My Portfolio

2016-2022

Product, UX/UI Designer

Arghavan Zarei

Hi, I’m Arghavan :)

I’m a multi-disciplinary designer with experience in UX/UI and Product design.
I genuinely believe that "Design enriches life, stirs emotions, and unites the world.

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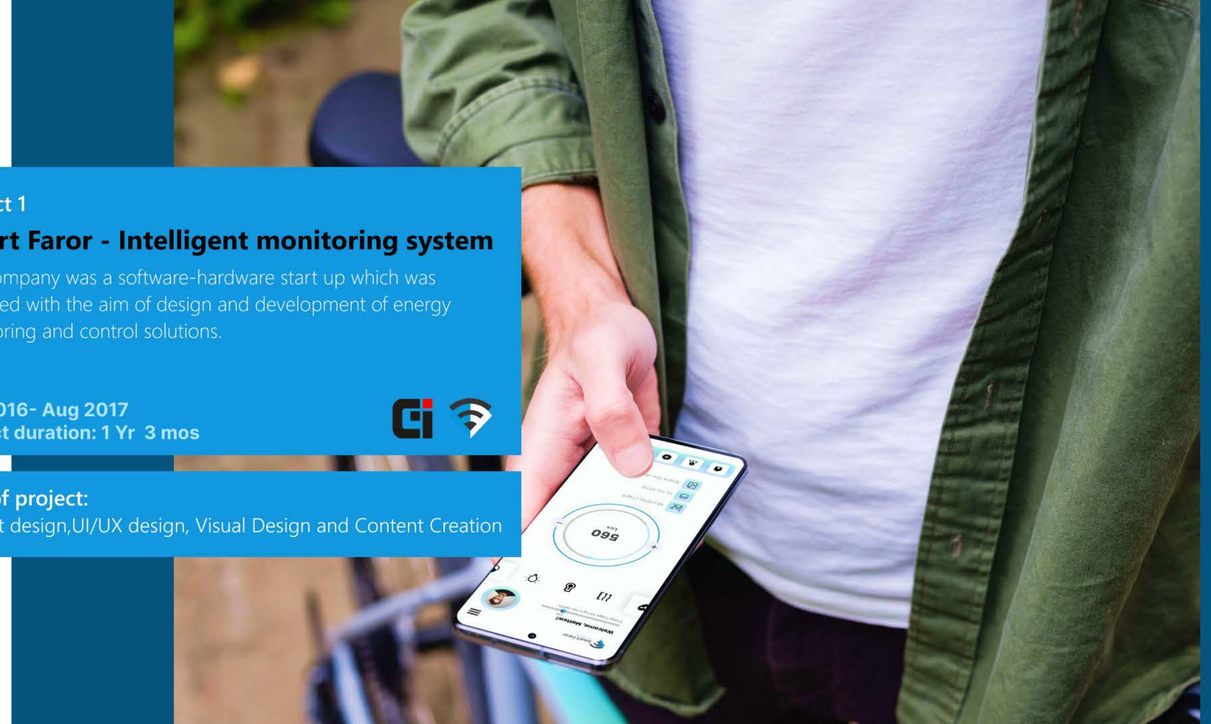
Content..



Project 1

Smart Faror - Intelligent monitoring system

This company was a software-hardware start up which was launched with the aim of design and development of energy monitoring and control solutions.

Jun 2016- Aug 2017
Project duration: 1 Yr 3 mos

Type of project:
Product design,UI/UX design, Visual Design and Content Creation

Purpose :
The main purpose of organizing Smart Faror is to change how people make decisions in their day-to-day activities through IoT solutions to create a better experience.

Target:
All ordinary people, managers, engineers, and economic units.

Brief:
Presenting user-friendly, low-cost, and futuristic end-to-end IoT solutions to improve the quality of life of society, and strengthen management processes for executives working both in the private and public sectors based on local potentials in Iran.

Client:
- Centralized monitoring systems
- research centers
- Municipalities
- Private centers

Challenges:
Providing the best decision support system (DSS) solutions to environmental resources through a commitment to low-price products and beneficial solutions using internet of thing technology first, in Iran, then, abroad.

