

Product
Design
Portfolio*



*Selected design projects

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Awards

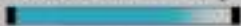
Ranked among top 75 in the
Rijks studio award 2017

10th ranking in the 14th Iranian
Student National Olympiad in
Industrial Design



Computer skills

Adobe Photoshop



SolidWorks



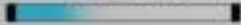
Rhinoceros



AutoCAD



EndNote



Publications

- Public toilet and citizen's health.
- An aesthetical Review on Iranian Korsi and its accessories compared with Japanese Kotatsu.
- A study on the impact of academic educational environment on learning quality of industrial design students in Iran.



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Certificates

- Design: Creation of Artifacts in Society
- E-learning and Digital Cultures,
- Beauty, Form & Function: An Exploration of Symmetry



Languages

Persian



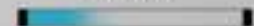
English



Azerbaijani



Turkish



Education

Master of Science, Design for Interaction
Delft University of Technology, Netherlands

Master of Arts, Industrial Design
University of Art, Tehran, Iran
(top 1% student)

Bachelor of Arts, Industrial Design
University of Art, Tehran, Iran
(cum laude)



Work experience

- 2009-2010:
Interaction Design Manager, Iliya Group
- 2011-2012:
Researcher & designer, Municipality of Tehran
- 2010-2012:
Research and Development Manager,
LILAS Creative Ideas Company
- 2013-2014:
Infographic designer, Tahlllgaran Systems

Designing an Inclusive Industrially-Made Public Toilet for the City of Tehran

A Biomorphic Design of a Perfume Bottle Packaging

Rijks studio Award 2017



Designing Candles as Cultural Artifacts

Designing a rescue backpack for Tehran's Emergency Medical Services

“Designing an Inclusive
Industrially-Made Public Toilet
for the City of Tehran”

Nasibeh Soltani
April 2011 – February 2012

Purpose: Master's thesis
Employer: Municipality of Tehran
Involvement: 100%
User research: Yes

“Designing an Inclusive Industrially-Made Public Toilet for the City of Tehran”

This project was my Master's thesis. I designed an inclusive industrially-made public toilet for the city of Tehran. I divided this project into two sub-projects to design the interior and exterior of the toilet. The user research phase took 6 months.

In Iran, the squat toilet is the common type of toilet used in private and public, however using squat toilet brings difficulties for elderly, disabled, or sick users. The absence of inclusive public facilities in Tehran hinders the social activities of users with special needs. My personal inner urge to solve this shortcoming motivated me to commence this challenging design project.

The concept of “toilet” as a taboo subject in Iranian culture made the user research phase of the project complicated. Iranian users tend to avoid talking about the details of activities they do in public or private toilets. There exist some general literature about toilet, but none has focused on the users' behavior or user needs in public toilet. The specific religious rules for defecating and urinating and the cultural aspects related to it add extra constraints to the design steps.

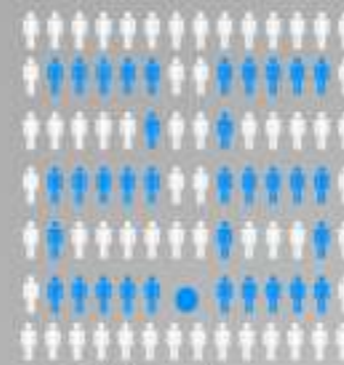


The initial step was started with a literature review to identify the national and international norms and standards as well as the basic needs and requirements of disabled and non-disabled users while using the public toilets.

To initiate the exploratory phase of the investigation, a group of 20 friends, all university students with industrial design background, were asked to openly discuss all the aspects of the subject matter, including their behavior, needs, and feelings while using the public toilets and in different situations. A list of very interesting and relevant issues was compiled from the remarks. The collected points were taken into careful consideration in order to develop an online questionnaire as the next phase of the investigation.

The questionnaire was designed to be collected online so to avoid the element of shyness that Iranian participants usually have in expressing their views about this taboo subject. In total, more than 300 participants responded to the online questionnaire. By analyzing the data collected from questionnaire and incorporating the norms and standards gathered from the literature review, a list of user needs were identified. The results of the questionnaire were also used to form the design criteria, which later were used in the selection phase.

Research



2.6 billions have no access to toilet



1 in 2 men 50+ years old and 2 in 3 women 50+ years old have urination problem



Wash interventions significantly reduce diarrhoea morbidity

Cultural adaptation for muslim community
Islamic rules for toilet etiquette



4080
TEHRAN needs 6620 toilets.

Data collection



300+

Participants answered the questionnaire

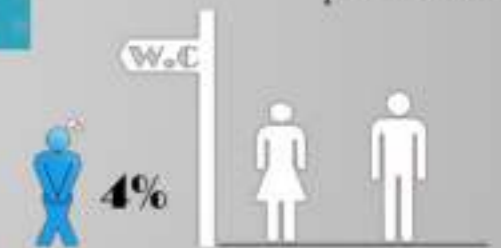


20 - 40 years old



Bachelor's and Master's degree

4% of respondents said that they would never use public toilet



3 most popular things people do in public toilet: washing hand, looking at the mirror, vomiting



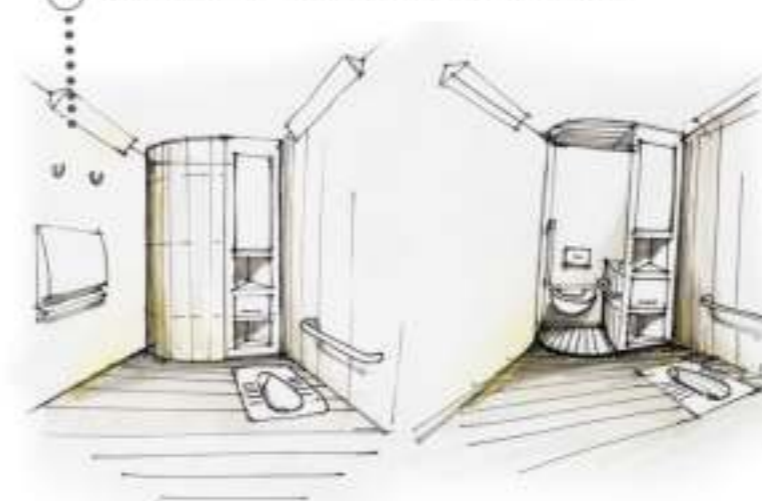
Cultural challenges in Iranian public toilets:
1. Men urinate standing up in squat toilet.
2. The long veil of women can be troublesome for them.
3. Women's challenges during their menstruation.

