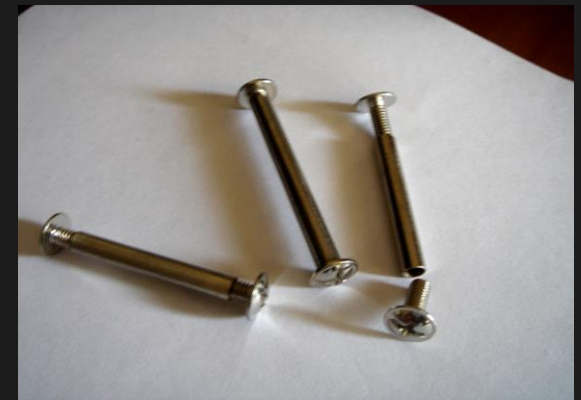
Knock down furniture, also known as 'Flat Pack' or RTA (Ready To Assemble) was created to solve fundamental problem of shipping the furniture.

The Indian companies :

Ebbco Fittings, Aries International etc.

Their showrooms were visited to find out the possibility of using their fittings for bar stool

Bamboo - splits vertically when nailed perpendicular to the direction of fibers. Manga variety of bamboo (nearly solid),if holes are drilled with drilling machine and not hammered, the splitting problem could be avoided.



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Image Board



Knock down bar stool in bamboo

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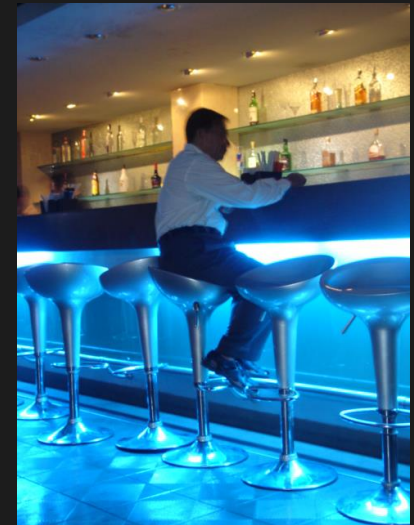
User Survey

The users selected were of three types

- a. people who are regular pub visitors
- b. people who have visited and used bar stool only once
- c. people who have used bar stools few times.

Good mix of Nationalities and gender

Age group : from 20 to 45



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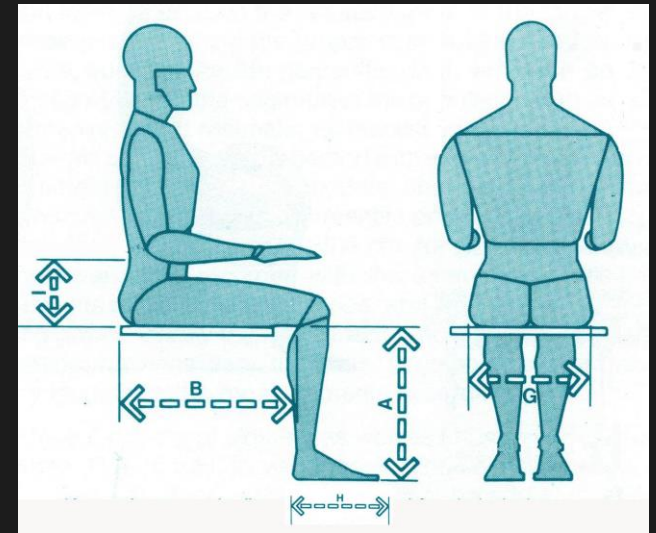
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Following summary could be given from these user interviews-

- a. People prefer to sit on the bar stool, near the bar counter if they are alone. This helps them in making new acquaintances and they can chat with people more easily.
- b. People prefer to sit on the more comfortable lounge area if they are with their partners or friends.
- c. People have never used a bar stool which is without the backrest for more than 20-30 minutes.
- d. People prefer swivel type bar stools since getting in and out is more easier

- e. Barstool with a backrest is preferred since it is more comfortable than barstool without backrest.
- f. Many times the barstools are not stable enough and they tend to topple with shift in the loading pattern.
- g. People who visit the pubs regularly tend to personalize their space and like to sit in a particular place
- h. The floor is very dark and it's difficult to find belongings like keys or money if someone drops it mistakenly.