Outcome:
Designing and launching two final products : ***WeatherBoxTM*** and ***Faror Node***.

Research and Overview

Smart Forever was launched with the aim of **building IoT solutions** that will thoroughly change the **decision-making** process for **individuals, professionals, and businesses**. It was founded in 2016 in the ICT Innovation Centre at Sharif University of Technology. The design and production of Smart Faror products have been possible from the following design process :

Primary Resarch

Decision support systems are an efficient tool to increase the effectiveness of decisions. With the significant progress in data recording and transmission systems and the expansion of the telecommunication network, it is possible to design and develop centralized monitoring systems.

Iran is facing a crisis of groundwater levels and polluted air and the weak role of the government in managing its resource crises. Preventing excessive consumption or strictly controlling consumption has become a matter of course in this country. Centralized and efficient monitoring will play a significant role in improving the decisions and policies of relevant organizations.

Layers of IoT System

Some of main IoT advantages

- Massive collection of distributed data
- The ability to use artificial intelligence tools
- Determining coping strategies in different cases
- Extracting valuable information
- Private centers

The solutions provided by Smart Faror

- Created the PCB designs in-house (Iran) to minimize costs, and provide flexibility for future developments.
- Became partners with advanced local institutes within the sensing technologies field.
- Developed a proprietary algorithm using artificial intelligence techniques to improve the sensitivity of the sensors
- Implemented extensive web services to store, analyze, and visualize the acquired data.
- Planned to deliver a turnkey solution to our customers, with complete support afterward.

Ideation and Development

Personas

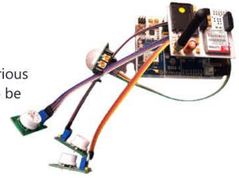
What Smart faror offers

WeatherBox

This product is an end-to-end air pollution monitoring solution that creates continuous (numeric and visual) reports of environmental variables such as temperature, humidity, and concentrations of harmful air pollutants such as NOx, SOx, CO, and small particles in the air.

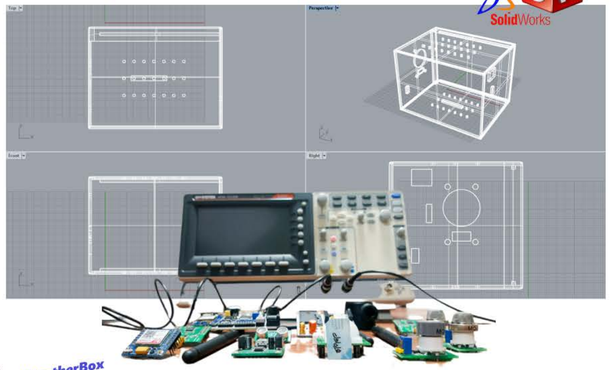
Smart Node

Faror Node is a plug and play device which can drive various types of sensors and send the data to the cloud serve to be monitored over users application



Prototype and Outcome

3D Product Design



Prototyping

WeatherBox Version.01

WeatherBox Version.02

Major Applications:

- Municipal air pollution monitoring for small and big cities
- Quality monitoring of air within buildings such as gymnasiums and hospitals
- Gas leakage monitoring for public places with a high risk of dangers
- Air quality monitoring for industries with pollution-sensitive process

Smart Faror Node

Faror Node is a plug-and-play device that let users monitor their surroundings by driving various types of electronic sensors.

It just needs to connect to the wifi and plug in the sensor and then the users can have all the data on their Mobile and Web.