Based on the identified needs, in “brainstorming” sessions some initial concepts were generated. Using the “Black Box” approach, the different concepts were presented to a group of creative industrial designers. The black box phase resulted in 12 different categories of public toilets.

In order to narrow down the categories and reduce the 12 categories of public toilet designs into a final concept, seven principles of universal design were used as a set of criteria. To this end, a mathematical function was proposed and used to give weighted scores to each element of design concepts based on its closeness to the seven principles of inclusive design. This function was used to quantitatively assess and evaluate the inclusivity of the 12 concept categories of public toilet in this thesis project.

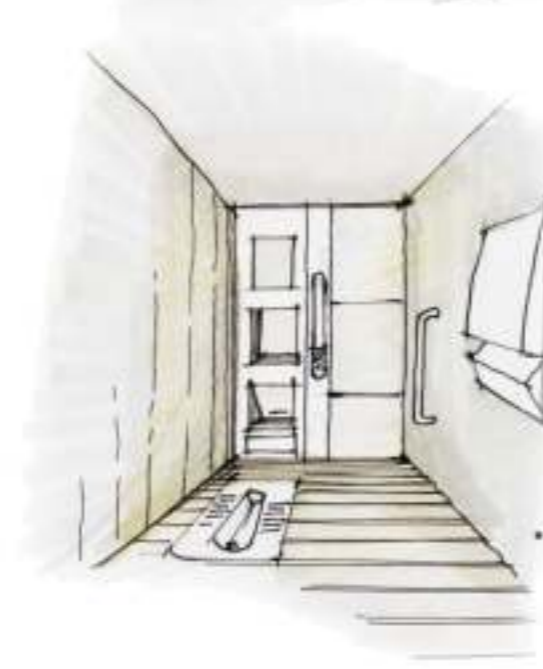
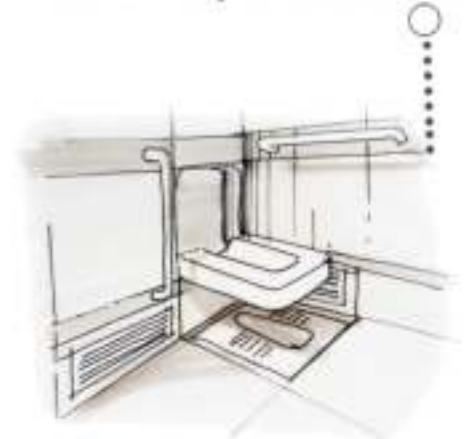
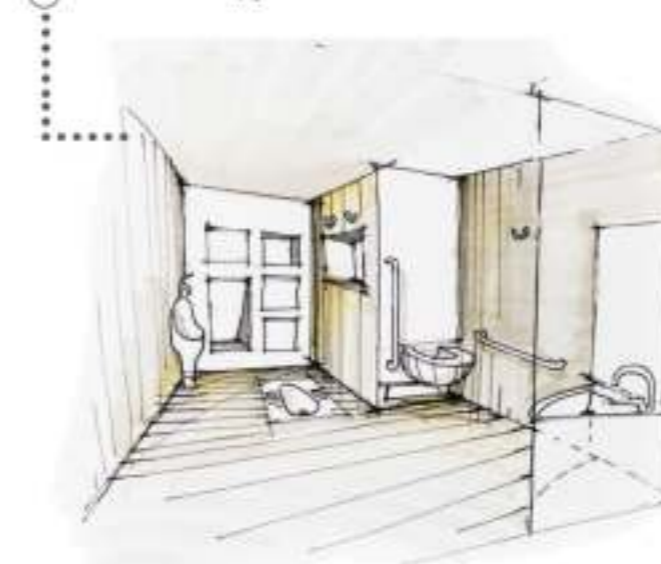
As for the final phase of the design selection, the three selected concepts were presented to two experts, who each were professional designers with more than 15 years of experience in designing public toilets and urban furniture. Thus, out of the three selected concepts, the final design was selected in consultation with expert’s opinion.

Hidden seat toilet for ordinary users



Modular toilet with moveable boxes of squat and seat toilets

3 different types of toilet in one cabin



This cabin is equipped with both types of toilet, but they can be used only one at a time.

Baby changing table for changing baby's diaper in public with extra slits for hanging mother's bag.

Washing and vacuum hand dryer basin with soap and warm water. The bin is put in an accessible place.

A shelf and 2 hooks near to the toilet and sink to keep bags off the floor safe, and within the reach for the users who need to access personal belongings.

