

Noor-ul-Ain Javed  
Industrial Design Portfolio



“ Hi,  
I am Noor-ul-Ain Javed.

I recently graduated with a Bachelors degree in Industrial Design as the batch valedictorian. Since the last 4 years, I have completely absorbed and absolutely indulged myself in the fields of Industrial and Product Design.

For me, each stage of the design process is like a breath of fresh air. I work passionately at every level and continuously strive to grow and improve myself. For all problems at hand, I thoroughly study the target audience. Hence, my design developments cater to and revolve around the users, to ultimately refine their interaction with the proposed design solutions.

I am an avid learner and aim to explore, learn, create, and innovate, and through this, enhance mutual productivity, promote positivity and bring happiness and convenience into people's lives. ”



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Lahore, Pakistan

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# Mindquil

by Noor-ul-Ain Javed  
26/06/2021  
Islamabad, Pakistan

An 8th semester Final Year Project,  
for which all the work created and  
submitted was my individual effort  
and contribution.

Advisor:  
Jawwad Zaidi  
jawwad.zaidi@sada.nust.edu.pk

Mindquil reduces the symptoms of anxiety and promotes feelings of happiness, relaxation, stability, calmness, and emotional well-being, by guiding people to perform breathing exercises. It is a tangible, one of a kind, hand-held product which amalgamates emotional and behavioral design thinking, with thorough research on complex emotions and their effect on physical and mental health. It focuses on emotional response and human interaction with textures, materials, forms, rhythms, motions, sounds, feedback systems etc. In an increasingly digital and inter-connected world, Mindquil intends to maintain a real, physical, and simultaneously, personal space. It visually and physically engages people by bringing out rhythmic illusions and movements into a 3dimensional space, unlike the already worked upon UI based applications that lack physical connectivity.



Lotus



Lavender



Ripple



**Anxiety in Pakistan**

Whether it's the law-and-order situation or the incessant rise in fuel prices, tensions are high, and nerves are shot in Pakistan

**9 in every 10** Pakistanis are anxious and "very nervous", which is the largest proportion across the globe

**92% of the 225 adults (aged 18-plus)** polled in the survey are "anxious" about "everything that is going on in the world, the country and their family's life". Nearly **60%** of these participants claimed to be "very anxious or nervous", the highest proportion of people in the markets surveyed across five continents

The different variables examined include safety and security concerns, the threat of terrorism, potential and current military hostilities, crime, and economic worries such as the cost of health care, the cost of living, education and job security

When asked, "Thinking about everything in your life, how would you describe your overall happiness?" only **14%** of those surveyed responded "very happy"

### Anxiety by Age

**Anxiety in young children:** They experience anxiety, though it'll be different from anxiety in teens or adults. They can experience worry about the future, fear of being separated from loved ones, and fear of people, places, or things etc.

**How common is anxiety in children?** It is more common in older children. Around 1% of children ages 3 to 5 and 6% of children ages 6 to 11 show signs of an anxiety disorder.

**Anxiety in teens:** Anxiety in teens is even more common. Teens go through many physical and emotional changes that can contribute to developing anxiety.

**How common is anxiety in teens?** Roughly 10% of teens ages 12 to 17 experience anxiety. Over 30% of teens have dealt with an anxiety disorder.

**Anxiety in young to middle-aged adults:** Many adults experience anxiety. Adults who have had anxiety as children and teens are more likely to develop anxiety again in their adult years.

**How common is anxiety in adults?** Based on a survey from 2001 to 2003, around 21% of U.S. adults ages 18 to 60 reported experiencing an anxiety disorder. Over 32% reported having had an anxiety disorder at some point in their lives. Adults ages 30 to 44 have the highest rate of anxiety of this age group.

**Anxiety in older adults:** Adults 60 years of age and older are more likely to experience physical symptoms of anxiety. This age group also has a higher risk of other medical issues, which can increase the risk of developing an anxiety disorder.

**How common is anxiety in older adults?** Anxiety affects at least 4% of older adults. The percentage could be higher because older adults tend to experience physical symptoms of anxiety rather than worry or fear and may not report that they have anxiety.

### How to Cope with Triggers

**Medication**: Bottles of pills and capsules.

**Psychotherapy**: A therapist and patient in session.

**Self-help**: A person meditating with a book nearby.

**Practice relaxation techniques**: Lungs with 'IN' and 'OUT' arrows.

**Become aware of your triggers**: A face with three numbered boxes below it.

**Anticipate and plan a coping strategy for triggers**: Three numbered boxes.

### Anxiety around the world

- National prevalence data indicate that nearly **40 million people** in the United States (**18%**) experience an anxiety disorder in any given year
- Approximately **8% of children** and teenagers experience an anxiety disorder with most people developing symptoms before age 21
- Only about **1/3rd** of those suffering from an anxiety disorder receive treatment, even though the disorders are highly treatable
- WHO:** **1 in 13** globally suffers from anxiety. Anxiety disorders are the most common mental disorders worldwide with specific phobia, major depressive disorder and social phobia being the most common anxiety disorders.

Topic research, moodboards, statistics, and infographics for anxiety and its coping strategies. Further research was conducted on the benefits of breathing exercises on one's mind and body. Finally, the design objectives were listed down with the help of the obtained information.

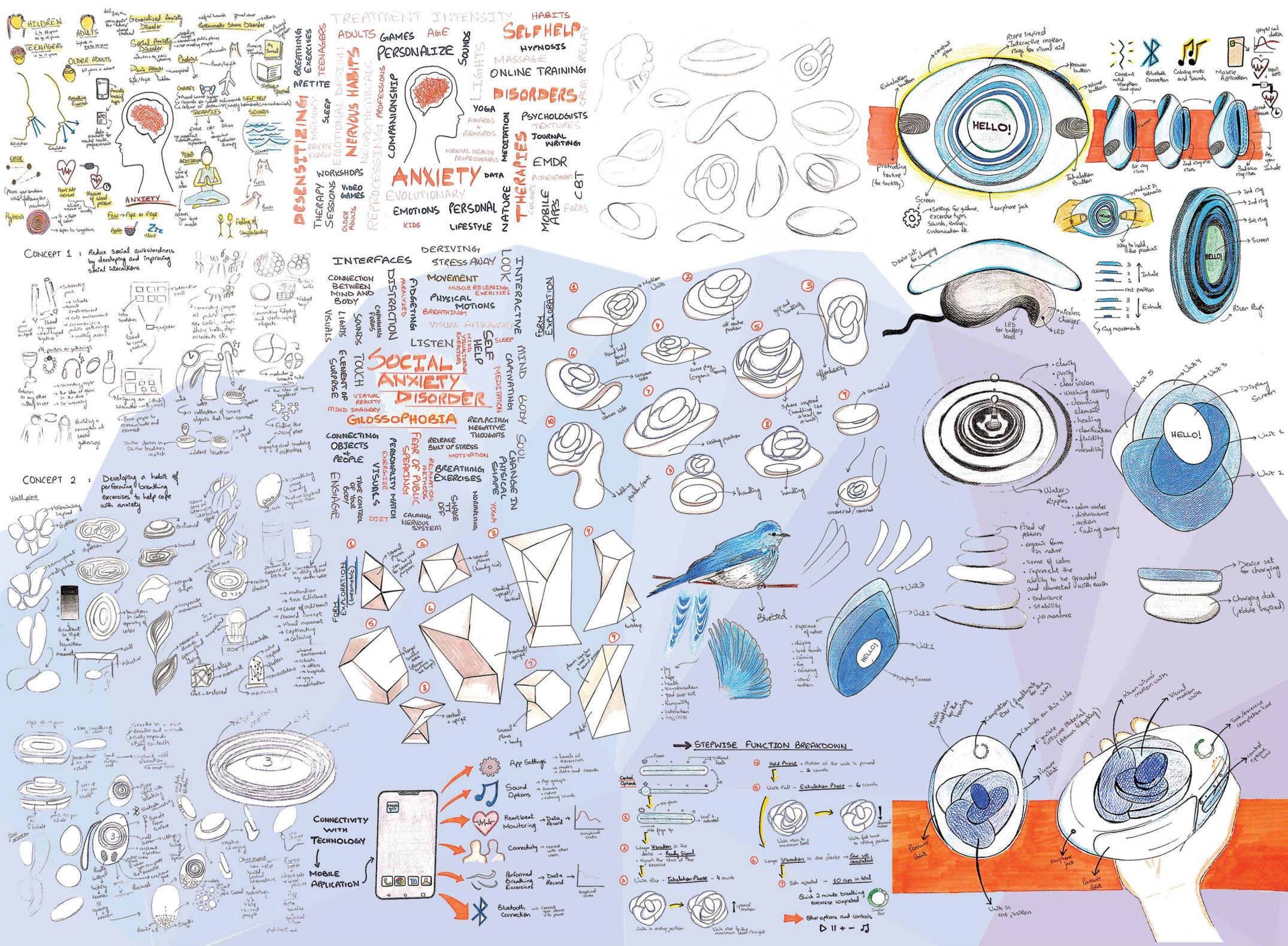
**Benefits of performing breathing exercises**

- Slows heart rate
- Reduces stress and anxiety
- Lowers blood pressure
- Balances nervous system
- Gives time to think and process
- Increases focus
- Increases blood oxygenation
- Increases mind body awareness
- Boosts mood and energy
- Improves digestion
- Enhances core muscle stability
- Eases headaches

