2022

portfolio

Mahima Purohit
Industrial Design Student

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Hello!

I am a 4th year Industrial design student. Exploring design at different scales has been my creative journey. I strongly believe that design is for user and not the creator. Along with that my interest is inclined more towards furniture design and material exploration. I appreciate investing time in learning different materials and am a quick learner.

2022

Experience

CLAY CLUB INNOVATION
Product design Intern for 1 month

CURIO DESIGN
Product design Intern for 2 months

THUMBIMPRESIONS COLLABORATIVES
Furniture design Intern for 2 months

TECTONA GRANDIS FURNITURE
Furniture design Intern (present)

Education

COLLEGE
June 2018 - present

Department of Design, Nirma University
B.Des Industrial Design (8th Semester)

SCHOOL
April 2016 - March 2018

Udgam School For Children
Higher Secondary Education

Skills

- Adobe Photoshop
- Adobe Illustrator
- Adobe InDesign
- AutoCAD
- Keyshot
- Rhinoceros 3D
- Sketchup
- Microsoft Office

Languages

- English
- Hindi
- Gujarati

2022

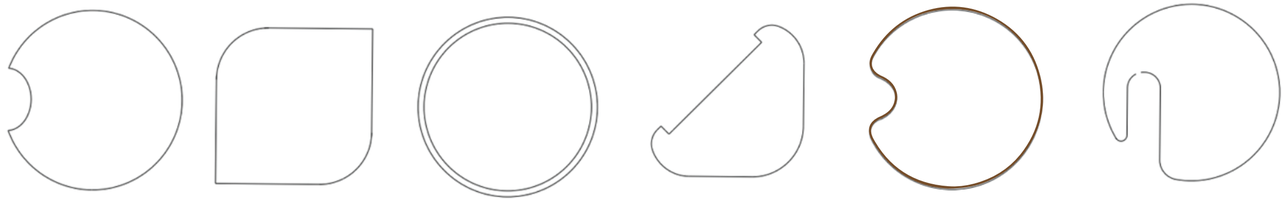
NELUMBO

Side Table with Lamp

Internship 2021
Client Project
Thumbimpression
collaborative

To design a side table with an aditional feature of a lamp that can be integrated into the decorative space.