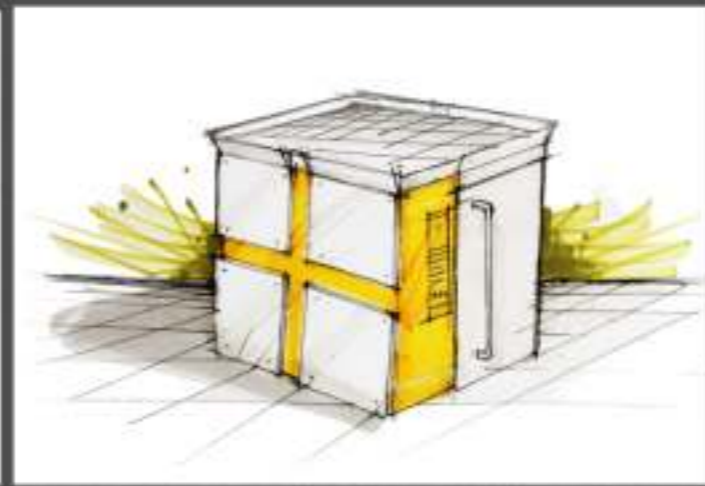
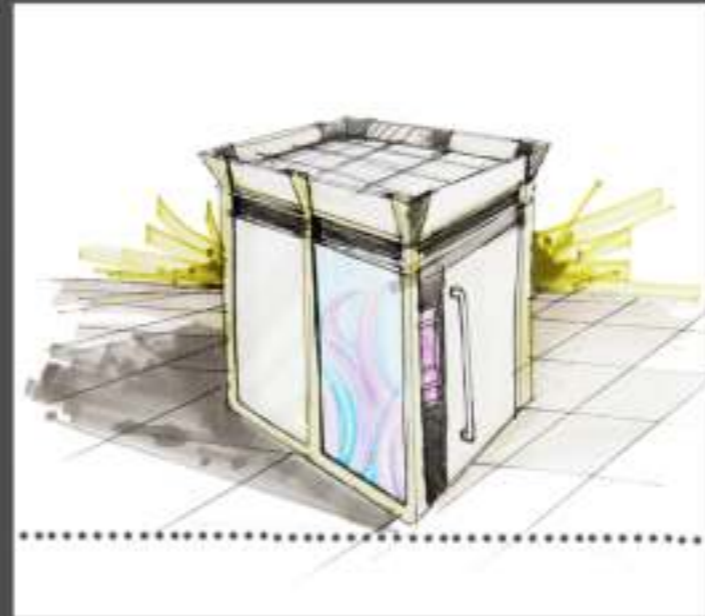
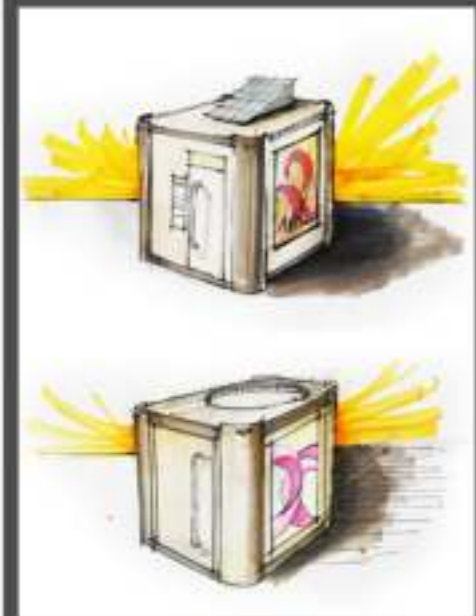
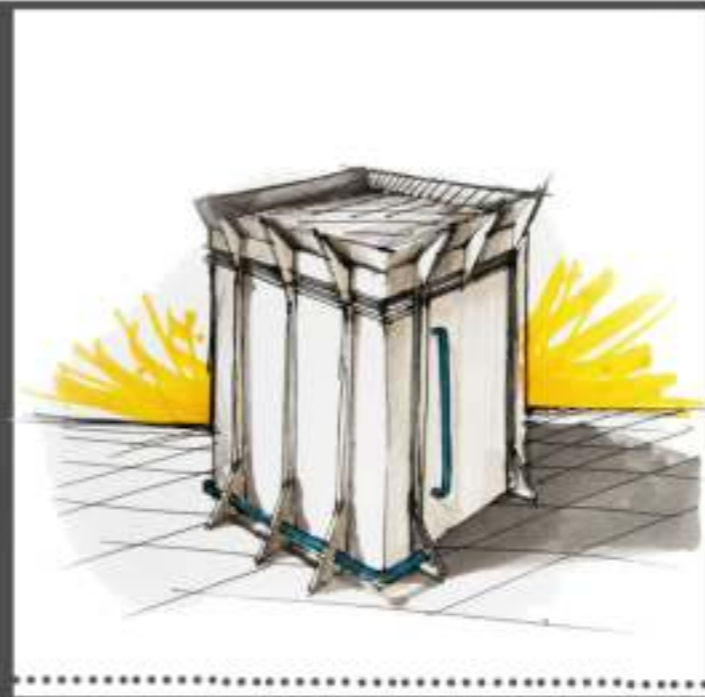
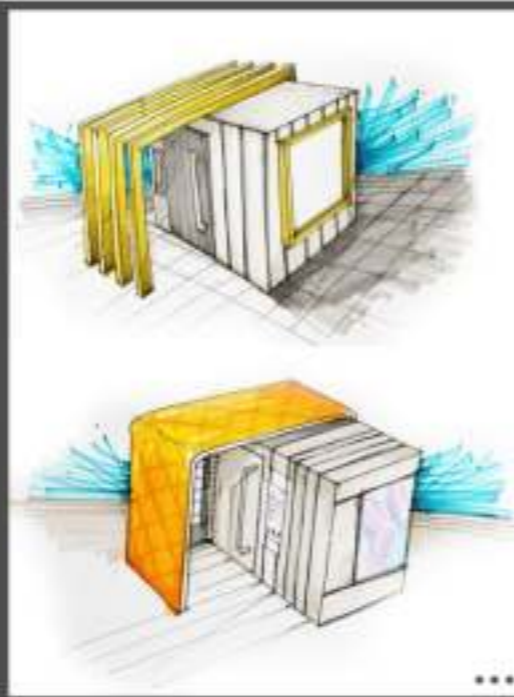
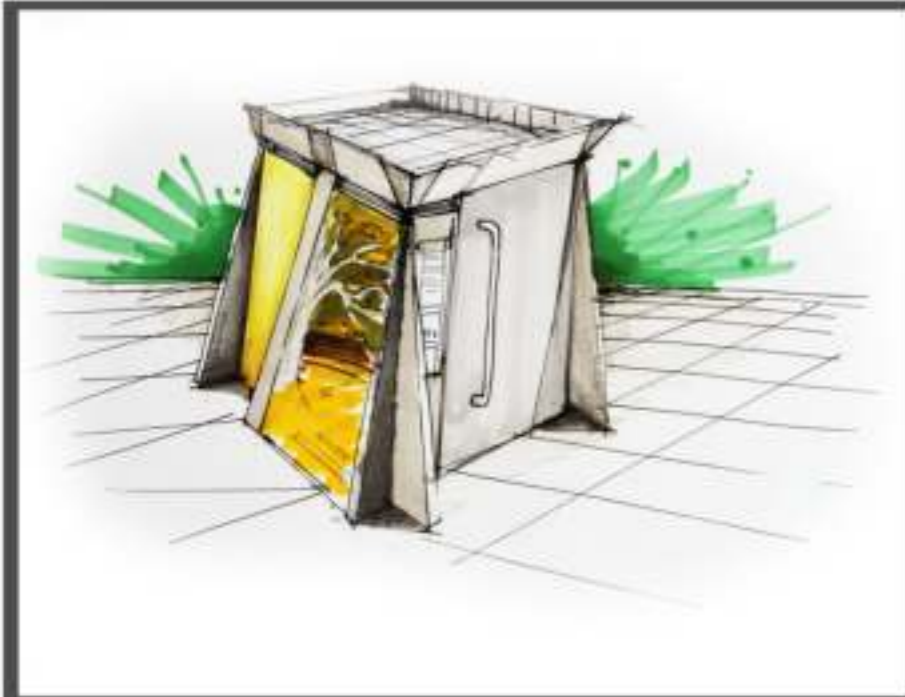
Two sets of bins, basin, and mirror for both squat and seat toilet.