Anthropometrical dimensions



		5 th Percentile			50 th Percentile			95 th Percentile		
		Male	Female	Combined	Male	Female	Combined	Male	Female	combined
A	Popliteal	380	365	374	425	399	419	471	441	466
B	Buttock- popliteal length	399	384	394	455	439	451	512	494	509
I	Lower Lumbar	72	66	72	101	95	100	156	189	159
G	Hip Breadth	272	259	269	331	314	326	405	429	406
H	Foot length	227	207	215	248	227	244	274	249	271

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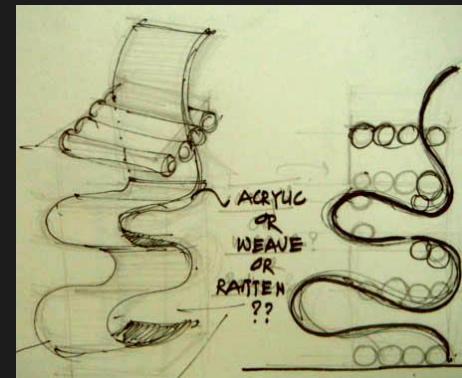
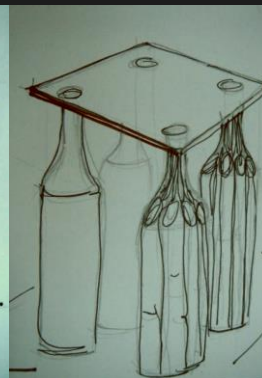
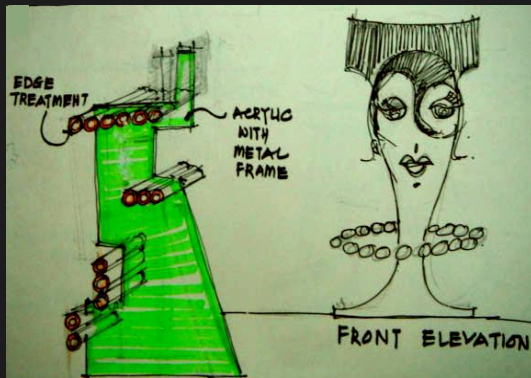
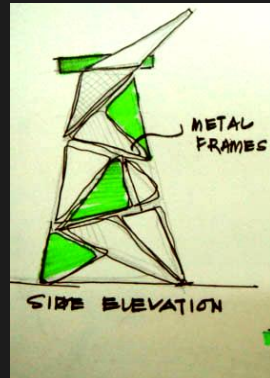
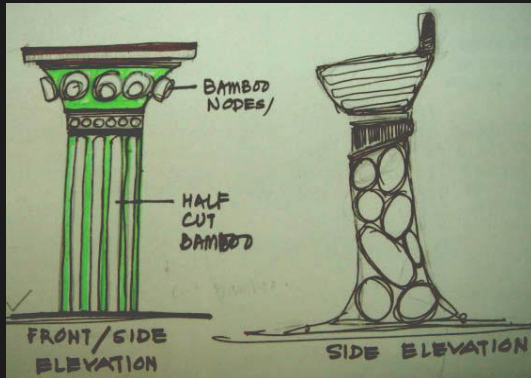
Product Brief

The product will have following features

- a. The main material would be full bamboo
- b. Joints will be of knock down nature with use of metal for joinery or structural stability
- c. Use of other materials like cane, steel, bamboo strips or weaving for seat
- d. The stool will have feature like 360 degree swivel

- e. The product aims at one time assembly at showrooms or customer end
- f. Immediate target market is for wine bar proposal by Indage group of wines
- g. The target audience is theme pubs/ resorts or restaurants.