Wooden top
Brass Base
Circular Top
Attched Lamp
Exposed Wires

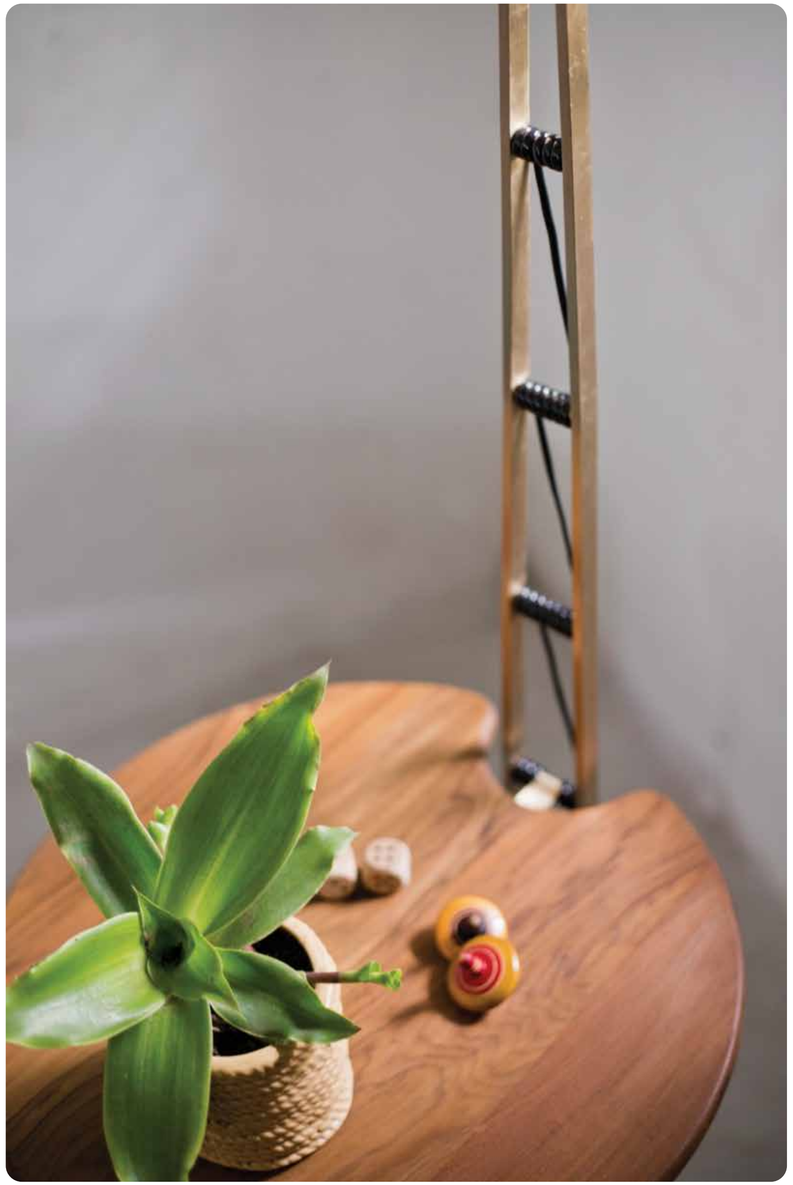


Forms for table top

Concepts for table base

Concepts for exposed wires

The furniture is inspired from nature and each part is made of different material. The product is designed in three main parts, the table top is made using teak wood representing lotus leaf, the stand is made with brass and the frame for lamp shade is made out of black powder coated MS. The specification by client was to have exposed wires which was achieved by representing climbers.