A stand toilet with water sensor

Braille signs on the grab for helping blind users.

Grab bars mounted lower for better leverage. Toilet tissue put within arm's reach. SOS button for emergency situation. All measurements match with 2010 ADA Standards for Accessible Design.





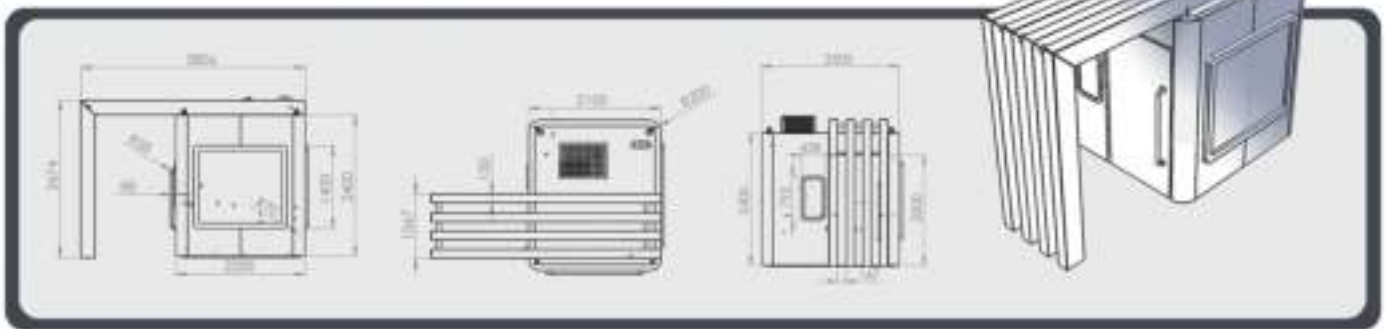
- These toilets have access to:
 1. Solar energy panel for providing electricity for interior and exterior lighting.
 2. Ventilation system with high speed exhaust fan.
 3. Fire extinguishing system for critical situation.
 4. Large door knobs for the blind and disabled.
 5. Grid floor for preventing accumulation of water.
 6. Hidden access to toilet facilities from outside.
 7. Cabine at the same level as the street surface.

- Prefab stainless steel toilet to protect against vandalism with shade structures to hide the inside from outside and make privacy.

- Individual outdoor mobile container toilet/bathroom with light and billboard

- Eco-friendly luxury prefab portable toilets with separate toilet for men and women and disabled.

- Luxury prefab portable toilets with toughened glass.



“Designing a rescue backpack
for Tehran’s Emergency
Medical Services”

Nasibeh Soltani
June 2010 – December 2010

Purpose: Bachelor’s thesis +
internship project
Employer: Medasa Company
Involvement: 100%
User research: Yes

“Designing a rescue backpack for Tehran’s Emergency Medical Services”

This was my Bachelor’s thesis project, which I did during a 6-month internship with Medasa Company, producing medical equipment for Tehran’s Emergency Medical Services (EMS).

The project was defined because their backpacks at that time did not satisfy all the needs of their users in Tehran EMS. To identify the user needs, I made a questionnaire and distributed it among Emergency Medical Technicians (EMTs) in different districts in Tehran. Additionally, in order to get a first-hand experience about the EMT’s needs, I joined them in a few medical emergencies and videotaped the way they interact and use their rescue backpack.

After analyzing the collected data, I designed 30 different sketches for rescue backpacks, which later I presented to EMTs and senior managers in Tehran EMS. The top selected sketches were fine-tuned and improved based on the feedback. The final design was selected based on cost-efficiency, compliance with international standards, and producibility. At the end, a prototype of the designed rescue backpack was produced.