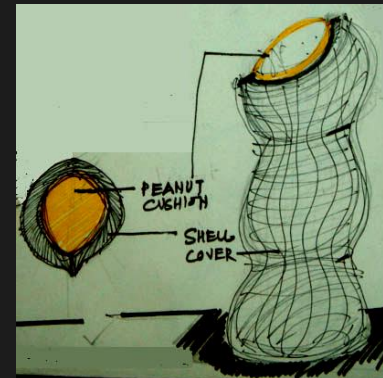
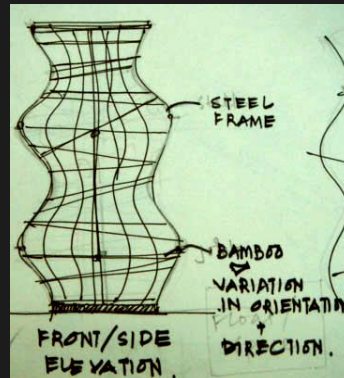
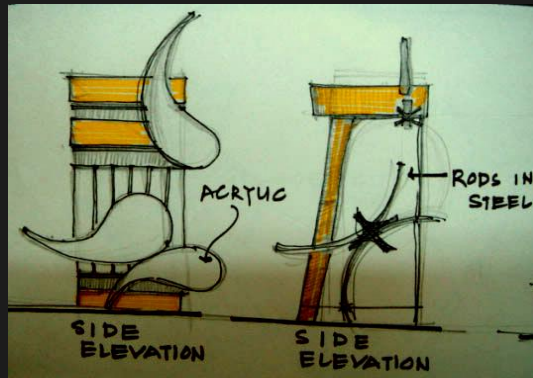
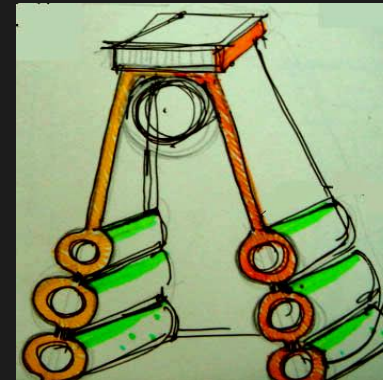
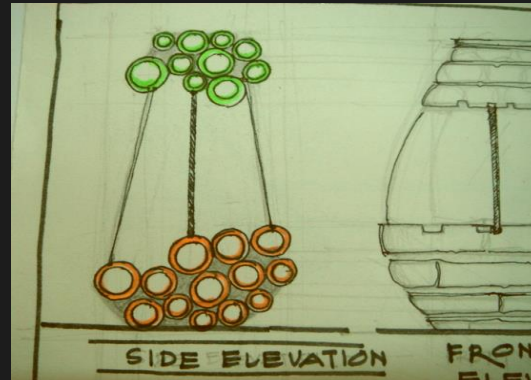
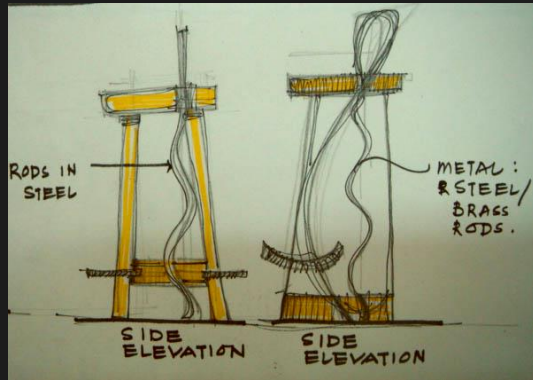
Ideation and Concept Generation