Design System

Logo Design

Smart Faror
Smart Living Solutions

Color Style

Shades

Primary 1

Primary 2

Saturated

Typography

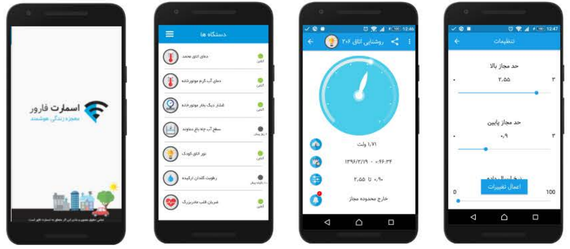
A.a Poppins Font

Large Title,	20px
Headline,	16px
Sub headline,	14px
Call Out,	11px
Body,	14 px

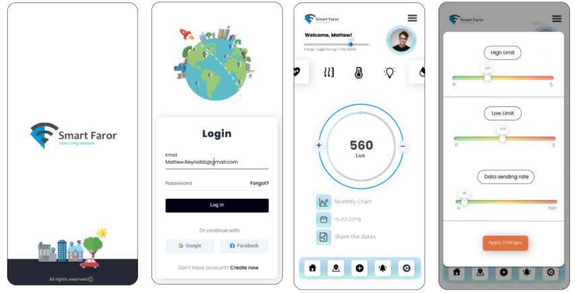
Illustration

Smart Faror Application

First Version

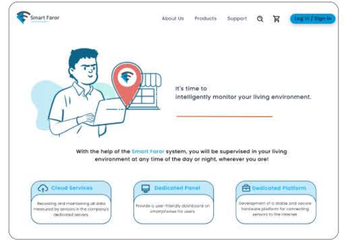


Second Version

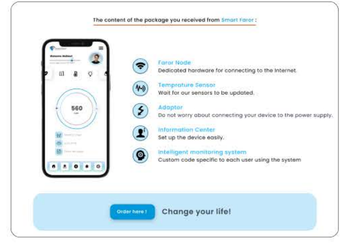


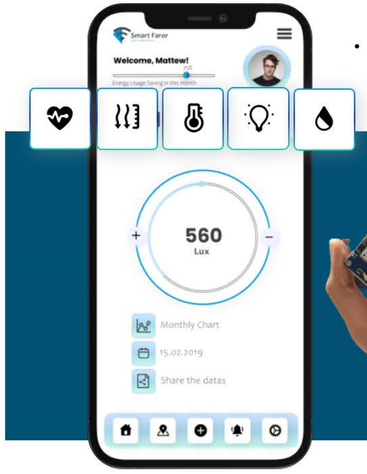
Smart Faror Website

The primary purpose of Smart Faror's website is to define the services and products for all who are interested



it is possible to see and learn about the various uses of products. Seeing the opinions of people who have used the product in different conditions helps others to choose the service more confidently.



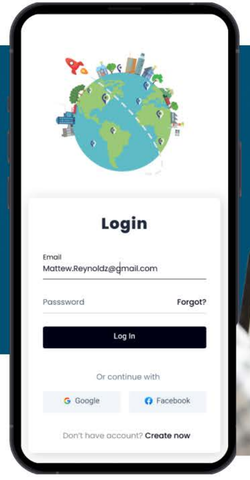


- Using consistent icons and using labels with limited content for increasing readability at first look.

Suggested uses of Faror Node :

- Monitoring the input/output of heating systems by connecting a pressure sensor
- Monitoring a particular object's temperature by a temperature sensor
- Monitoring specific elements of personal spaces like the humidity of the greenhouse

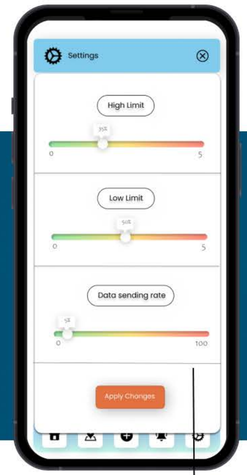
- Content is minimalism as much as it can. The main functionalities should be focused on by users to receive their goals easily.



- Adding borders and soft shadows for popping up substantial pieces of information.

Suggested uses of Weather box :

- Controlling the air quality in the space of people with special needs
- Residential/ Industrial spaces for managing energy consumption.
- Cold stores/ Industrial refrigerators for preventing product damage.
- Prevention of gas leakage/ fire
- Detecting early failure in the engine house



- Mobile friendliness is prioritized.
- Visual hierarchy is considered.