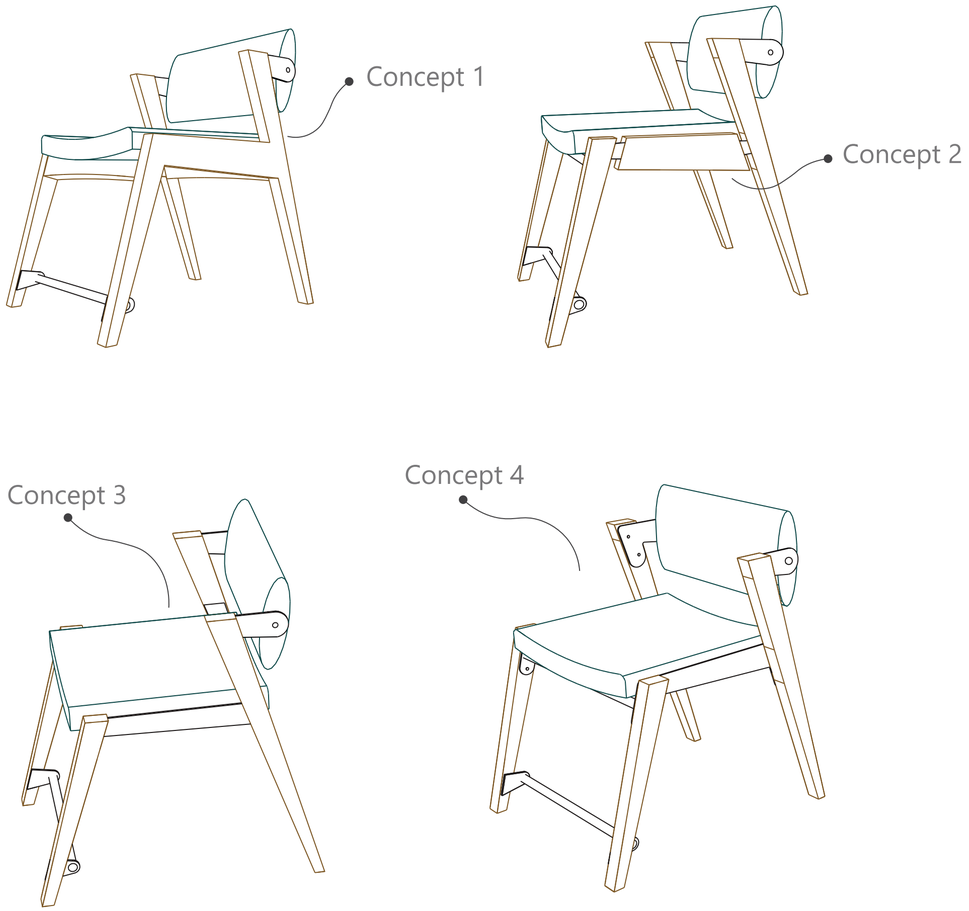
BEAK CHAIR

Knockdown Chair

Internship 2021
Client Project
Thumbimpression
collaborative

To design a knockdown chair using two materials, MS and teakwood and fasteners for joineries

Ideations for the chair



Fastners for the chair

CSK allen bolt

Button allen bolt

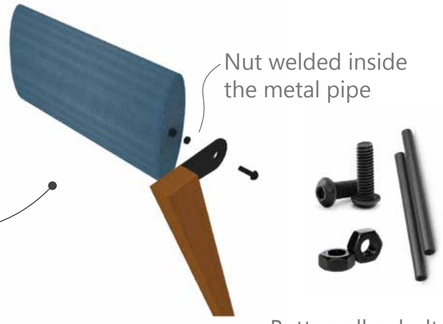
Flanged hex drive head nut

Hexagon nut

Assembly parts of chair

This furniture has a knockdown mechanism involved. The chair is divided in the above mentioned parts and the assembly is done using four types of fastners which are button allen bolt and hexagon nut for the rotating back joinery, CSK allen bolt and flanged hex drive head nut for the leg and seat joinery.

Rotating
Back

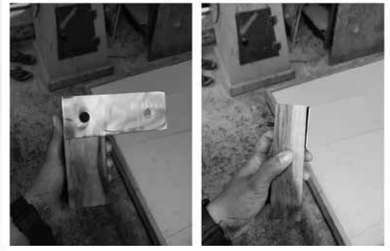


Nut welded inside
the metal pipe

Button allen bolt used
to fix the metal plate to
the back rest

CSK allen bolt and flanged
hex drive nut used to fix
metal rode to seat

CSK allen bolt and flanged
hex drive nut used to fix
metal plates to wood.



Leg rest
(MS rode)

Legs
(Teak wood)

PORTABLE WORKSPACE

Academic Project
2020
Furniture Design

To design an individual portable workspace which can be a proper and comfortable way of working outdoors, which would make it an easier task for students of design.

Understand

Understanding the word “Work”. Collecting Information about all the activities involved while working for a design student.

Analyse

After collecting information and analysing all the insights, listed down the broad principles of the product.

Design

According to the data, create design proposals in the form of sketches and small scale models.