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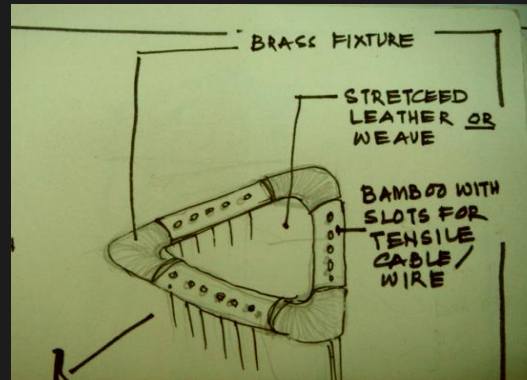
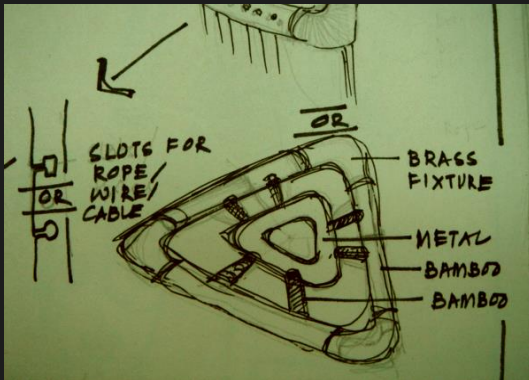
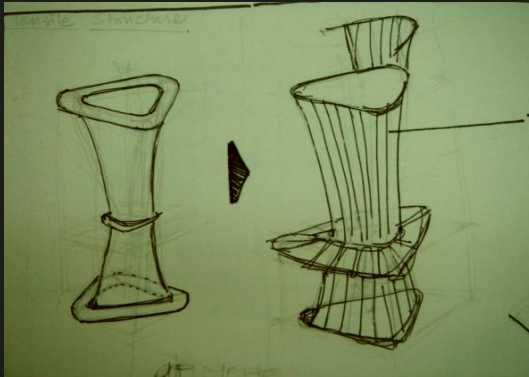
Ideation and Concept Generation



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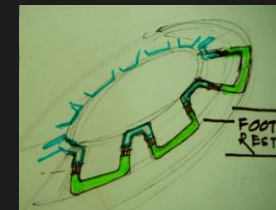
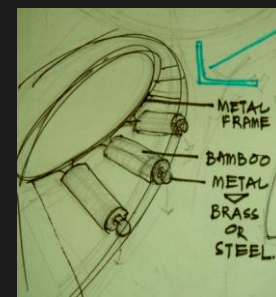
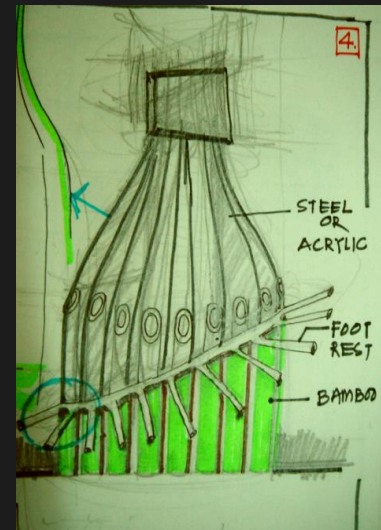
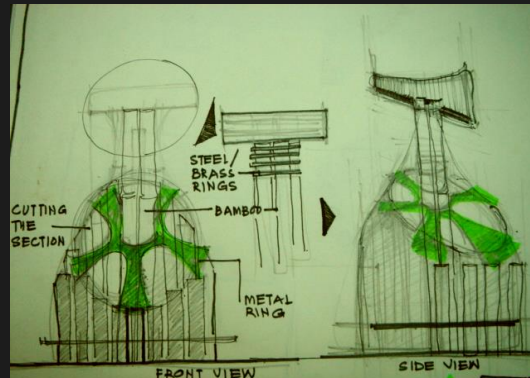
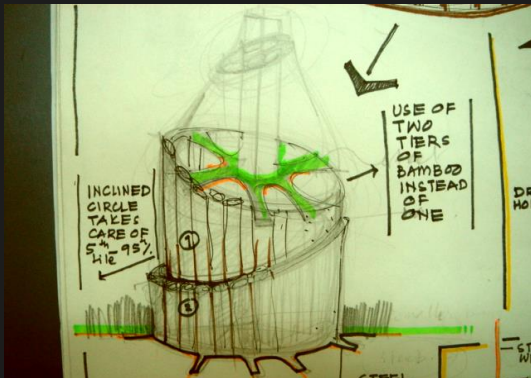
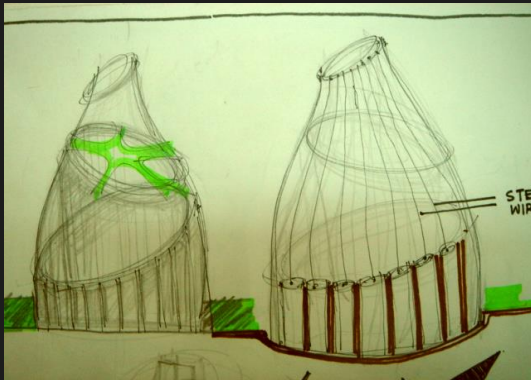
Ideation and Concept Generation