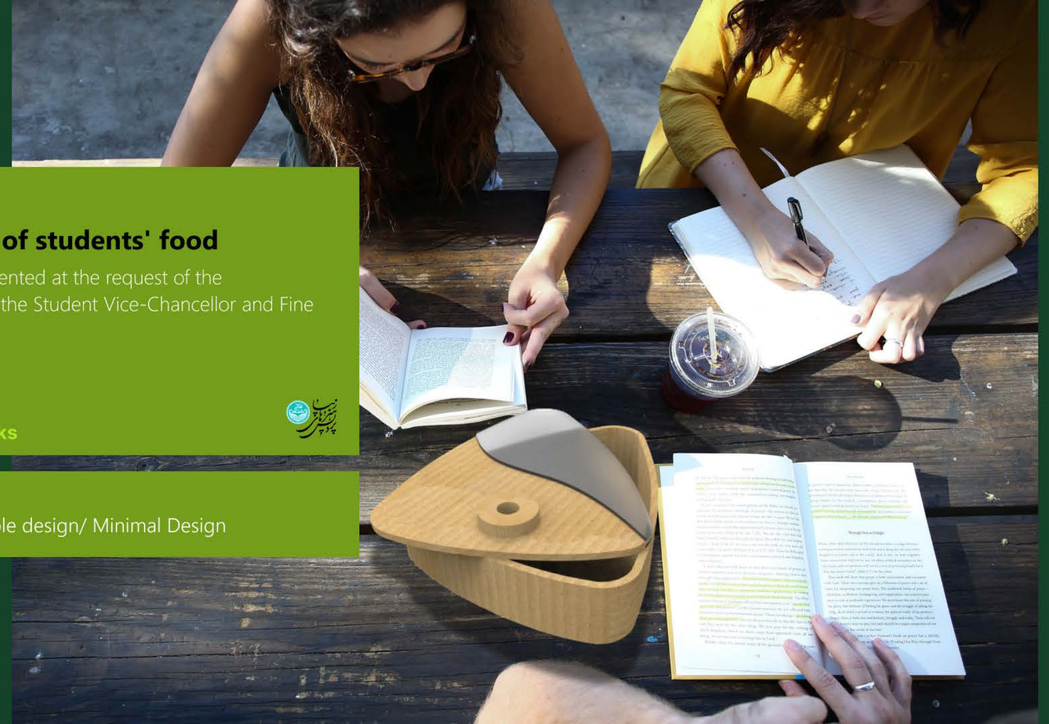
Project 2

Green packaging of students' food

This design project is presented at the request of the Development Program of the Student Vice-Chancellor and Fine Arts of Tehran University.

Oct 2018
Project duration: 2 Weeks

Type of project:
Product design/ Sustainable design/ Minimal Design



Purpose :
Designing and presenting a concept of green packaging that is degradable and minimal.

Target:
Students of Tehran University Faculty of Fine Arts.

Brief:
Using biodegradable materials through the minimal design of student food packaging based on the sustainable and harmonious relationship of human-environment-packaging.

Client:
- Tehran University Fine Arts
- Vice-Chancellor of Tehran University

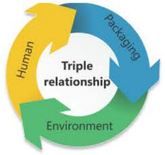
Challenges:
- Designing minimal green packaging and paying attention to the integrity principle of the whole product.
- Using accessible and recyclable materials with low energy of consumption for production.
- Optimal design of packaging according to the special criteria of the faculty environment.

Outcome:
Designing two products in the form of food packaging for the college cafeteria and also designing the packaging of Take-away snacks.

Research and Overview

Project Main Goals:

- Reducing the use of plastic in the university cafeteria
- Developing green packaging
- Using new packaging ideas to reduce environmental pollution
- Increasing social responsibility
- Attention to the symbiotic and harmonious relationship of the three in packaging design



Primary Research:

Why Green Packaging ?