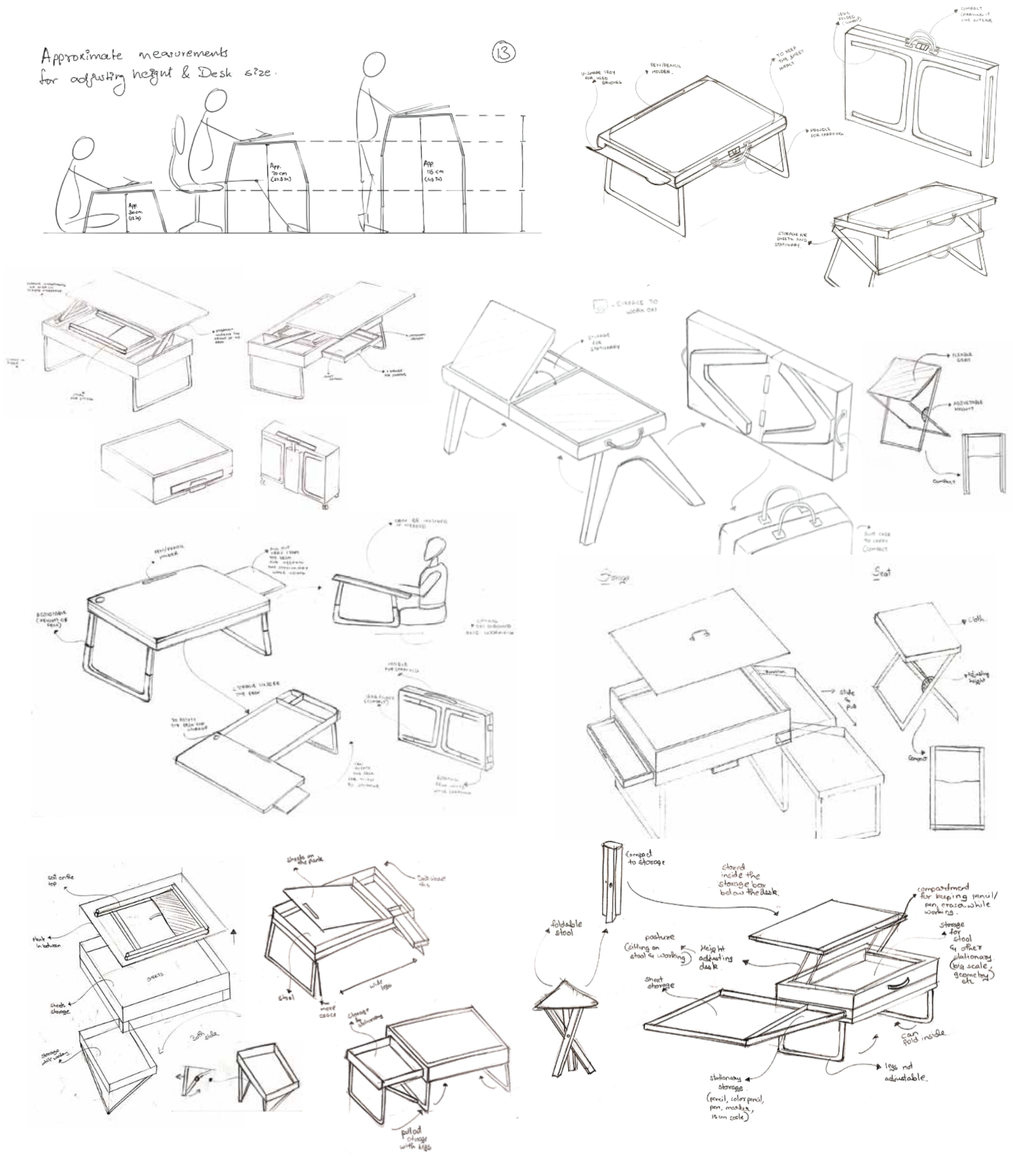
Prototype

Making the prototype using the available materials, for better understanding of its structure and usability.

User testing

Invite users to test if the product satisfies the user need or not and collect feedback to improve the product.

Ideations



Making Process












Making the prototype using the available materials, for better understanding of its structure and usability. Material used are Plywood and MS.