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Ideation and Concept Generation



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Concept development

Approaches

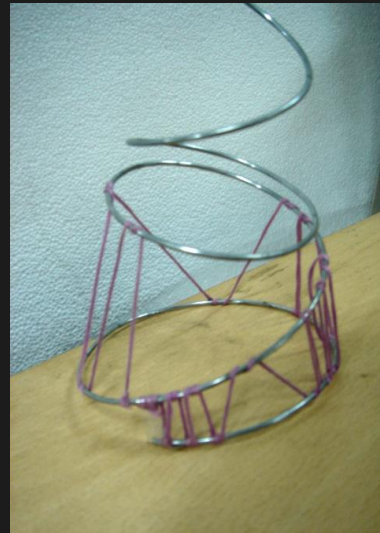
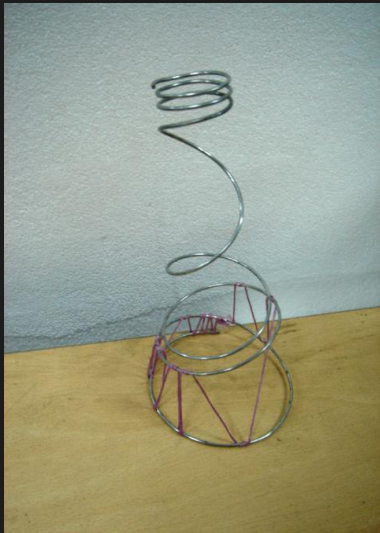
- a. Emphasis on formal aspects of barstool
- b. Structural system and knock down possibilities

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- b. Structural system and knock down possibilities