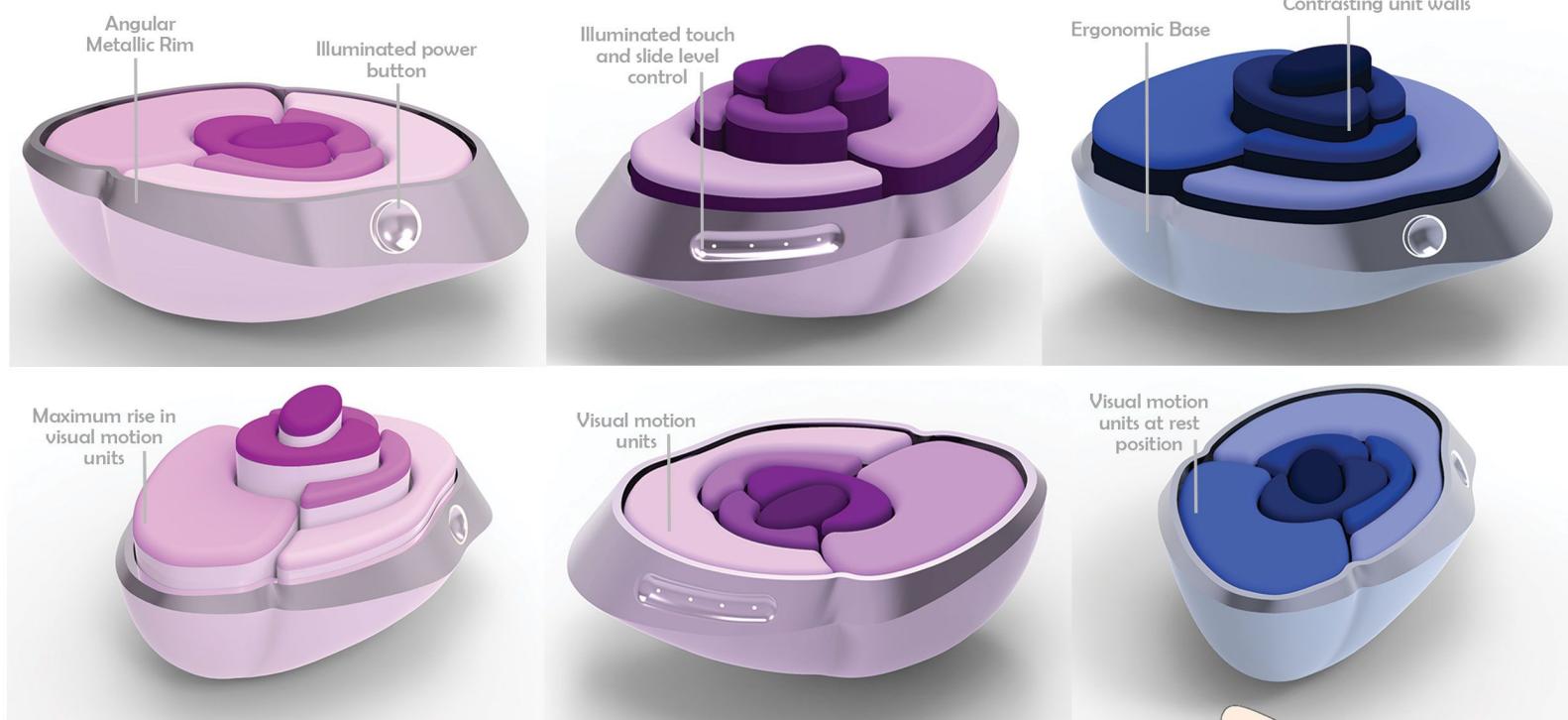
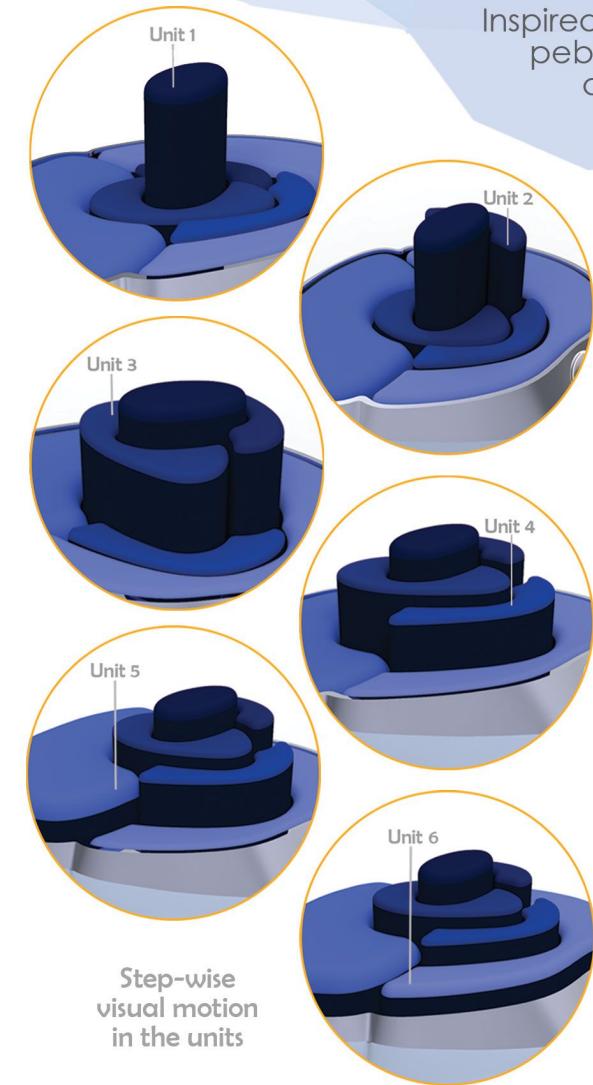
### Design Objectives

- Should engage the senses of touch, hearing and vision
- Should be interactive and engaging
- Should communicate with the user
- Should have an effective feedback system
- Should be user-friendly
- Should be appropriate for the use of young people
- Should have an overall calming effect
- Should be visually captivating
- Should provide visual and auditory cues
- Should provide the users with required guidance
- Should inculcate a sense of achievement and motivation

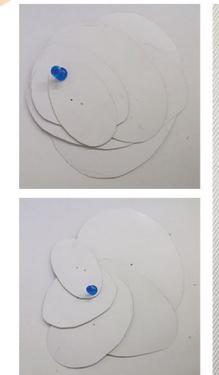
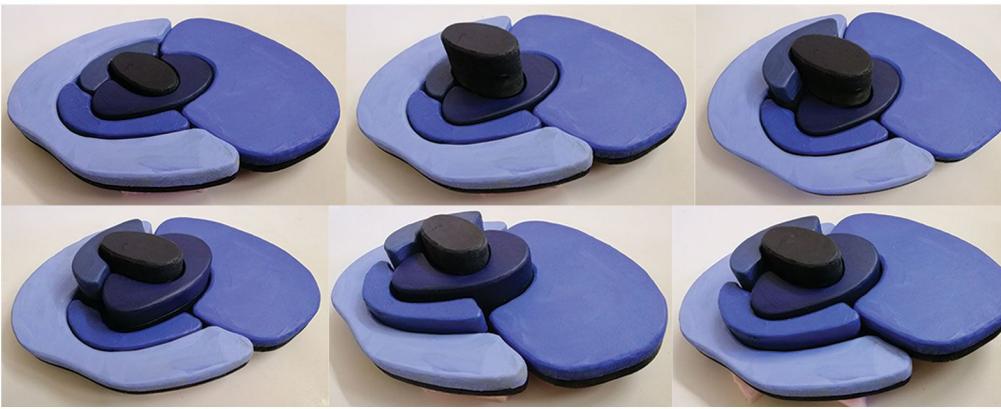
# BRAINSTORMING AND IDEATION



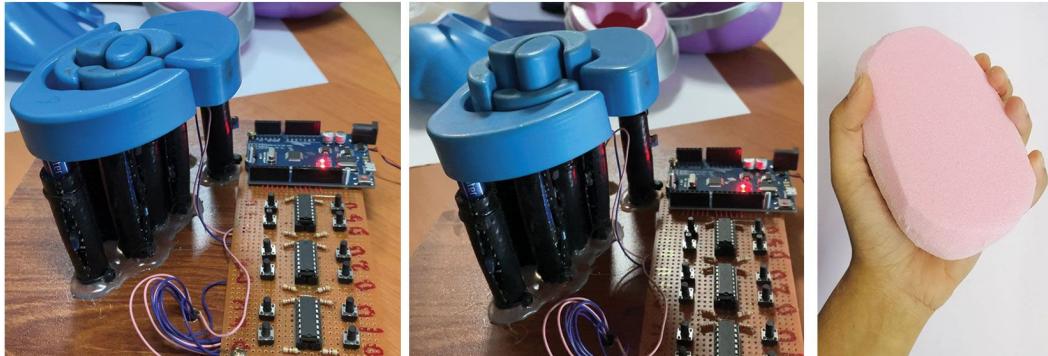
Inspired by biomimicry, Mindquil's design decisions were made, keeping certain textures and objects such as pebbles, ripples, lavender and lotus in mind. Its six interactive visual motion units rise and fall to engage and guide the users to perform breathing exercises. The touch and slide level control helps users pick the level of exercise they wish to perform. Once the level is selected, Mindquil gives them haptic feedback, then the units rise to the maximum level, stay still, and finally fall back to rest position, guiding them to inhale, hold their breath and exhale respectively.



Prototype exploration and development with upscaled MDF and cardboard motion units and 3D printed form exploration



Several forms were tested with users until perfect ergonomics were achieved, both in terms of handling and proportions

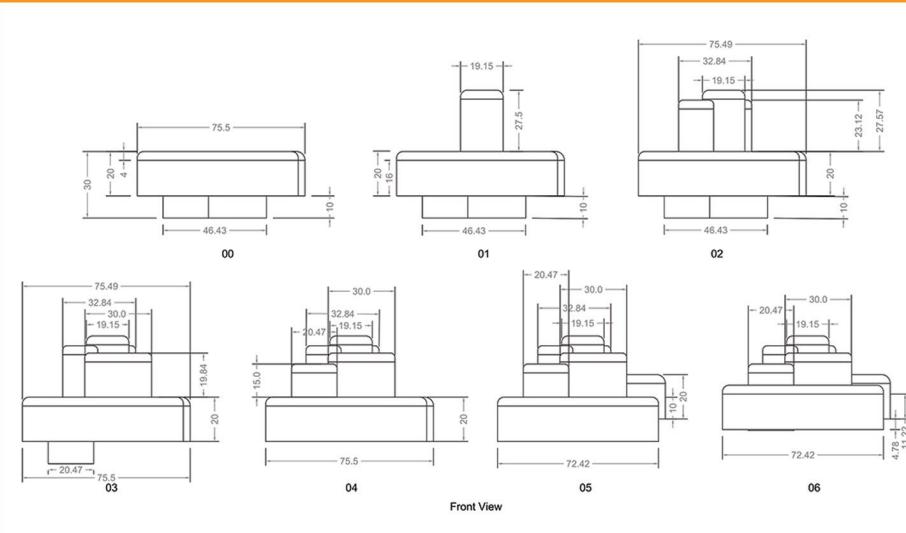
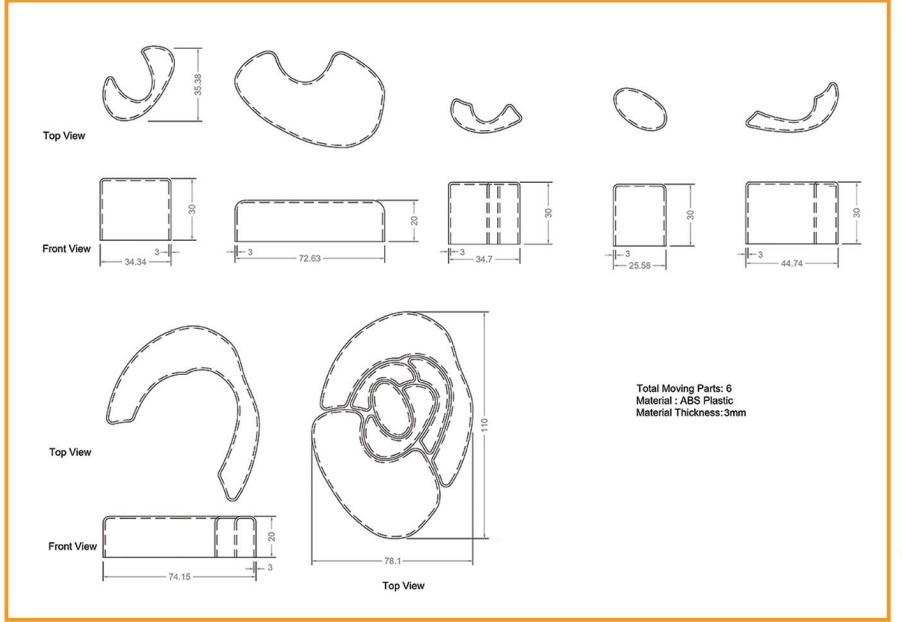
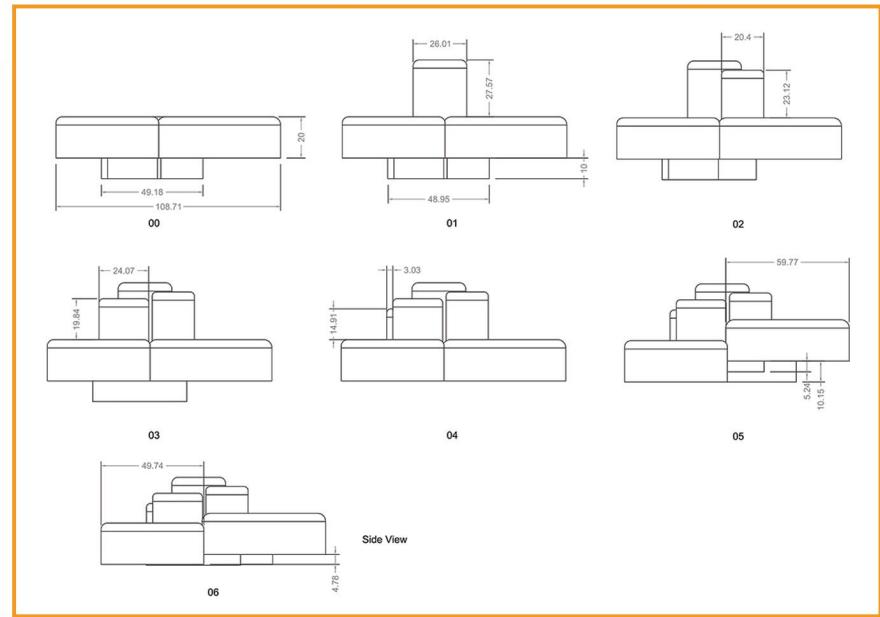
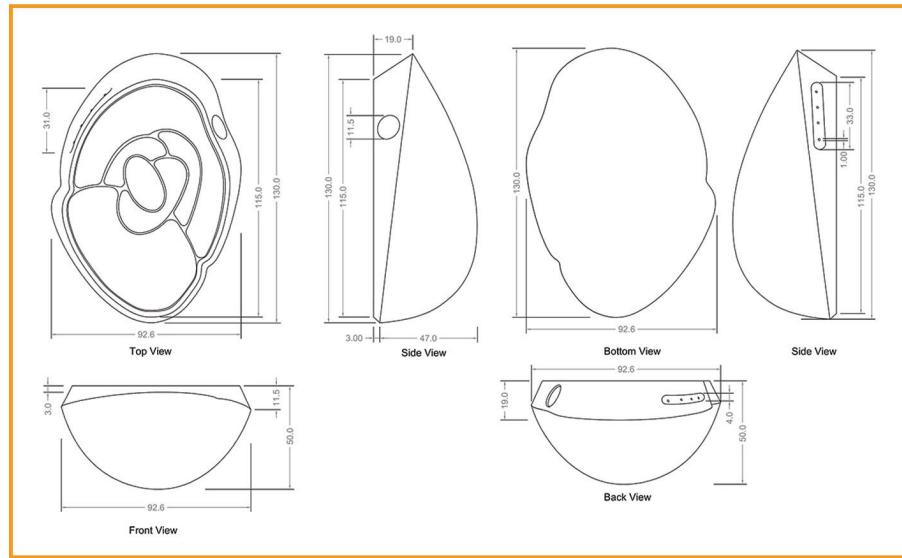
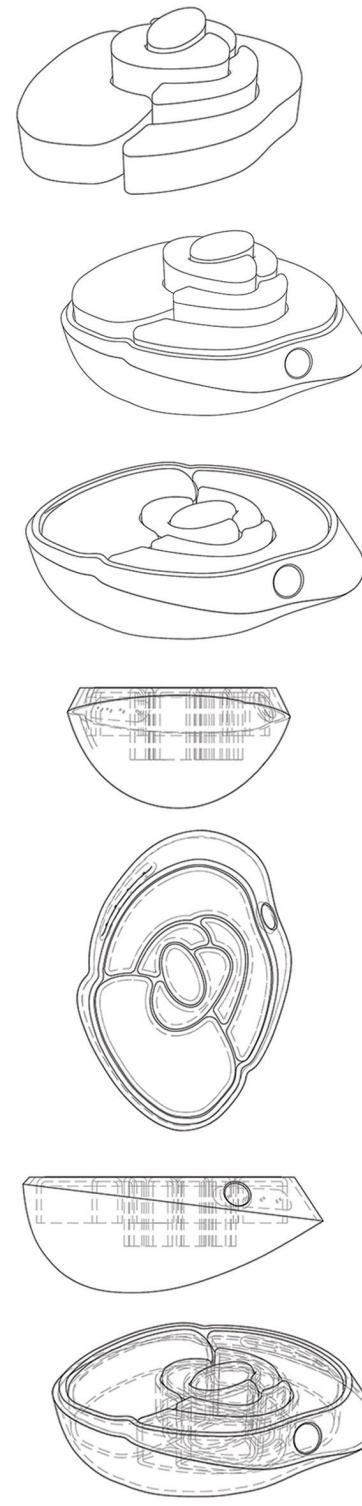