Full compact desk

Closed desk when
used while sitting
on the ground

Wheels at the
base for easy
portability

S.A.B.A.R

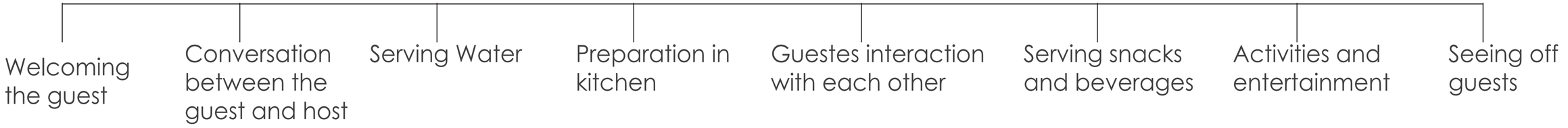
SELF AUTOMATED BUTLER AT RESIDENCE

Academic Project
2021
Technically Complex Design

To design a device that makes serving food and beverages convenient and also provide a better experience for both host and the guest.

Journey mapping

On conversation with multiple people, we came know about many human interaction and journey mapped a house party in particular.

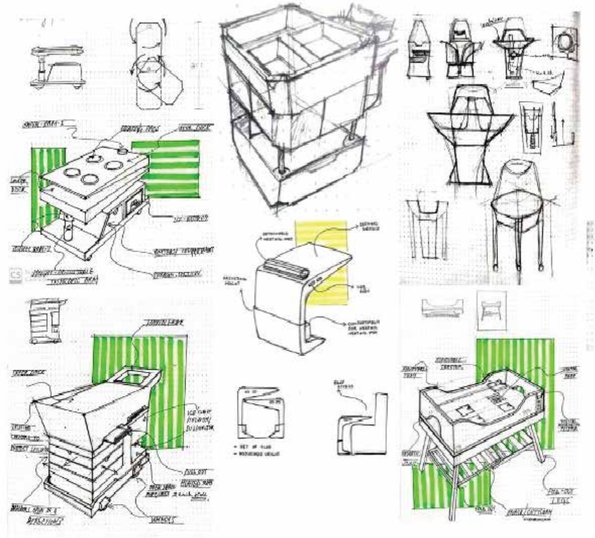


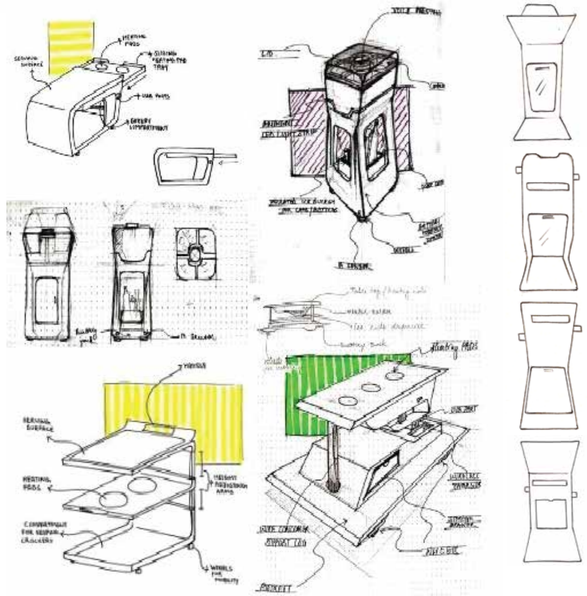
Insights based on the journey mapping
- Host & guest interaction
- Serving
- Maintanace and cleaning
- additional Entertainment for parties

Brief :
To design a device that makes serving food and beverages convenient and also provide a better experience for both host and the guest.

Features :
- Self automated
- cold container
- Storage
- voice assistant
- Music
- Ambient Light