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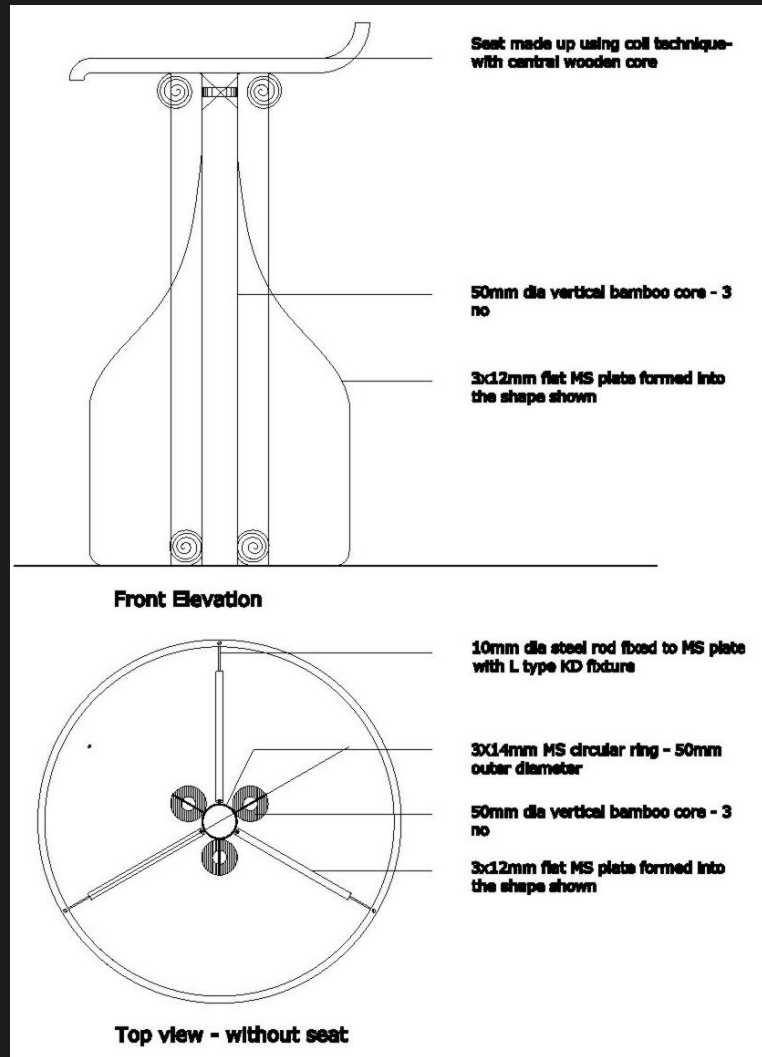


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- a. Emphasis on formal aspects of barstool
- b. Structural system and knock down possibilities