70% of EMTs take 7 to 13 missions per day.



30+ Participants answered the questionnaire



TEHRAN Emergency Medical Technicians



In 60% of missions, EMT have to use stairs to reach their target.



In 70% of missions, EMTs have to carry the rescue backpack.



In 55% of missions, a sick or injured person has to be transferred to ambulance.

EMT priorities for choosing rescue backpack:



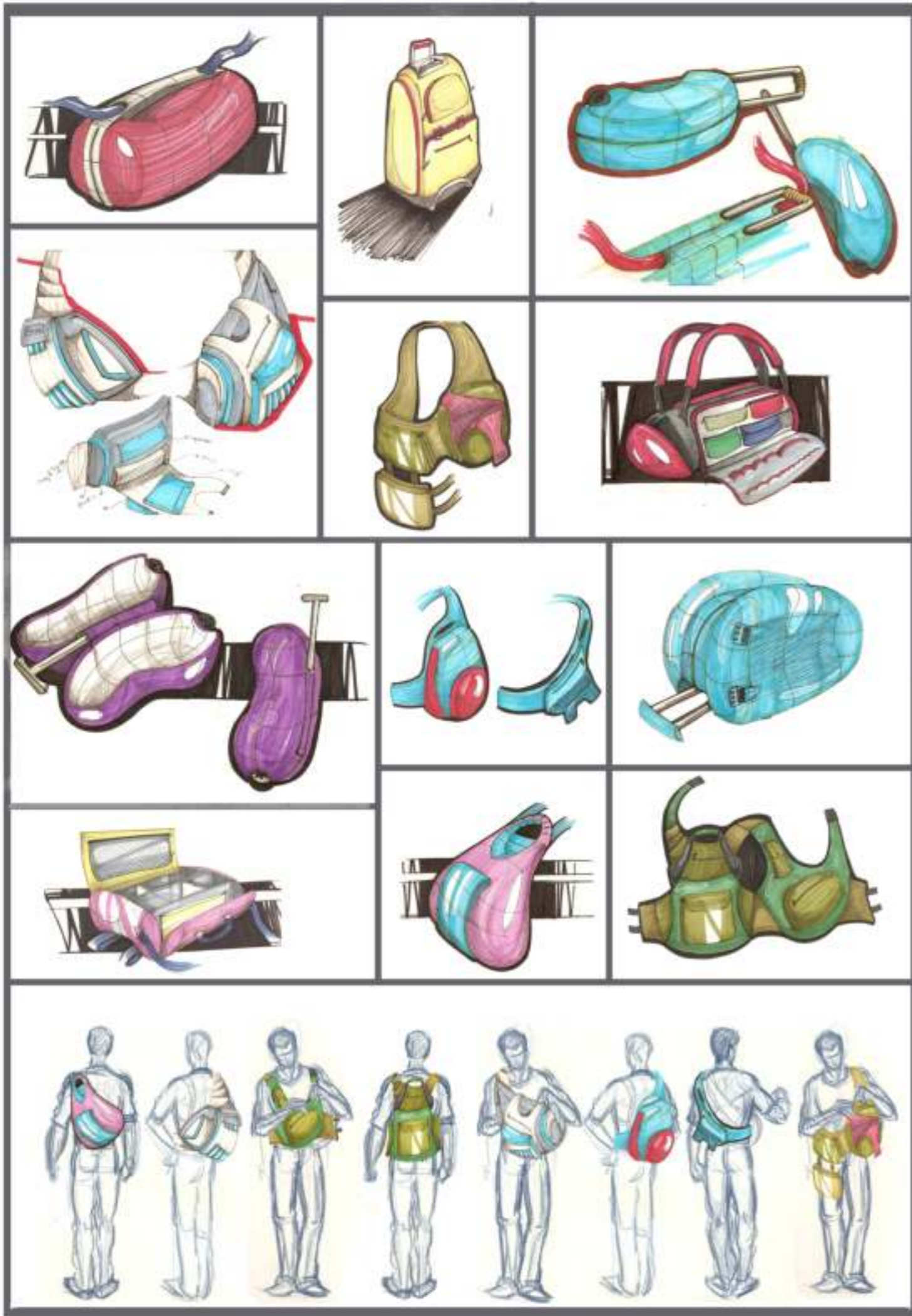
Flexibility



Weight



Spacious for CPR equipment



Polyester and *Blends* are used for the backpack material, which make the backpack washable, waterproof, and with little maintenance. The backpack is designed with a handle and shoulder straps so it is easy to carry. It also includes a shoulder hip system to help distribute the weight on the user's back.



“A Biomorphic Design of a Perfume Bottle Packaging”

Nasibeh Soltani
April & May 2009

Purpose: Course project
Employer: Not applicable
Involvement: 100%
User research: No

“A Biomorphic Design of a Perfume Bottle Packaging”