Key benefits of green packaging:

- Saving consumables
- Use of recycled materials
- Waste reduction
- Increasing the possibility of recycling
- Clean production process
- Energy saving
- Efficient transportation
- Increasing the use of renewable materials

Materials used in green packaging:

- Degradable plastic
- Herbal plastic
- Recyclable products
- Alternative energy sources
- Polyethylene bags made from recycled waste and...

The four main methods of green packaging:

1. Packaging based on renewable resources: 90% of lactic acid is derived from starch, which decomposes in industrial compost environments within 9 months.
2. Packaging with biodegradable additives: Use of OXO and BIO additives
3. Optimizing packaging
4. Use of recyclable materials

Materials that are not used in green packaging:

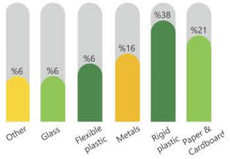
Plastics made from :

- PE
- Styrofoam
- Multi-layer packaging
- Polystyrene
- Fossil fuels and...

The amount of consumption of various materials used in packaging in the world :

In order not to face the widespread presence of plastic and other packaging that causes "white pollution" in our daily lives, we should think about confronting this bitter reality.

This design project aims to use minimal green packaging materials and focus on environmental protection.



- Since environmental protection is a global issue in the 21st century, paying attention to this issue in people's daily lives has become an important social ethic.

- In the middle of the green wave, the packaging discussion is a significant issue that includes a large family. Food packaging accounts for 70% of this industry.

Ideation and Development

Surveys Result

- **Goal**

The opinion of some potential users on how they prefer a green packaging for the college cafeteria.

Close The Loop !!

Interviews

- **Goal**

Getting to know more potential customers of the cafeteria and their different insights to be considered in the decision-making stage.

Based on the data obtained from the answers to the ***54*** questionnaires and ***5*** interviews and their analysis, the designer has found useful information in line with the design path.
The keywords of the design a can be considered to include the following:

Main design Key words

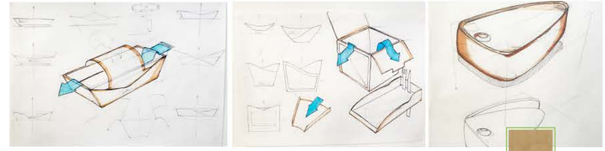
- Minimal design
- Recyclable materials
- Easy mass production
- Using available local materials
- Low Cost
- Integrity principles of the product
- Reduction of packaging waste
- Attention to competitive advantages

Target Group

- Students of University
- University professors
- Administrative staff

Prototype and Outcome

Creativity and ideation phase



Cardboard
As a main material

Final Idea

- A very simple design based on the principle of **folding paper** or cardboard
- The **intact/ usable remains** of this packaging can easily be used by art students to make **sculptures/ prototypes**
- Enthusiasts can be **creative and come up with ideas** on packaging , **just by having a simple** pencil.
- The possibility of direct recycling without the need for special equipment

Self-service container packaging for students

Snack Packaging for students

Project 3

Wearable smart laser therapy device

This design project was done as an academic smart design project.
*Special thanks to the help of the Moheb Kausar Hospital in the field of primary research.

Feb 2019
Project duration: 4 Weeks

Type of project:
Product design/ Smart design

Purpose :
Conceptual design of localized smart medical products that are durable, feasible, and also satisfying to use.

Target:
Referees to the physiotherapy and occupational therapy unit of the hospital who need laser therapy. Target age group 20 to 50.

Brief:
According to the main subject of the design presented by the teacher of the subject and also the target group, the final project of the design includes an efficient indigenous laser therapy device that performs well compared to imported samples.

Client:
- Startups companies
- Ministry of Health Research Unit

Challenges:
- Smart product design with full consideration of global standards
- The design of the product should be completely consistent with the anthropometric dimensions
- It is important to be able to use it in different places and to keep the design up-to-date

Outcome:
The design includes a smart wearable laser device with the ability to be used in clinical and non-clinical environments.