Upscaled working prototype made to test the motion, using arduino and stepper motors

Testing ergonomics



3D printed presentation models demonstrating units at rest and risen positions



Orthographic projections, component details, line drawings, and technical drawings

# CanO

by Noor-ul-Ain Javed  
20/11/2020  
Islamabad, Pakistan

A 7th semester university project, for which all the work created and submitted was my individual effort and contribution.

Advisor:  
Jawwad Zaidi  
[jawwad.zaidi@sada.nust.edu.pk](mailto:jawwad.zaidi@sada.nust.edu.pk)

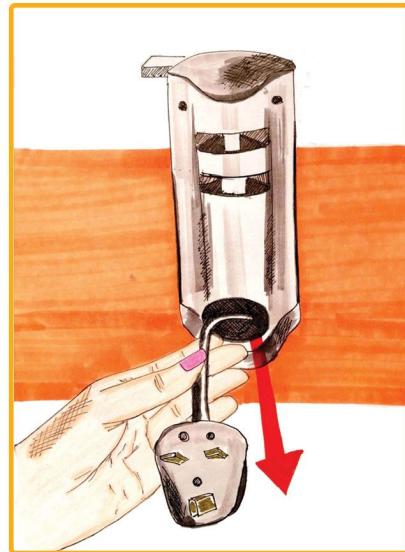
A morphological redesign of an existing Daniel James electric can opener which was closely examined, each function physically performed and thoroughly tested, and all parts disassembled, closely studied and reassembled, in order to gain full understanding of the product in terms of functionality, assembly, ergonomics, and ease of use. Many problems were identified and resolved, such as, the efficiency of the bag opening and knife sharpening blades, the allocated space for the plug to fully retract into the casing, missing platform to place the can, and missing power button. While redesigning it, other aspects such as size, proportions, convenience, comfort, handling, safety, and aesthetics were also kept in mind.



Scenario sketches of the existing Daniel James product. Its several functions were performed, closely studied and examined for the problem identification phase



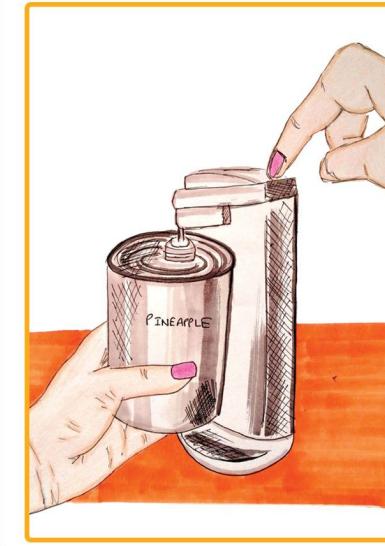
Retractable Cord



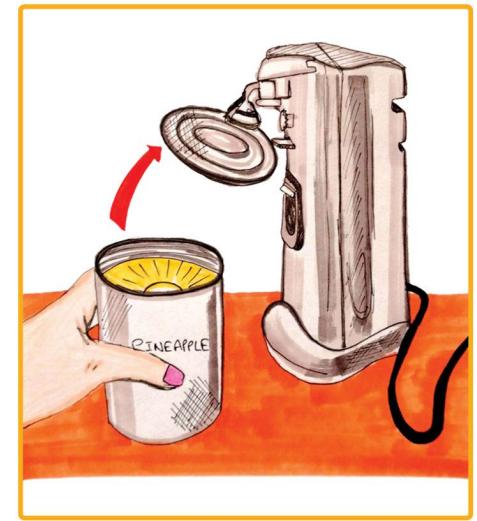
Pulling the cord out



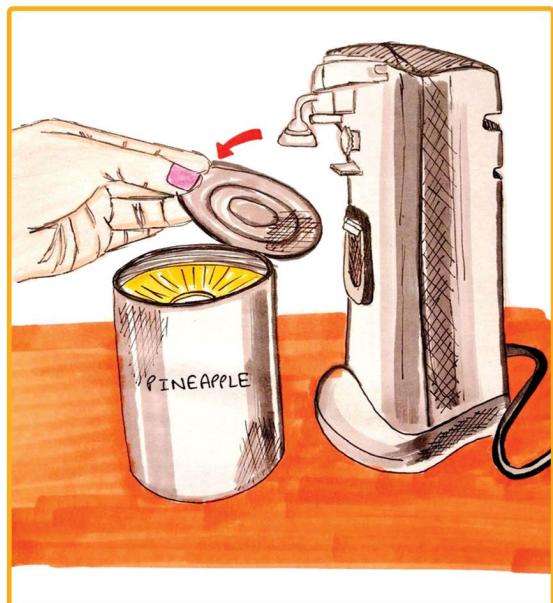
Lifting the lever



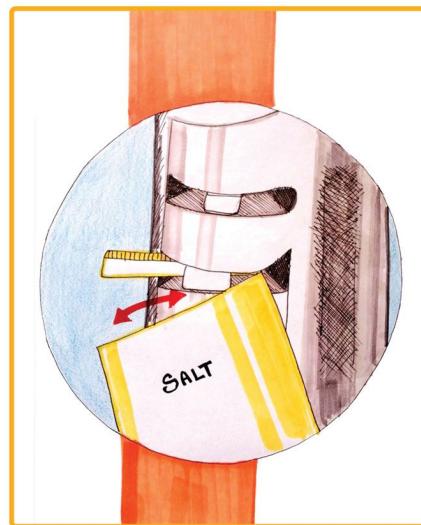
Attaching the can



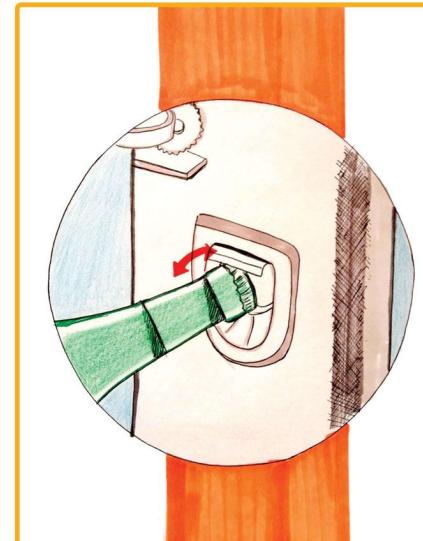
Can opened



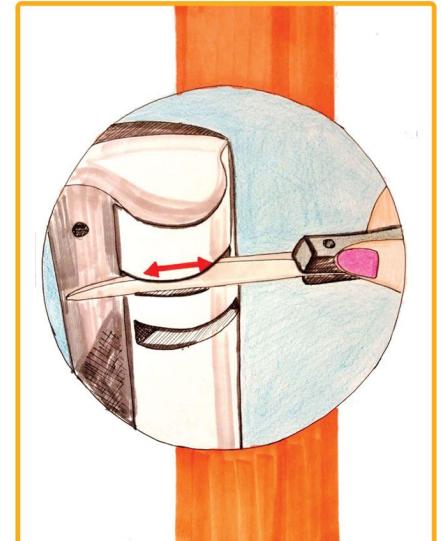
Removing the can lid



Bag Opening

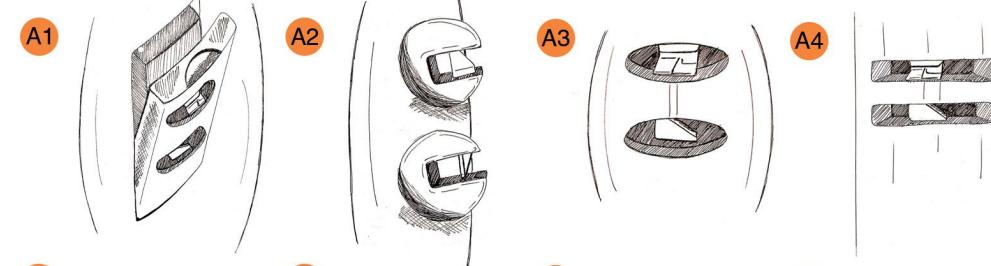
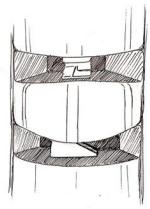