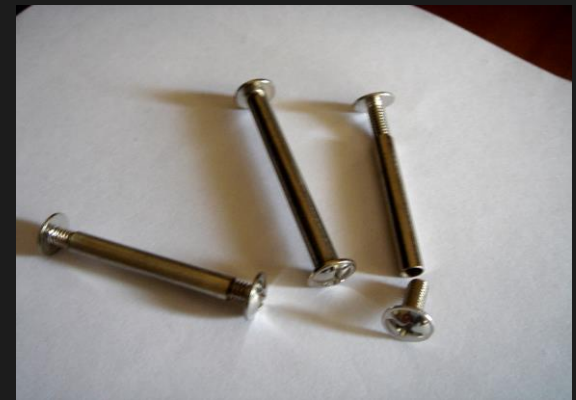
Concept I



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Knock down fittings details



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Seat Design

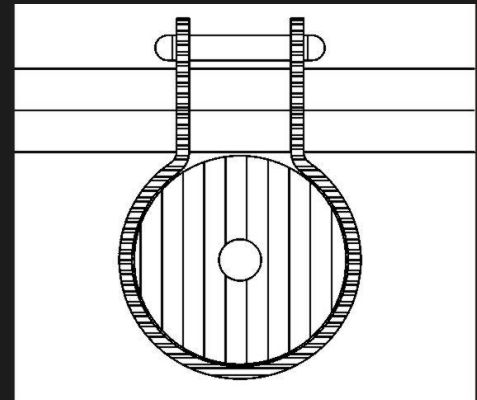
Coil technique



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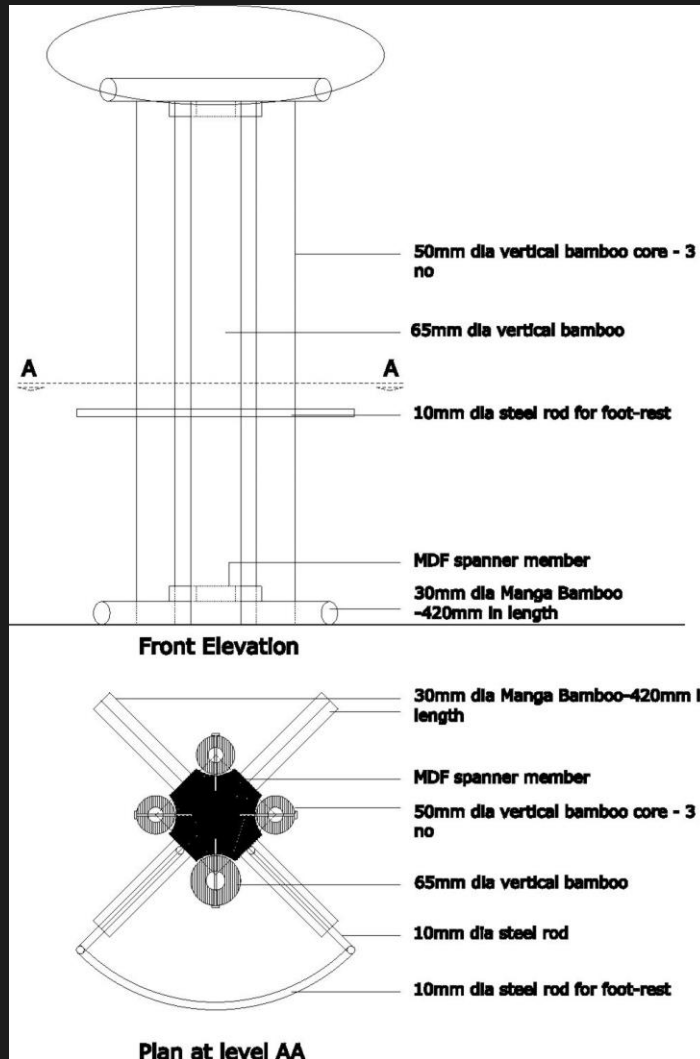
Footrest Design



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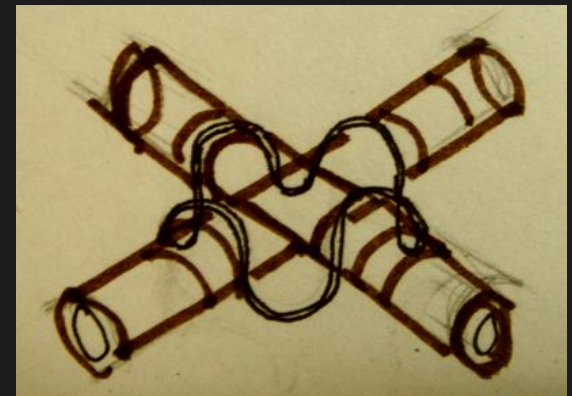
Concept II



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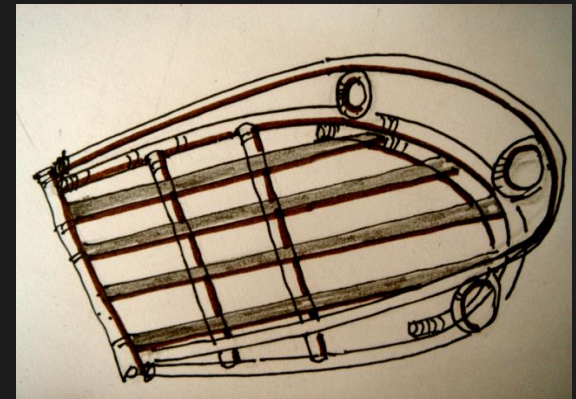
Details at base