Concept Sketches





Proof of concept

Material :
- PVC pipe
- Corrugated Sheet

Making Process

Components Used

Johnson DC Motor

2 Units
Used for making the device mobile. The two motors are connected using a Dual DC Motor Driver

Node MCU Microcomputer

1 Unit
Microcomputer responsible for communication between different parts of the project.

IR Sensor

3 Unit
IR sensors are used for object detection during motion to prevent it from abrupt crashing into humans or objects

Amazon Echo Dot

1 Unit
Amazon Alexa plays two roles, one it acts as a voice command receiver and acts a speaker as well.

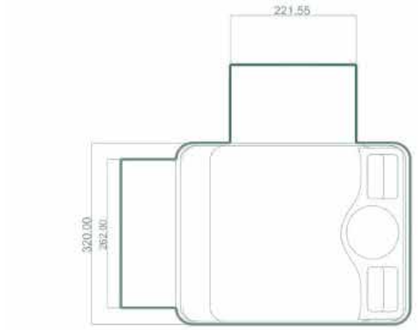
Tracked Wheel 90mm

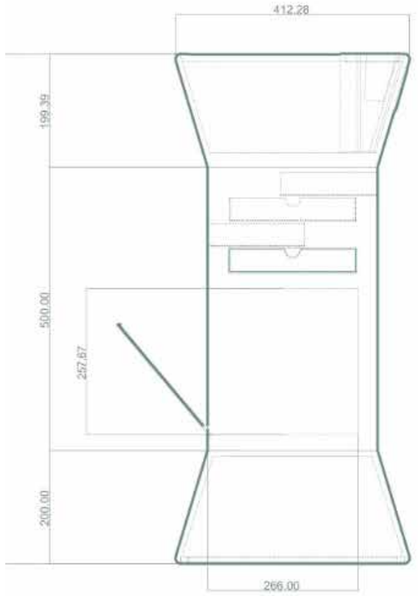
4 Unit
2 Wheels in the front and two in the back. The wheels in the back are driven by DC motors and the wheels in the front are free wheels.

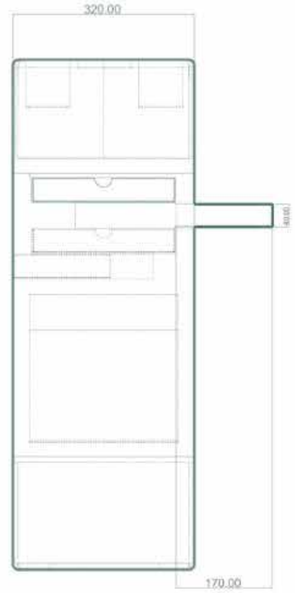
600 mAH Battery

1 Unit
This 6000 mAH Li ion rechargeable battery is responsible for powering the entire system. One one charge this can run the entire system with music playing on for minimum 4-5 hrs.