Bottle Opening

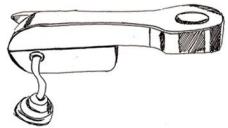


Knife Sharpening

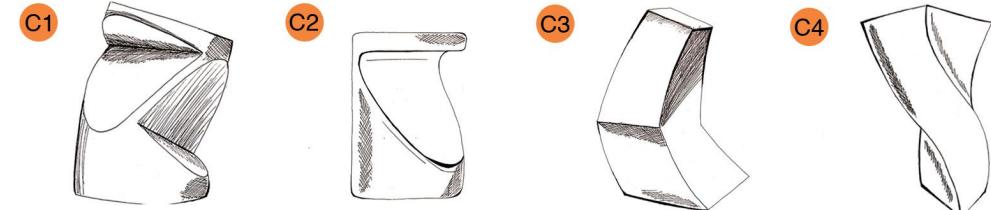
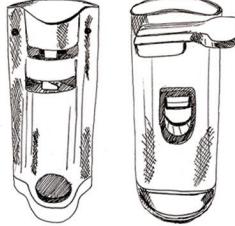
**A**  
Bag opening  
and knife  
sharpening  
blades



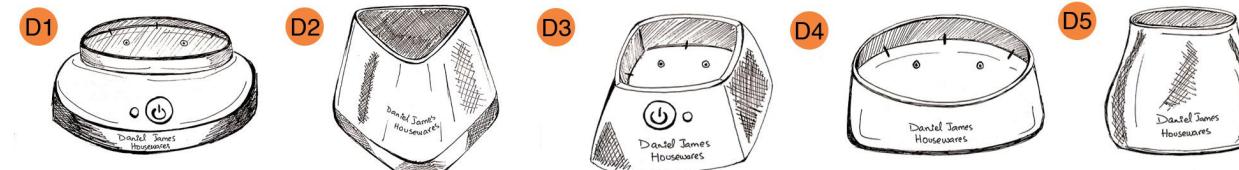
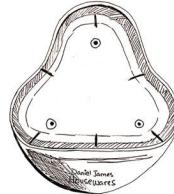
**B**  
Cutting  
lever



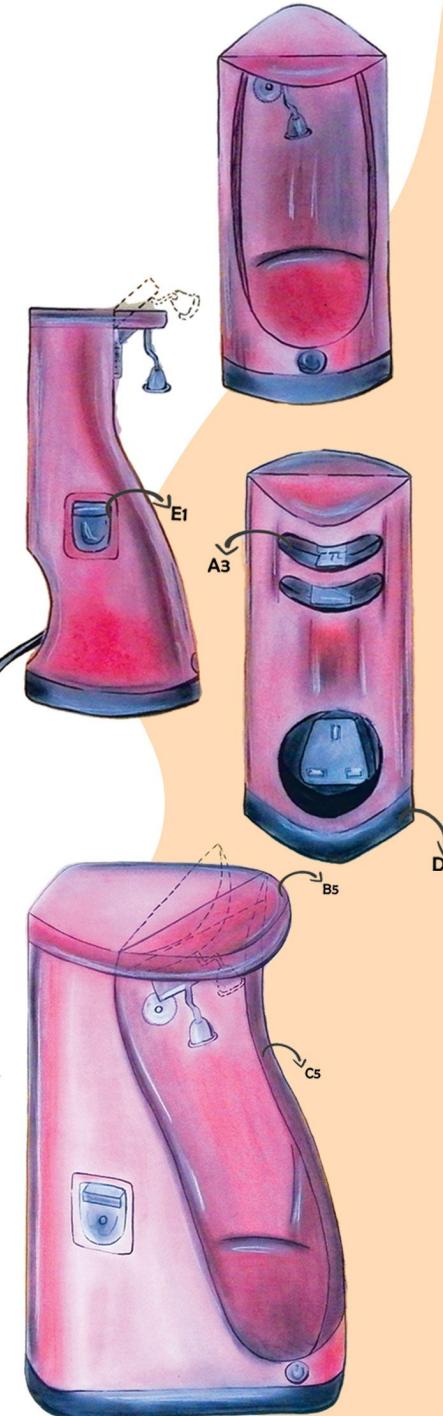
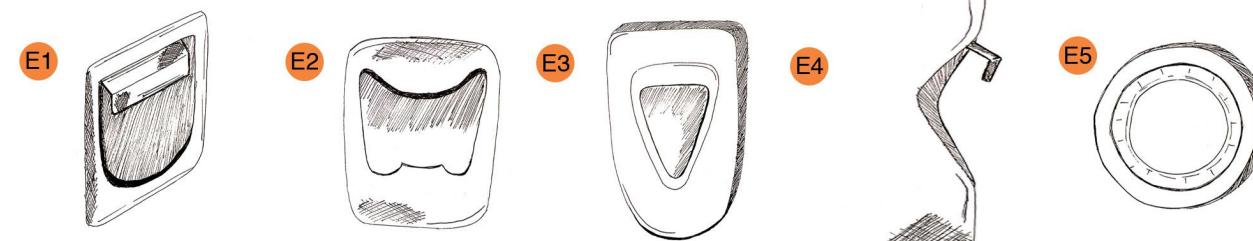
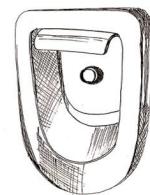
**C**  
Casing



**D**  
Base

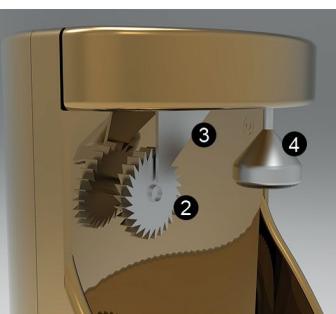
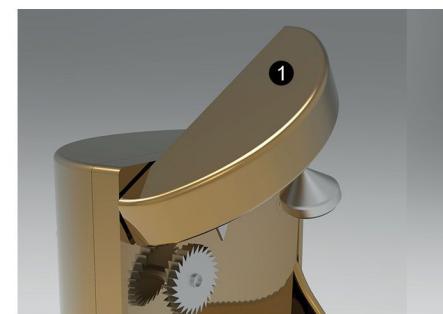
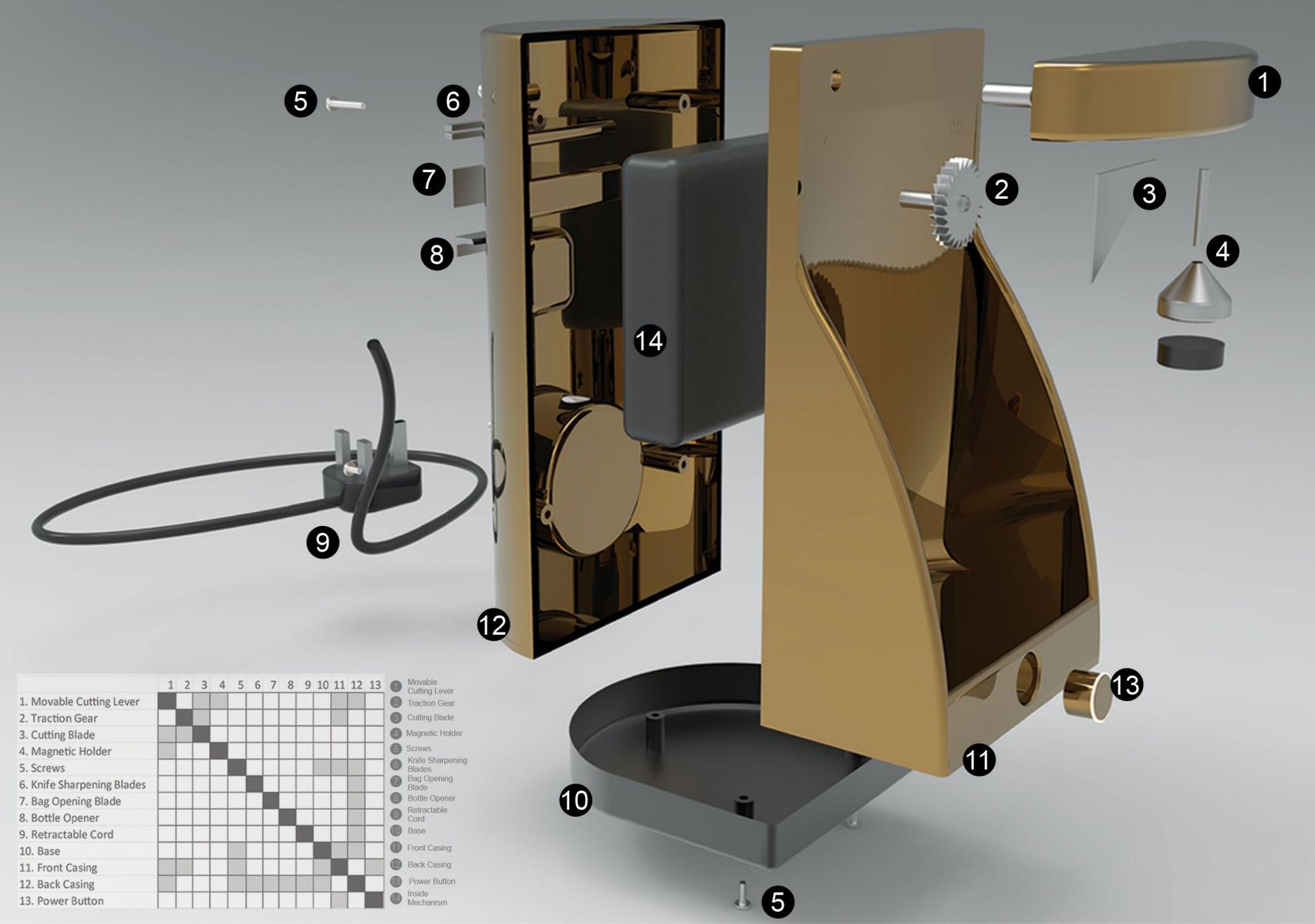


**E**  
Bottle  
opener



Iteration sketches drawn in order to explore different forms of components, as per their functionality. Out of these, the final iterations were picked as part of the redesigning process

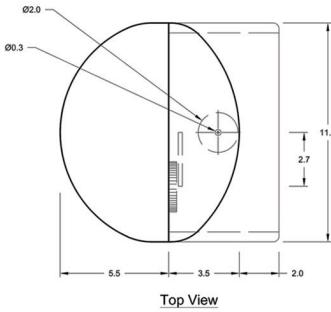
Proposed redesigned electric can opener, with improved aesthetics and functionality, alongside its interaction matrix



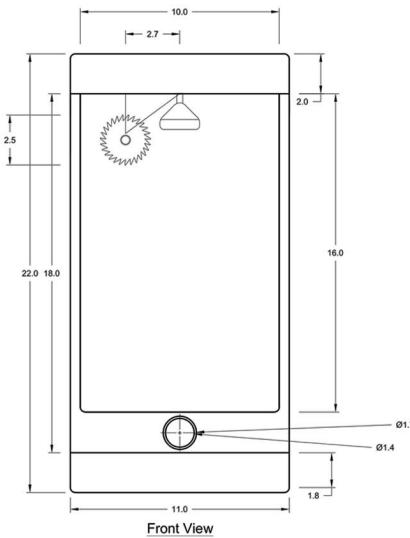
- 1 Movable cutting lever
- 2 Traction Gear
- 3 Cutting Blade
- 4 Magnetic Holder
- 5 Knife Sharpener
- 6 Bag Opening Blade
- 7 Bottle Opener
- 8 Power Button
- 9 Retractable Cord

Product detail, technical and section drawings,  
alongside its proposed materials