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Seat Design



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Concept III : Final Concept

Development I



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Development II



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Development III

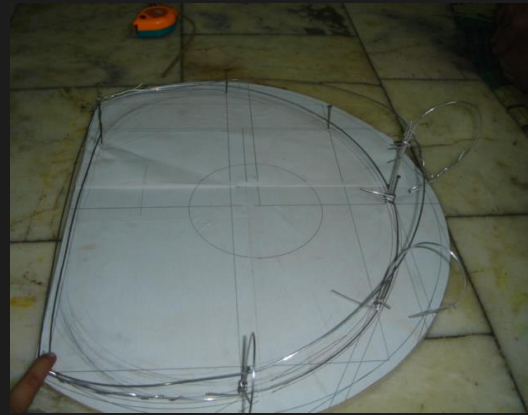


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Seat Design

Making the inside
frame for weaving



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Seat Design

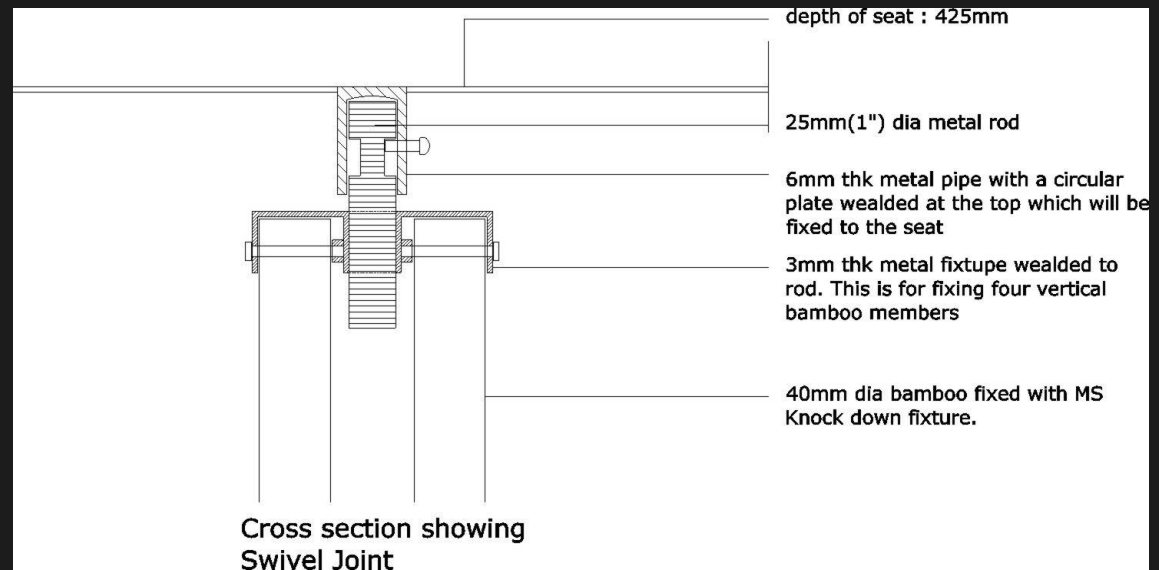
Weaving over the frame



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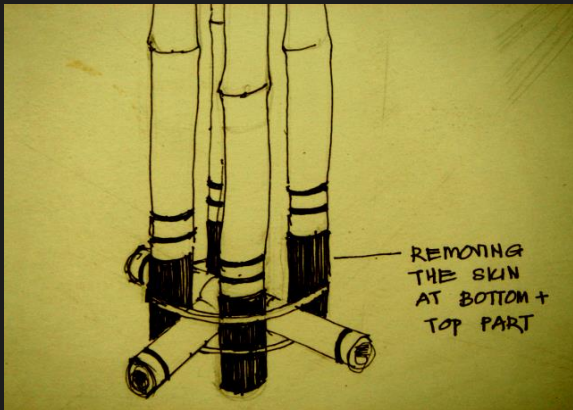
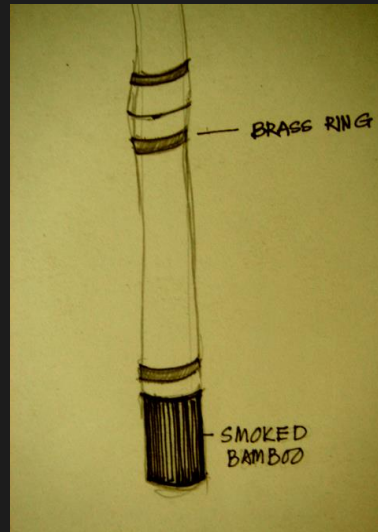
The Rotating Fixture



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Textures and finishes



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Initial Prototype



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Final Design



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Assembly sequence



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Assembly sequence



6



7



8



9



10

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