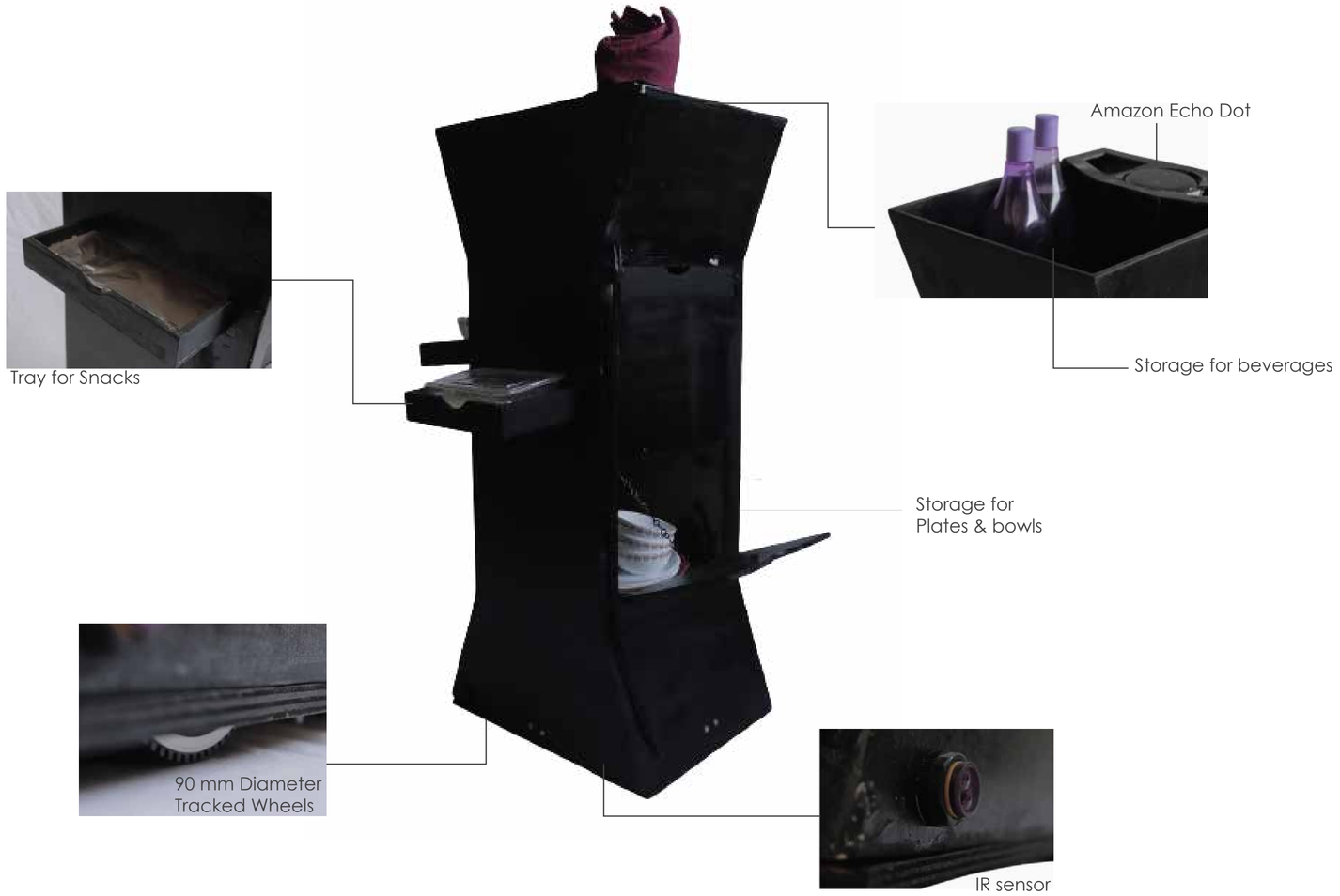
Structural Drawing







Prototype



Branding

WHY SABAR ?

This product is intended to be robot butler at people's resident for parties and gatherings. Hence, we named it Self Automated Butler at Residence abbreviated to SABAR. SABAR in Urdu means patience and we intend to provide the user to patiently interact with their guests without worrying to run back nd forth.

How It Works ?

1

Setting up Device

Setting up the device by configuring it with the amazon alexa app and also allowing the device to map the entire house/space.

2

Loading up Food & Beverages

Loading up food and beverages before the guests arrive so that the host gets to spend more time with the guest.

3

Welcoming The guests

Welcoming the guest to the gathering interacting with them.

4

Introducing guests to the product

We have designed the product to also be a point of conversation starter. Introducing the product to the guest in important as to make them familiar with the product in case they need anything and the host is not in the vacinity

5

Using the Product

This is the point where the guest and host use the product if and when required for food, beverages, tissue paper, etc.
Also amazon echo dot allows it to act as a moving speaker and songs can be played for fun and games.

6

Reloading the trays and drinks

There might be a point where the butler would require reloading if there are more number of guests.

7

Guests leave

Guests leave and greeting are exchanged

8

Unloading

Unloading the trays and just wiping them off in case of any spillage.

9

Putting the device to charge

Putting the device on charge as consumer will have to get it ready for the next gathering or daily use if they want to.

MATERIAL HANDLING

Wood and Metal

2019

Academic Project

Abstract Form
Material : Teak Wood

Origami Bird
Material : Teak Wood

Spinning Top
Material : Metal & Wood

Aluminium

Teak Wood

Sal Wood

Mild steel

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