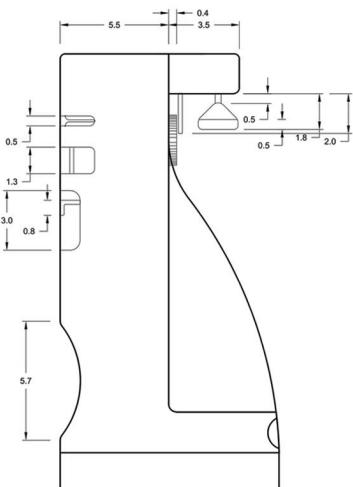
Name: Noor-ul-Ain Javed
Morphological 2.0
  Unit: cm



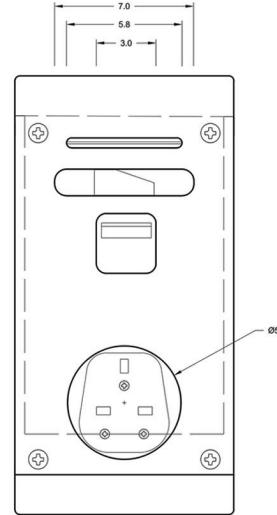
Top View



Front View

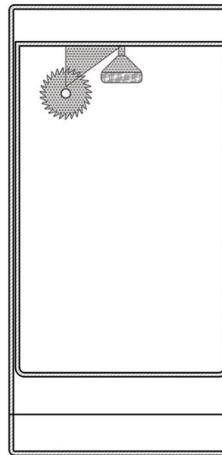


Side View

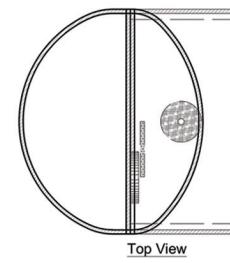


Back View

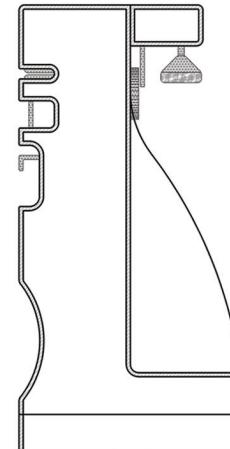
	Sheet Metal
	Metal Parts
	Magnetic Metal
	Screws



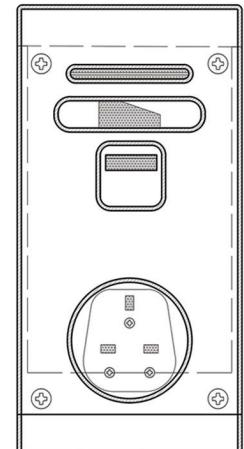
Front View



Top View



Side View



Back View

# DOT

by Noor-ul-Ain Javed  
04/05/2020  
Ankara, Turkey

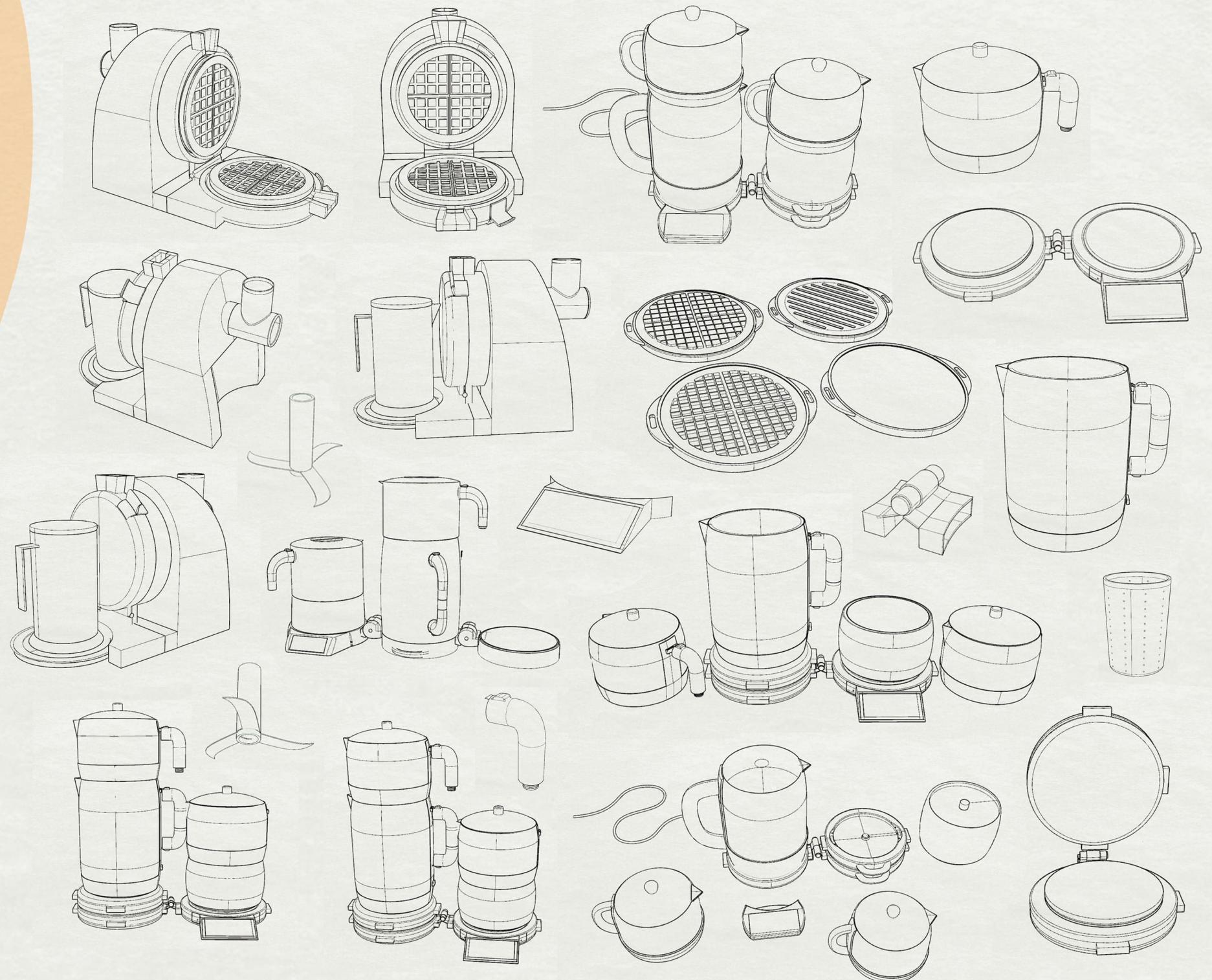
A 7th semester university project,  
for which all the work created and  
submitted was my individual effort  
and contribution.

Advisor:  
Çağla Doğan  
dcagla@metu.edu.tr

An open kitchen design solution for small, shared spaces. During the problem identification phase, several user cases were studied and problems with cleaning and sharing were analyzed. In order to effectively resolve them, DOT offers the performance of multiple functions such as tea brewing, water boiling, sandwich/waffle making, pancake making, and fruit and vegetable chopping, all in one product. It can be used with mono, double, and triple use arrangements. The attachable and detachable connecting units offer flexibility in use and arrangement of the components, as per the need and requirement. All the processes performed can be controlled through the carefully designed user interface, which not just provides guidance in terms of use but also warns users in cases of emergencies. DOT further allows easy cleaning and storage of all its components.



Idea generation  
and concept  
development





Tea making



Chopping



Waffle making



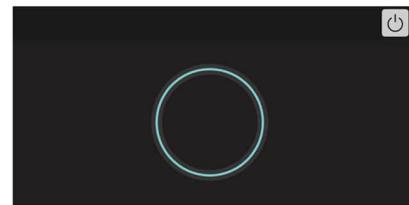
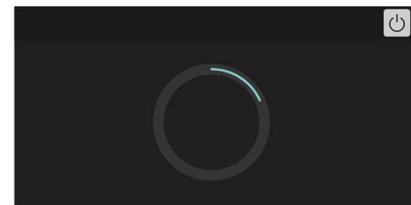
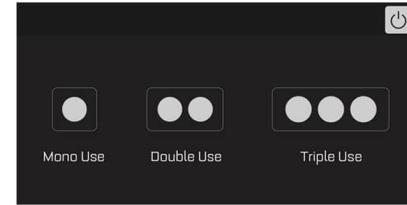
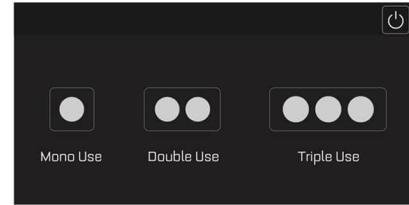
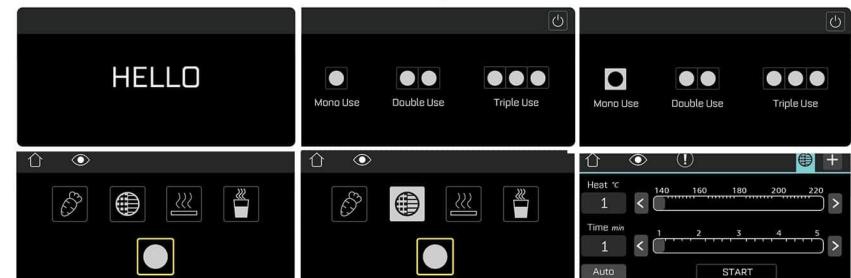
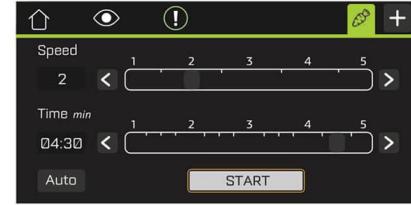
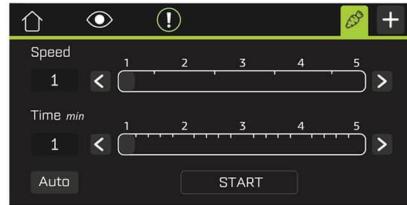
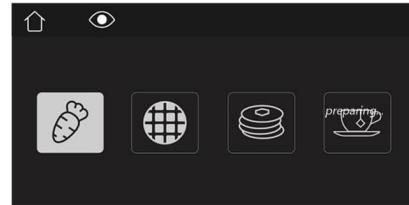
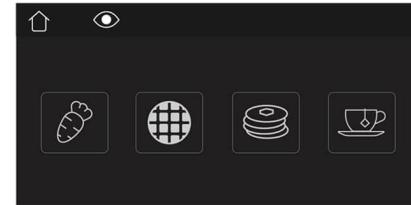
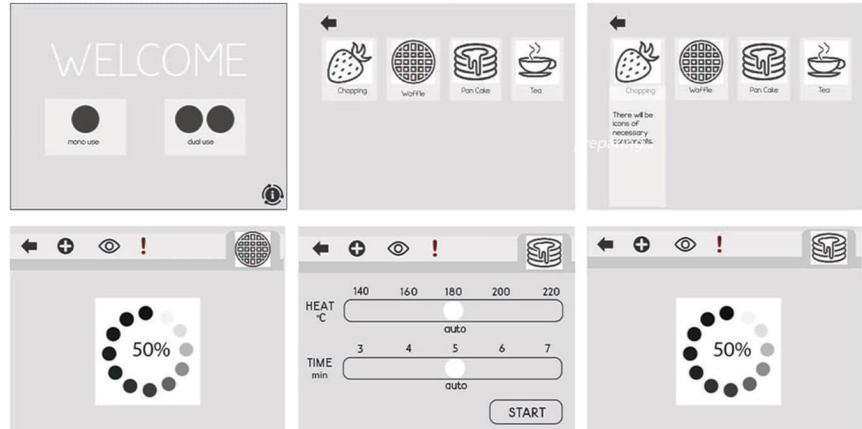
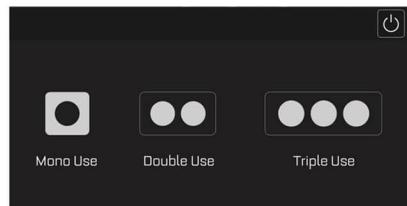
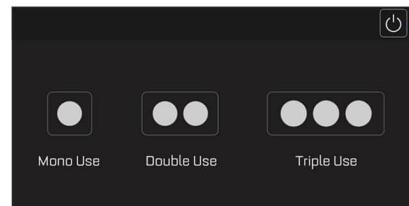
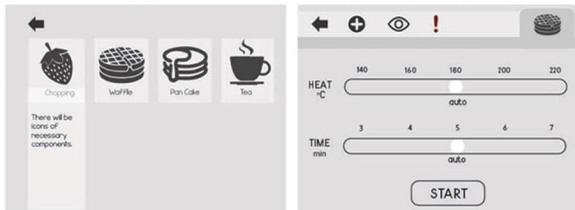
Pancake making



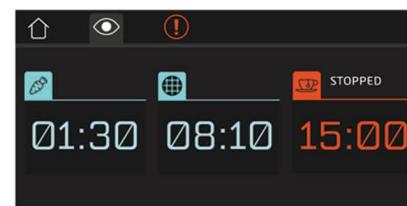
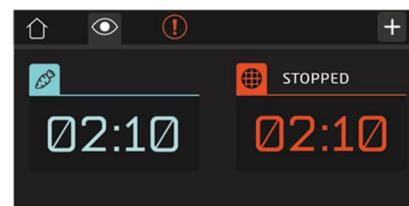
Sandwich, waffle and pancake making plates



Product  
component  
and  
assembly  
details



In case of warning



Color options

Exploring different interfaces and icons

Final interface with icons

## Product usage scenarios



Attaching the blades to the container for chopping.