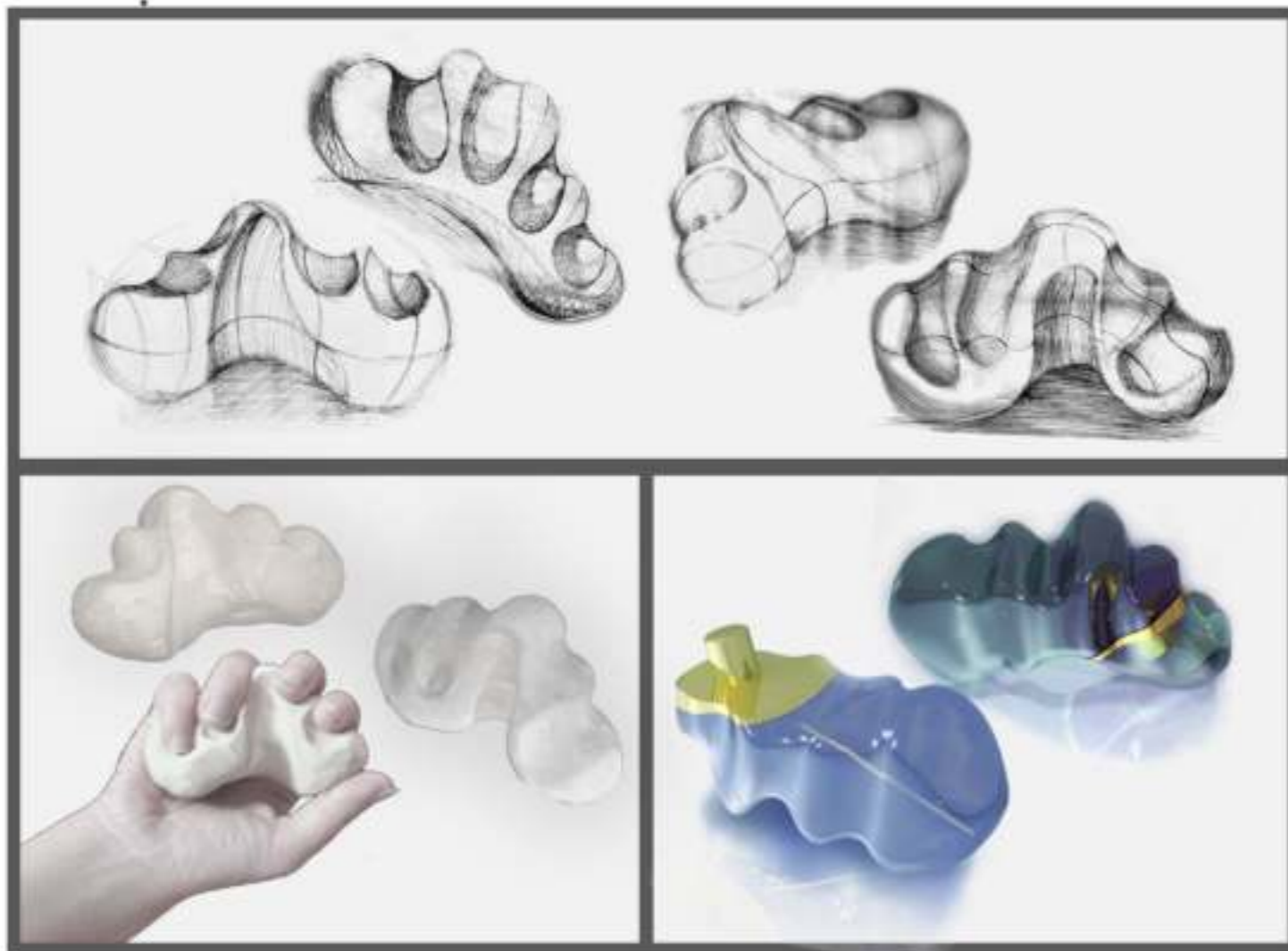
This is a course project during my bachelor's program, which I designed a perfume bottle based on biomorphic design concept.

Nowadays, the designed objects do not resemble the natural forms; Sometimes only a slight feature is incorporated in the design to remind the user about the nature. By designing the perfume bottle inspired by design concepts in nature (i.e. a biomorphic design), I tried to convey the message to user that the perfume inside the bottle is also come from nature.

To come up with a design for perfume bottle, I used clay to make a natural form by my hand. Afterwards, I made sketches of the formed clay and narrowed down the sketches based on expert opinion. A 3D model of final selected sketch was made using Rhinoceros.



Different physical models (maquettes) were made using clay. To do so, the clay was squeezed in hand with different pressure and angles, which resulted in different shapes. Then, sketches were made from the formed clays, and one model which made the most functional sense was used as the final design.



The 3D model of design was made using Rhinoceros. The size, material, color, and texture of bottle were chosen based on my discretion and the most appropriate visual appeal.

“Designing Candles as Cultural Artifacts”

Nasibeh Soltani
February 2010 – June 2012

Purpose: Part-time job contract
Employer: Lilas Creative Ideas
Company
Involvement: 100%
User research: No