Research and Overview

Design process plan

- Research
- Market Segmentatic
- Mind Map
- Interview
- Standards Factors
- Teachback
- Mood Board

Creating Design Goal

- Product Concept
- Biomimicry
- Sketching
- Ergonomic/ Anthropometric Analysis
- User persona

Creating Product Ideas and Concepts

- Dirty Modeling
- C-Box
- Weighted Objectiv Method

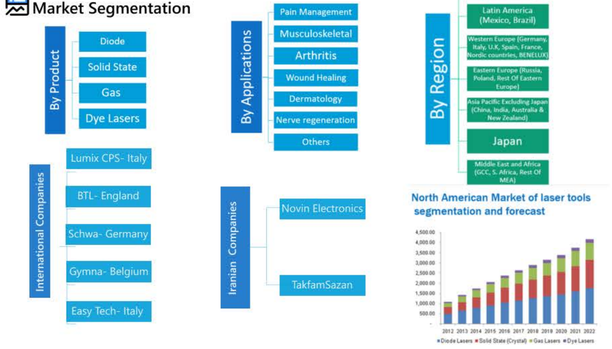
Decision and Selection

- Product Simulation: Rendering
- Detail design
- 3d print Modeling and Making Model
- Algorithm/ instruction of product

Evaluation Of Product Features

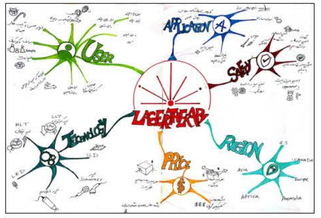
Primary Research

Market Segmentation



Mind Map

At this stage, the Mind-Map was divided into several main concepts and then different sub-ideas, and this work led to the visualization of ideas and classification of information.



Interview

This stage includes an interview in the form of 20 questions with Mrs. Tardest, who has a high experience in the field of laser therapy during several years of activity, in the physiotherapy department of Moheb Kausar Hospital.

Standards Factor

The main standard factors of laser devices are categorized in the form of the following:

- Relevant FDA regulations
- Special features of devices in terms of performance
- Prohibited use
- Research-based general guidelines for device dose selection
- General treatment protocols
- Eye safety while using laser devices

Teach back

This step was done in order to communicate directly with a skilled and expert person to exchange information. So that the designer, as an amateur, will get to know the laser therapy process completely with the physiotherapist during a two-hour session. Going through this stage will give you a very good experience in the field of laser physiotherapy.

Ideation and Development

Mood Board

This stage has been done in order to collect and put together the various information that came to the designer's way during this phase. This helps in better categorization and summarization to organize the main keywords.

Product concepts

Biomimicry

To get inspiration from nature and its elements, different forms and mechanisms were mentioned. Based on the research and information obtained, bio-morphological and bionic analysis was proposed in the lizard.
The main purpose for choosing it was its special property of adhesion to surfaces. Because in order to design a device that is not attached to the body through industrial adhesives but by itself, a significant point was considered in relation to the ideation stage related to the design project. This led to a new concept for the project.

Ergonomic / Anthropometric Analysis

In this step, the anthropometric dimensions of the desired product were extracted. Also, the dimensions and size of the product have been determined according to anthropometric data. The influencing parameters at this stage include dimensions, user, materials, safety.

Part	Material	Reason
بدنه	ABS	انتقال حرارت پایین
"	"	ماندگاری بالا
"	"	جلوگیری از لغزش
"	"	ایمنی بیشتر
چراغ	PC	انتقال حرارت پایین
"	"	ضد شوک
"	"	شفاف
"	"	مقاوم به ضربه
دسته	کش سیلیکونی	راحتی
"	"	امکان استفاده برای تمام کاربران
"	"	ضد حساسیت
"	پارچه برزنتی	دوام
"	"	ایمنی بالا

Product Name	Target Group	Age	Recommended Length	Product Length	Recommended Width	Product Width	Recommended Height	Product Height
Tri-Part	Men/Women	Adults	≤12 cm	10 cm	≤12 cm	10 cm	≤3.5 cm	3 cm
Belt	"	"		20 cm		12 cm		1.5 cm

Functions	Interface	Safety
کلیک کردن دکمه	USB	فرم مثلثی شکل
تبودن گوشه‌های تیز	LCD	اسکرول کردن کلید تنظیم
بستن قفل	Mode Button	کلید خاموش اروشن دستی
کشیدن کمربند	Power Button	