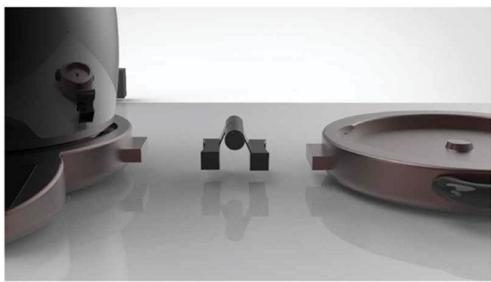
Putting vegetables in the container.



Covering with the lid and starting the process. Another person wants to perform another function.



While chopping continues, the woman takes the heater for pancake making.



Attaching the hinge to the heater and to the main component.



Placing the pancake plate on the heater and starting the pancake making process.



Removing the chopping container once the chopping is done.



Attaching the boiler to the main component while pancakes are still being made.



Placing the infuser into the container and adding tea leaves.



Adding water and letting the tea to brew. Meanwhile, removing the hot plate once the pancakes are ready.



Attaching another hinge to the heater to start the waffle making process.



Connecting the heater to the main component.



Attaching the other heater to the hinge.



Attaching the waffle plates to the heater to start the waffle making process.

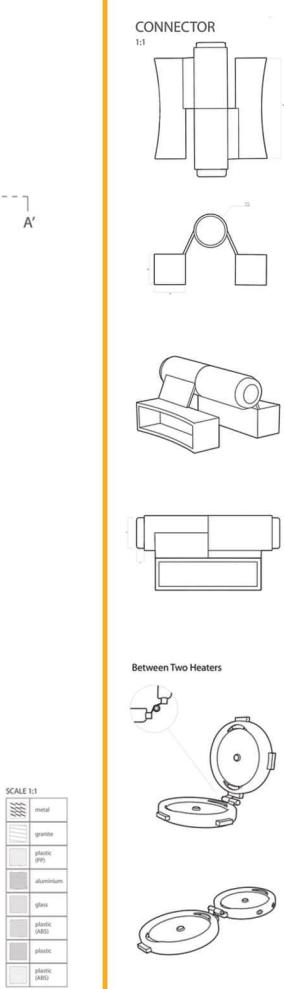
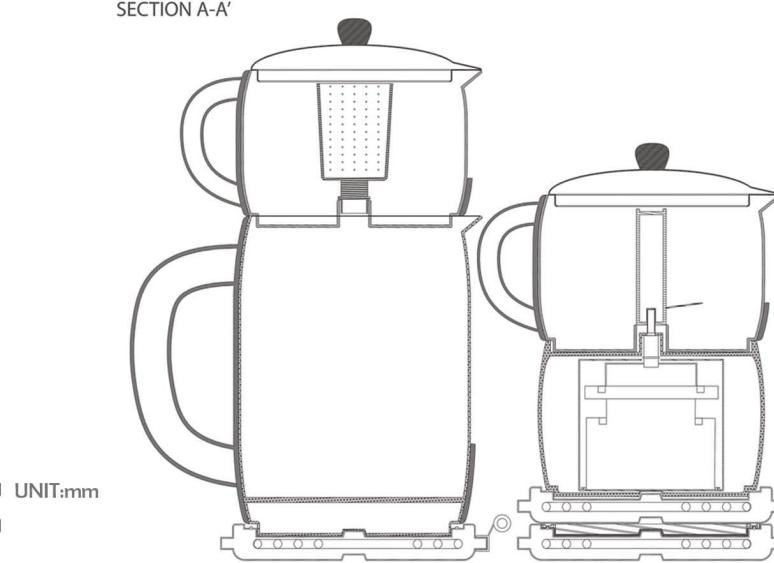
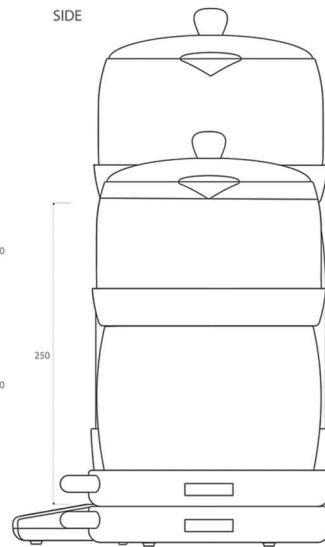
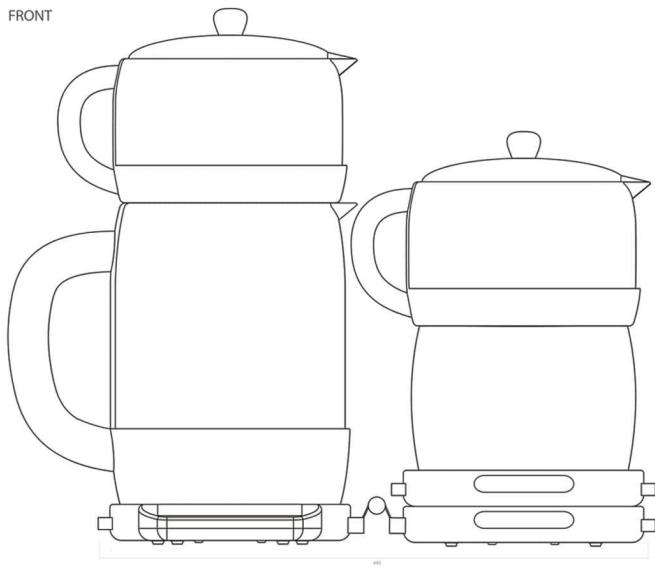
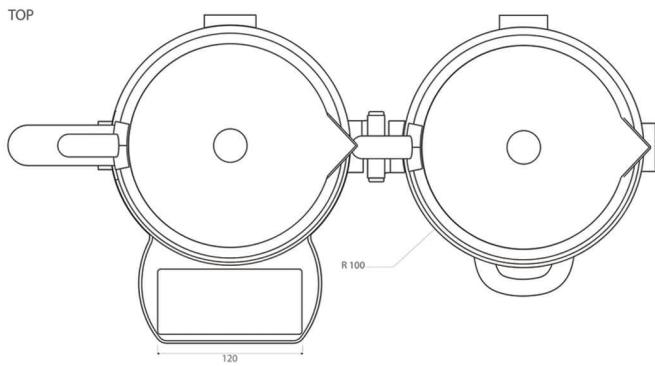


Both the tea and the waffles are ready.

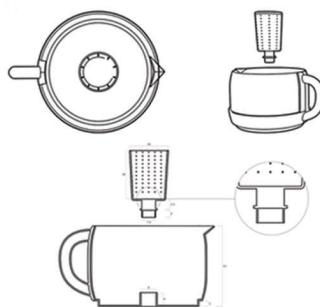


The containers, infuser, and blades can be put in the dishwasher but the other components should be hand washed.

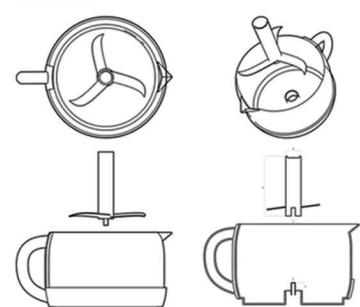
Technical drawings, component assembly,  
and product details



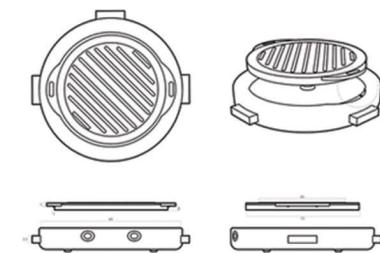
FILTER



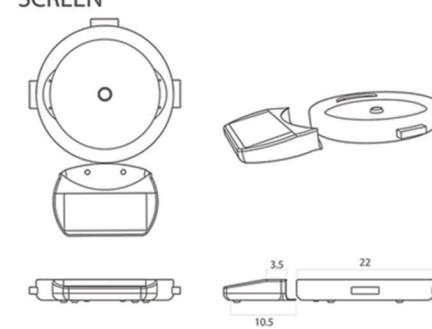
BLADES



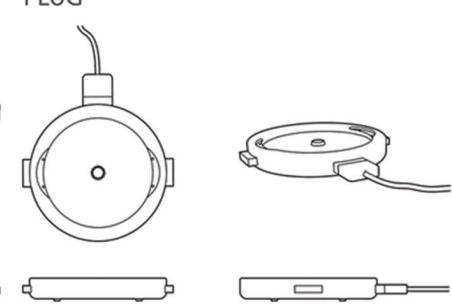
HEATER-PLATE CONNECTION



SCREEN



PLUG



# Chevalier Golf

by Noor-ul-Ain Javed  
20/09/2021  
Lahore, Pakistan

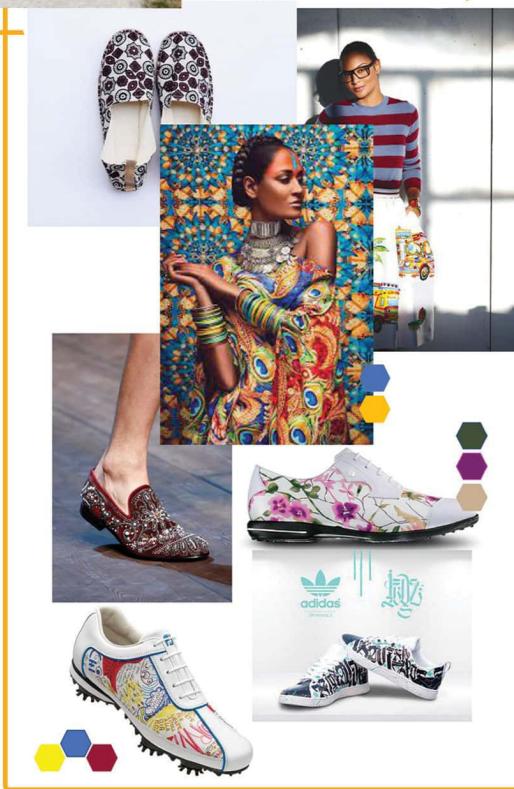
A professional assignment, for which all the design work created and submitted was my individual effort and contribution.