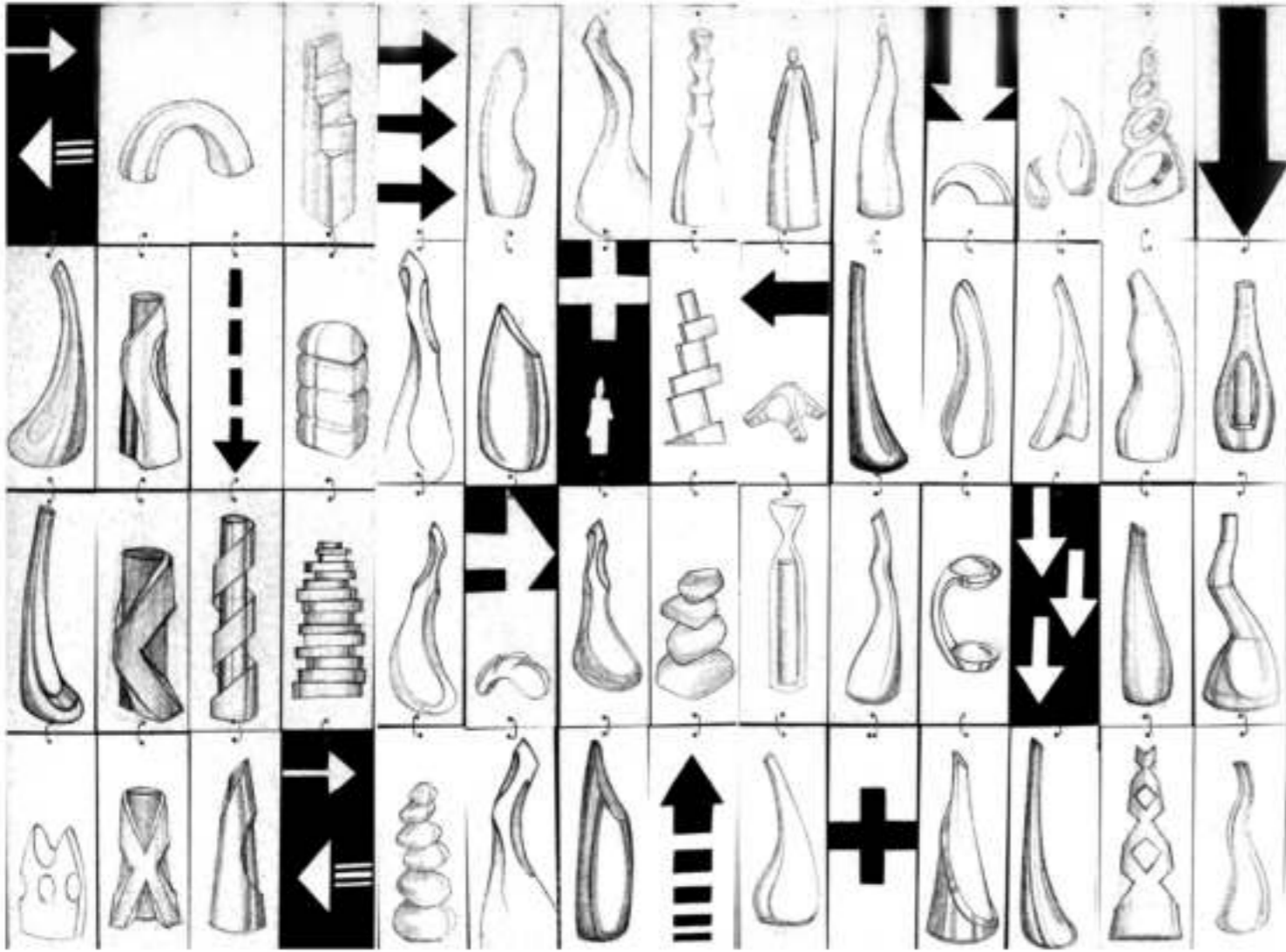
“Designing Candles as Cultural Artifacts”

I designed different candles during my part-time contract position as R&D Manager in Lilas Creative Ideas Company. This company is a pioneer in candle-making industry in Iran. I was responsible from researching the market, designing, and implementing prototypes for further industrial production.

Candles are integral parts of many religious and cultural rituals. However, the majority of candles in the market are not customized for their related purpose. My goal was to introduce new candle designs that suit the related cultural and religious elements.

To achieve this goal, I designed a candle for different target users in society: *Ashura* candle for Muslims, *Christmas* candle for Christians, *Shamse-Chalipa* candle based on Islamic architecture, and *Esbragh* candle based on Iranian Sufism philosophy.





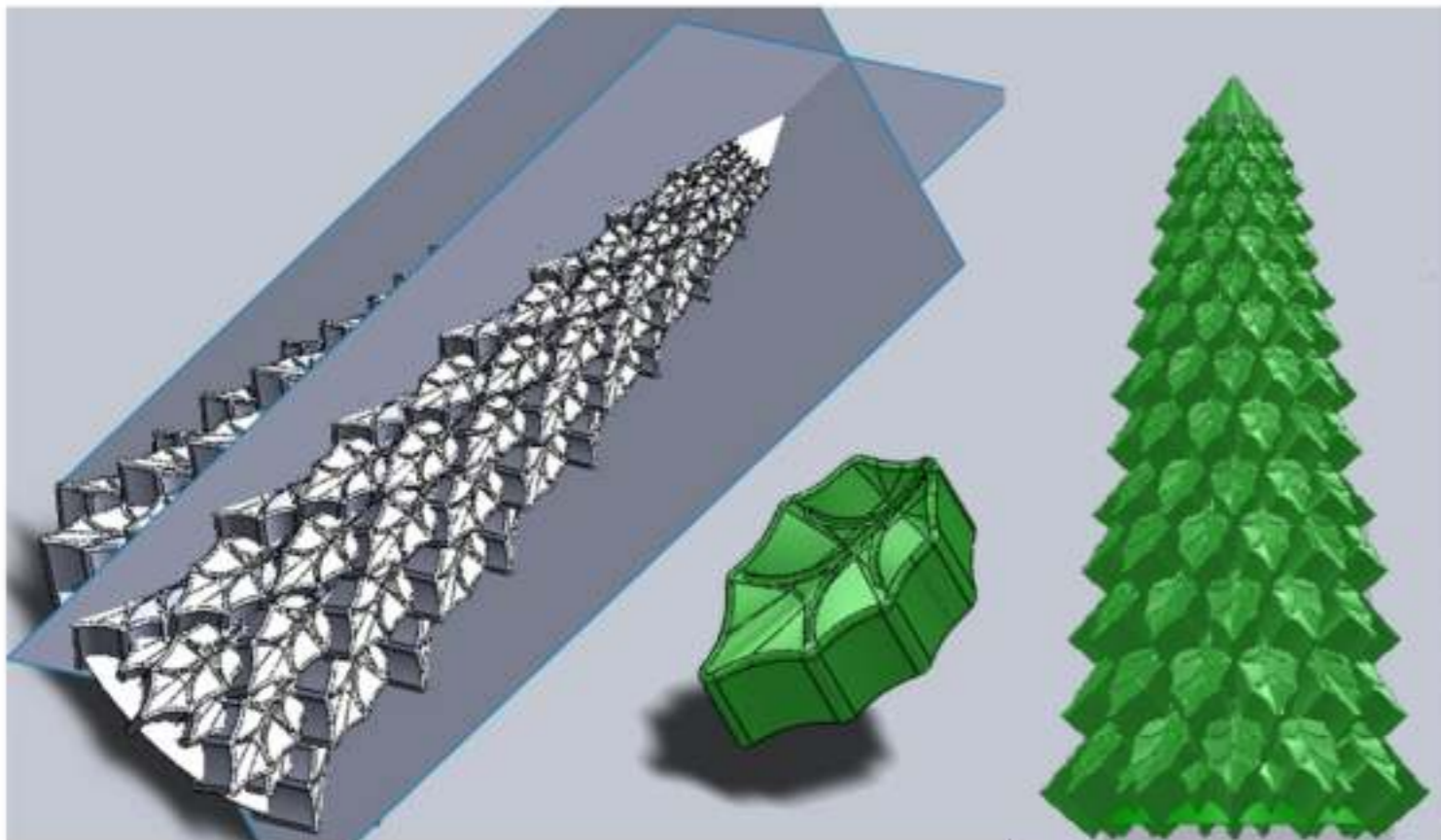
Ashura is one of the most important *Shiite* religious rituals that have its own unique elements. Candles are one of the most important parts of *Ashura* rituals, which made this religious day a great market potential for selling customized candles. Based on the cultural concepts and symbolism used for *Ashura*, I designed new candles (shown in the right).