User Personas

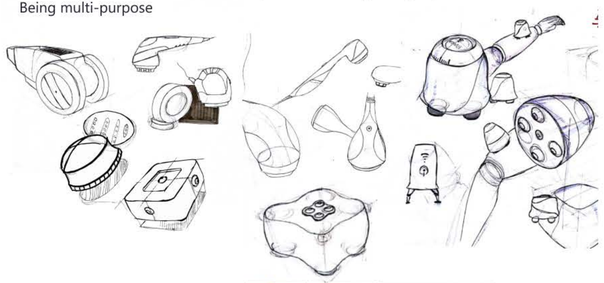
The design and implementation of the persona was done due to the better understanding of the users' behavior. For this purpose, three users, each with different characteristics and topics, have been considered.

Prototype and Outcome

Sketching

Concepts based on the following main factors like :

User- friendly, Coordination with the target group, Up-to-date design, ease of use, Technology, Can be used in different parts of the body, The proportion of facilities with cost, Being multi-purpose



Dirty Modeling

The purpose of this rapid models was to better understand the initial design ideas as well as better analysis and evaluation.

Weighted Objectives Method

This stage was done during a 2-hour meeting with 5 people. After presenting the ideas and a brief explanation of each one, try to find the right place for each idea and the results are shown

فاکتورها	وزن	گانسپت ۱	گانسپت ۲	گانسپت ۳
جذابیت برای کاربر	۲	۶	۶	۷
هماهنگی با سابقه گروه هدف	۲	۷	۸	۵
به روز بودن طراحی	۲	۸	۸	۶
سهولت استفاده	۵	۶	۸	۷
تکنولوژی	۲	۹	۷	۲
قابلیت استفاده در نقاط مختلف بدن	۲	۷	۹	۲
تناسب امکانات با هزینه	۲	۵	۸	۶
چند منظوره بودن	۲	۱	۷	۱
#Total score		۱۷۵	۱۱۸	۱۲۲

Final Idea

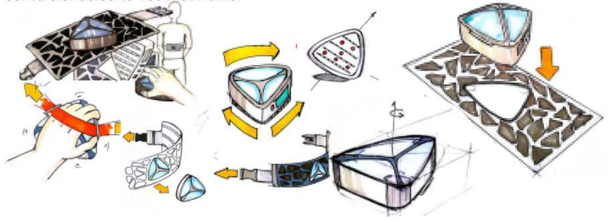
This product is in the form of a portable medical laser device with a special cam brand to increase the ease of use in different areas of the body. This device consists of two separate parts.

The first part:

This section benefits from LED and SLD technology. And for this purpose, it has the ability to penetrate the surface and middle tissues to relieve pain.

The second part:

The special belt is designed for use in hard-to-reach areas with geometric elements. And also a separate strap for use in the required places such as arms and forearms. The purpose of designing this product is to use medical laser devices in medical centers andalso to use it at home.



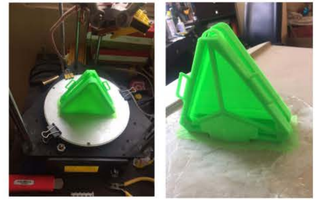
Product usage algorithm

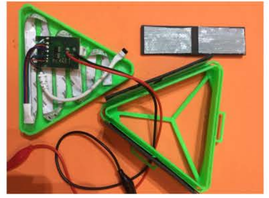
This stage was done during a 2-hour meeting with 5 people. After presenting the ideas and a brief explanation of each one, try to find the right place for each idea and the results are shown below:

3d prınt Modeling and Making Model

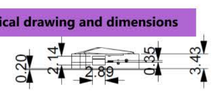
After 3D design in Rhino software, the product model is 3D printed with PLA material. To start the LEDs, programming was done on the Arduino electronic board.