Advisor:  
Shehzad Khan  
gm@pakfootwear.org

The aim of this project was to design a collection of golf shoes for the American market, by fusing aspects of Pakistani culture into the golfing culture in America. For this purpose, traditional golf shoe designs, their functionality, comfort and styles were studied, along with the common elements found in the traditional Pakistani culture, such as, different patterns, themes, motifs, and color palettes found in the famous Pakistani truck art, multani pottery, ajrak prints, mughal art, different embroidery styles etc. These findings were put together in the form of moodboards, material boards, and hand-drawn and digital sketches. Client's feedback was noted at every step of the way until the designs were finalized for the execution process. Finally, the vendors and craftsmen were involved, to work on the execution and prototyping of the samples and creating pairs of extremely lightweight and comfortable shoes.

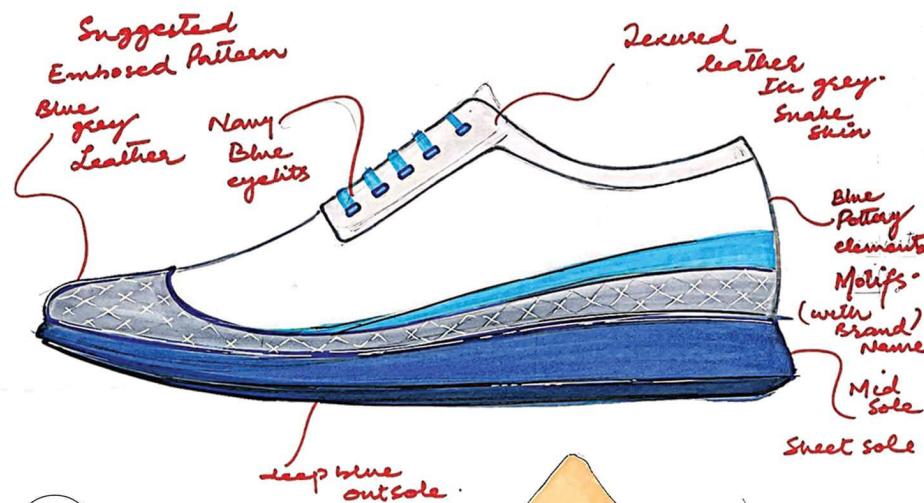
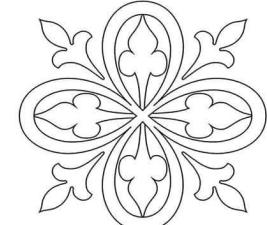
CHEVALIER  
GOLF



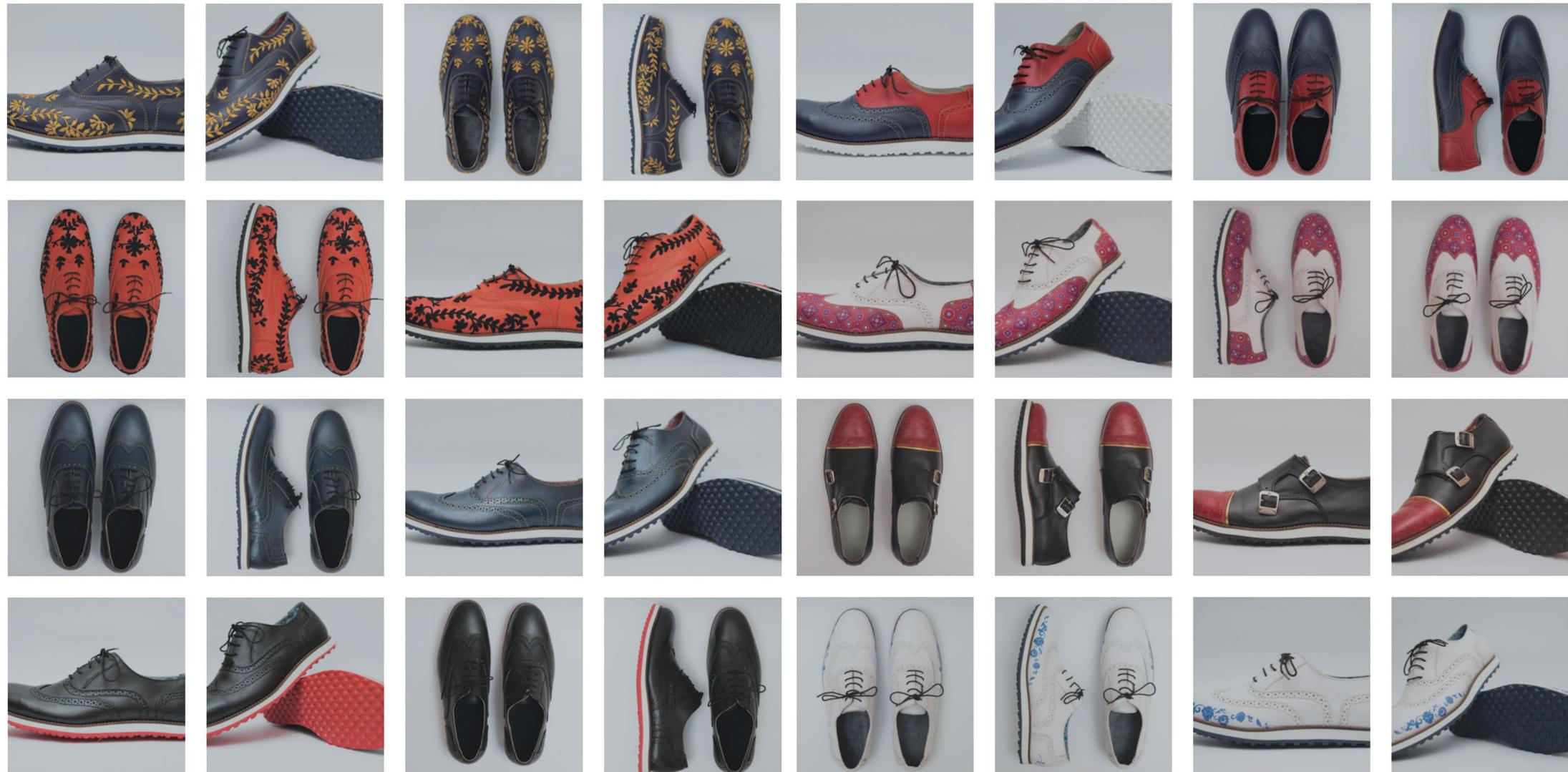


Inspirational  
Moodboards

Concept and  
Development  
Sketches



Final product samples which were exhibited in America, made with extremely lightweight materials such as leather upper and EVA sole. These can also be found on [www.chevaliergolf.com](http://www.chevaliergolf.com)



# YellowWedge

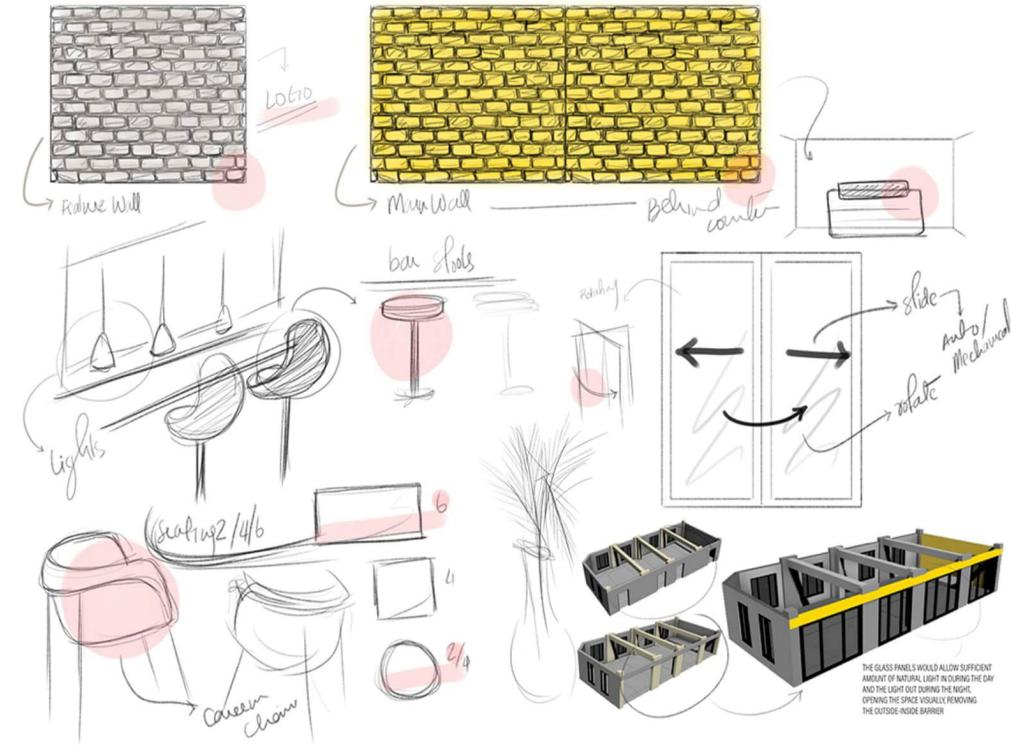
by Noor-ul-Ain Javed  
28/01/2021  
Islamabad, Pakistan

A 7th semester university project, for which all the work created and submitted was my individual effort and contribution.