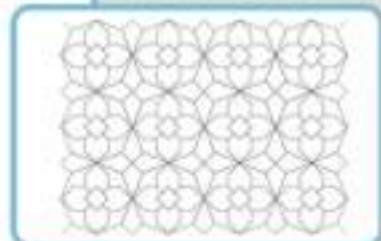
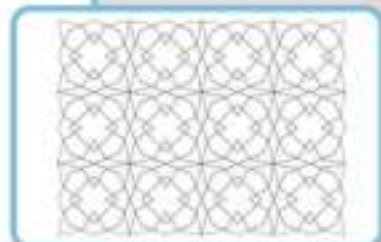




To initiate the design process, the symbols and cultural elements of Ashura was identified. The relationship between these elements and the emotional attachment of users was studied. Based on the findings, different sketch concepts of candles were made. The final sketches was chosen by the company's management team based on producibility and economic profitability. The physical models of the selected designs were made using clay to come up with an impression about the actual size and dimensions. The 3D models were made using Rhinoceros or Solidworks. Based on the 3D models, the rapid prototype models were made, which were used to make a two-part silicone mold. The melted paraffin were poured into the silicone molding.

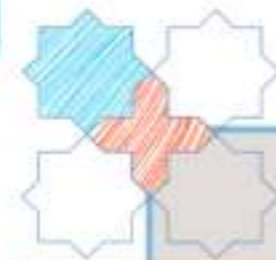
Christmas Candle: This candle design is inspired from the Christmas tree and designed for the Christian users, which symbolizes one of the most important rituals in Christian faith. The candles are produced in different sizes.





Eshragh Candle: This candle design is inspired from Philosophy of Illumination (*Eshragh*) in Islamic philosophy and mysticism that drawn upon *Zoroastrian* and *Platonic* ideas, by Iranian philosopher *Subrawardi*. In this philosophy, light is a divine and metaphysical source of knowledge and wisdom.

Shamse-Chalipa Candle: This candle design is inspired from Persian and Islamic architecture. One of the most functional element in Islamic architecture is the *Shamse* and *Chalipa* geometric patterns. This candle can be used individually or in combination with other candles, so that the user can create different compositions for themselves. The empty spaces between the candles also make patterns found commonly in Islamic architecture.



“Rijks studio award 2017”
entry submissions

Nasibeh Soltani
January 2017

Purpose: Design competition
Employer: Not applicable
Involvement: 100%
User research: No

“Rijks studio award 2017” entry submissions

Rijksmuseum award is an international design competition organized by the Rijksstudio. Rijksmuseum invites members of the public to draw inspiration from the Rijksmuseum collection, download images from Rijksstudio and use them to create their own artwork; The submitted artworks are judged by an international panel of experts. In 2017, 2600 artists from 68 different countries participated in the competition. I submitted three different concepts, which one of them (“Drink the art!”) reached the top 75 list and was showcased on the museum’s website.





“Wear like Adam and Eve!”

The painting “The Fall” by Cornelis Cornelisz shows Adam and Eve wearing fig leaves in order to cover themselves after eating the forbidden fruit and realizing that they were naked. In this sense, the fig leaves are the first underwear ever made and worn by humans. For us, as the sinful children of Adam and Eve, it might also be appropriate to wear the same underwear as our first parents once did. Since it would be a bit impractical to wear the fig leaves, wearing nude underwear would be the closest to what they wore.





Drink The Art!

Inspired by the bronze sculptures of ten weepers from the tomb of Isabella of Bourbon by Renier van Thienen, new ice sculptures are made by 3D silicone molds. These ice sculptures can be used in cocktail drinks, in a glass of Scotch whisky, or simply as a house decoration. The key idea behind these ice sculptures used in a bar or a party is that as the time passes by, the sculptures melt and change form. This time-dependent nature of these artworks will make it fun for the drinkers or the audience to watch. The use of silicone molds to create these ice sculptures gives a chance to the general public to simply recreate these artworks at home.

“See the world like an artist”



The idea behind this work of art is to help the audience see the world through the eyes of Ohara Koson, the Japanese painter. To achieve this ambition, the main elements of his painting are extracted and printed on the window films, while some spaces are made transparent. By putting these films on the window glasses, the sceneries and natural features outside the house – such as clouds, rain, sun, trees, etc. – combine with the paintings of Ohara Koson, and as a result, a new unique piece of art is created. The composition of this artwork is not fixed and can take different forms during different moments of day and night, while the frame of the window has replaced the frame of the painting. Every moment, the user will see a new artwork.



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