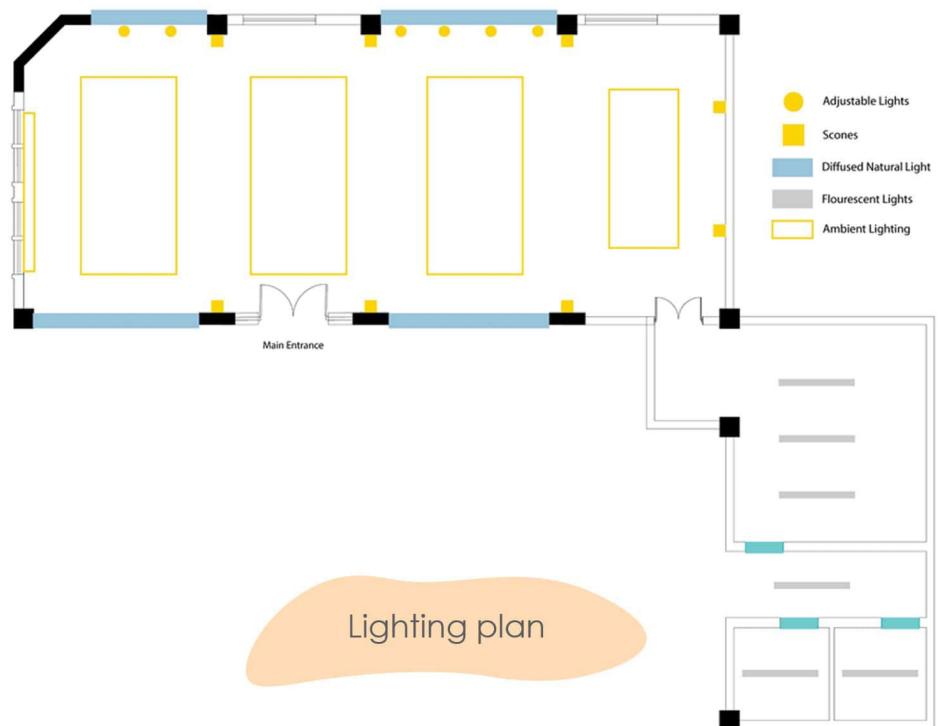
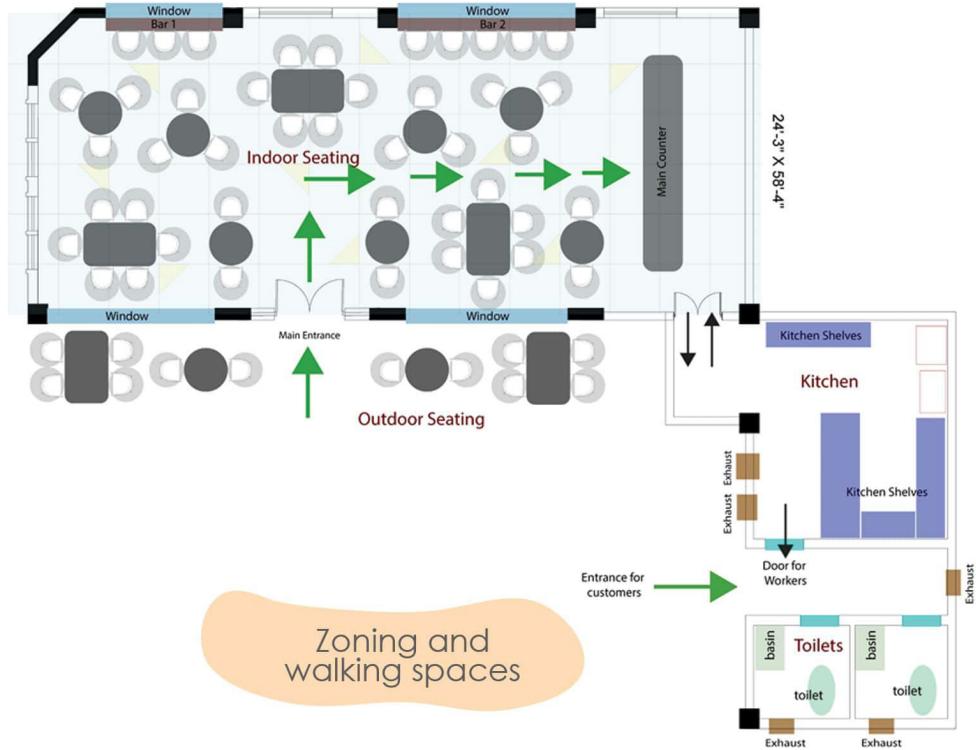
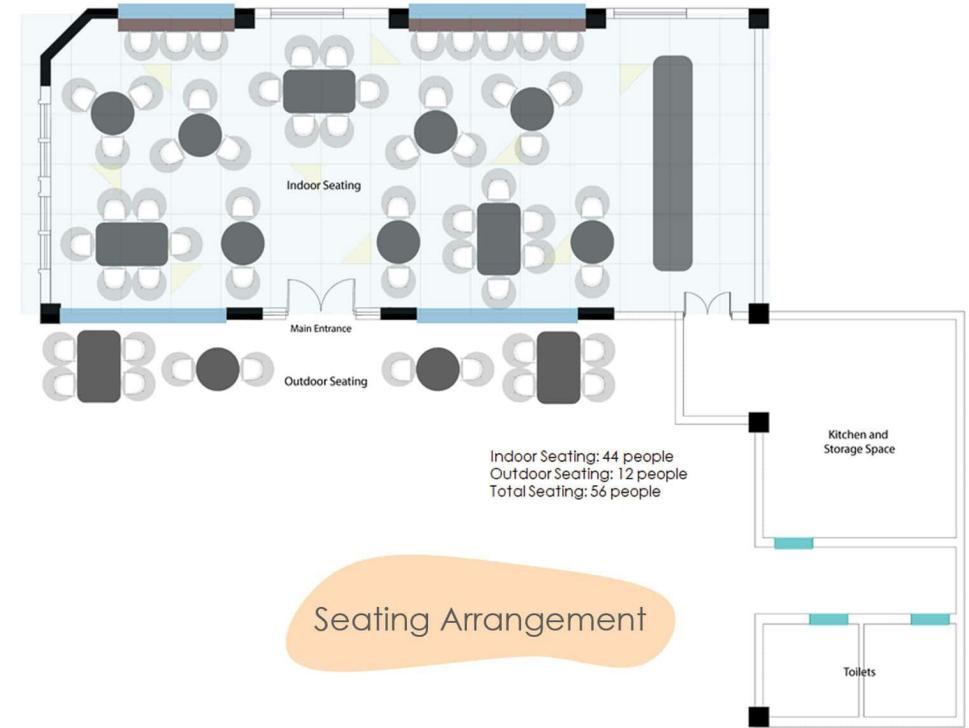
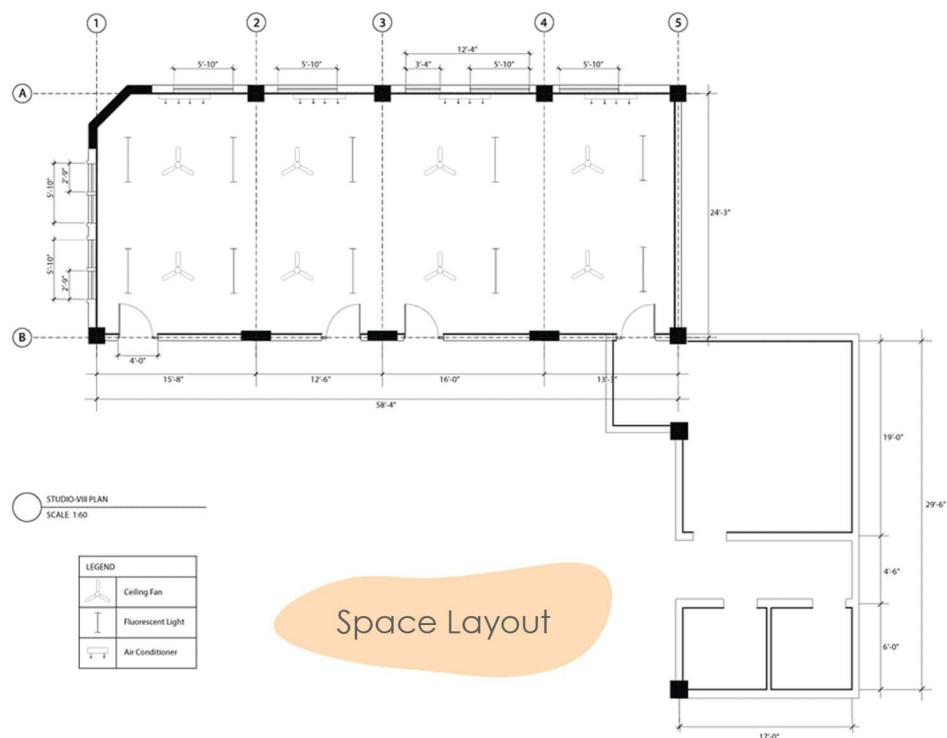
Advisor:  
Saboohi Sarshar  
[saboohi.sarshar@sada.nust.edu.pk](mailto:saboohi.sarshar@sada.nust.edu.pk)

A fine dining restaurant spread across a space of 24 by 58 feet with an extension of 24 by 24 feet, symbolizing elegance, truth and rawness through its aesthetic, ambience and materials. With its grayscale interior, a dash of yellow is added every now and then, in order to lighten the mood. The exposed ceiling further supports the industrial look, alongside the concrete lighting fixtures and brick walls, that add on to its theme, hence, combining sophistication and joy all under one roof. Similar design elements have been incorporated in the brochure, menu layout, logo, and furniture and interior pieces. Items on the menu have also been curated as per the theme. Similarly, technical aspects such as lighting, walking spaces, kitchen and bathroom spaces, seating arrangement etc. have been carefully designed as per the allocated space.





Inspiration moodboard, concept and exploration sketches and menu



Final renders of  
the outdoor  
seating, indoor  
seating, counter  
space, and  
kitchen and  
toilet areas of  
the restaurant



# The Duplex

by Noor-ul-Ain Javed  
31/10/2019  
Ankara, Turkey

A 5th semester university project,  
collaborated with LAV, for which all  
the work created and submitted  
was my individual effort and  
contribution.

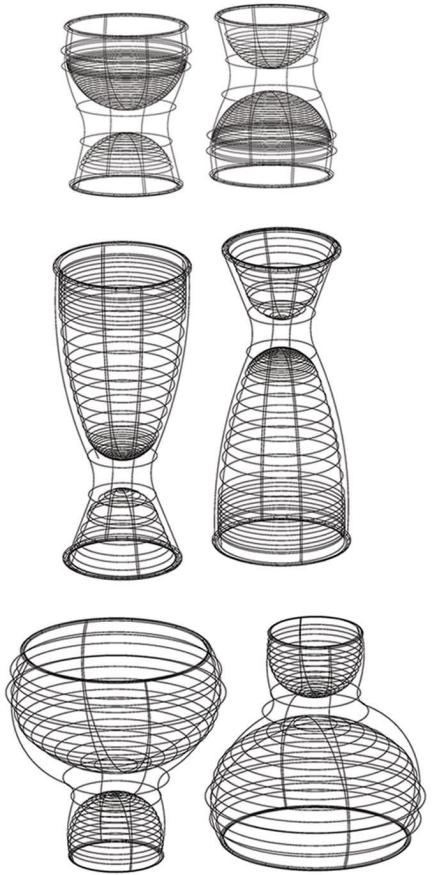
Advisor:  
Fatma Korkut  
korkut@metu.edu.tr **LAV**

A dual-purpose set of aesthetic and minimal, yet functional glassware, that offers freedom of use as well as visual appeal to its users. During the research and problem identification phases, several restaurants, local bars and cafe's were visited and their staff was thoroughly interviewed regarding the convenience and functionality of specific glassware in use. A clear understanding about the manufacturing process of glassware was also developed after a visit to the LAV production unit in Kutahya. This really assisted in design improvisation and development as it clarified that frame-like structures cannot be created in a revolving technique with which glassware was being produced there. Hence, through further development, the Duplex range was created, offering multi-dimensional uses such as serving drinks, desserts, dips, appetizers, toppings, and ad-ons, while also being used for decoration purposes as vases, candle holders, potpourri bowls etc.

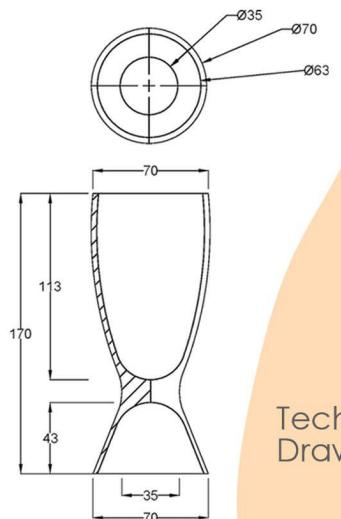
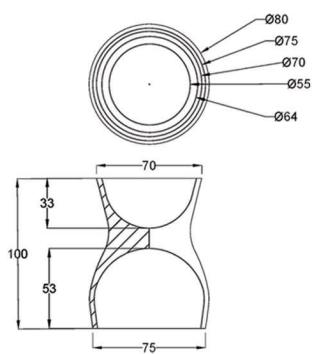
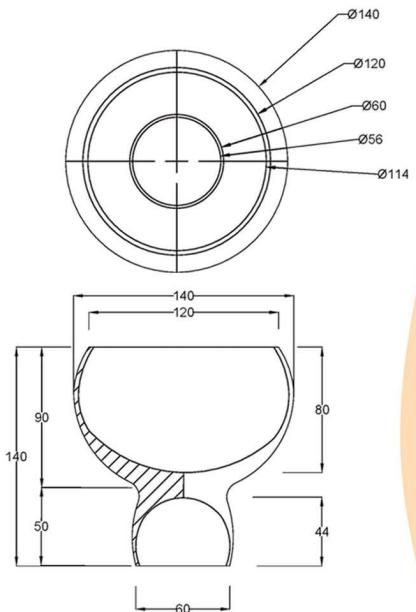




Idea Generation and Concept sketches



Scenarios, proposed design solutions, and cardboard prototypes



Technical Drawings

For video presentation, please visit:

**[https://youtu.be/yQL1\\_xdgNYw](https://youtu.be/yQL1_xdgNYw)**

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