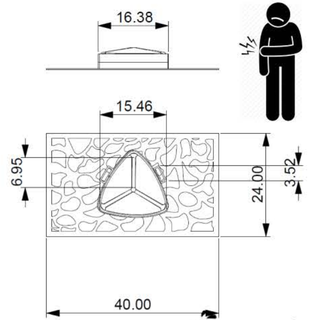
In the prototype, due to the large number of LEDs and the need for an amplifier in the circuit, LED Driver was used. This has been done to better communicate with the product and evaluate it better.

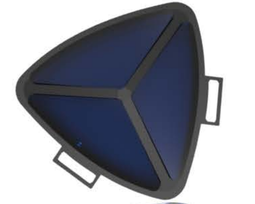


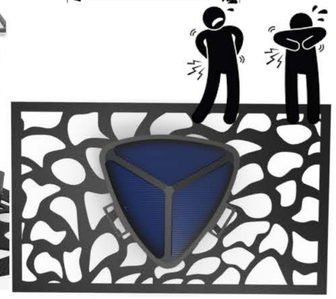


Technical drawing and dimensions









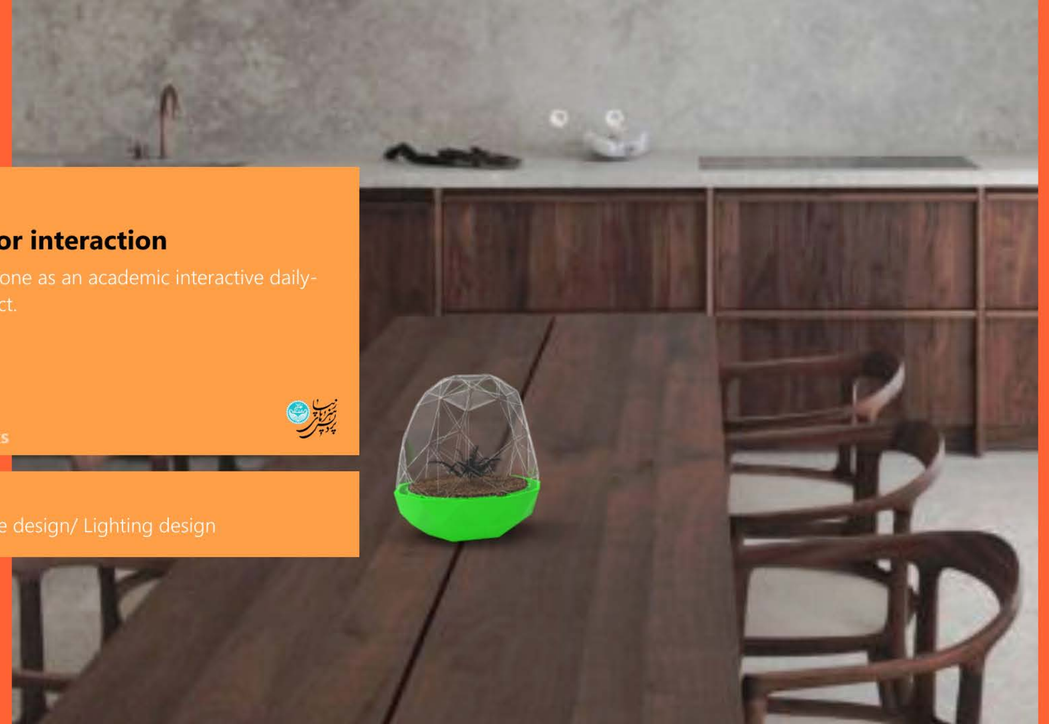
Project 4

Lighting design for interaction

This design project was done as an academic interactive daily-use product design project.

Jun 2019
Project duration: 2 Weeks

Type of project:
Product design/ Interactive design/ Lighting design



Purpose :
Conceptual design of an interactive daily-use product of personal choice , which has a higher level of efficiency for the user compared to existing similar non-interactive products. Due to personal interest, interactive lighting products have been chosen as the design theme.

Target:
The target market is a group of customers with the same interests in using interactive products without a specific age group with a high average income in the community. It is considered that they can communicate effectively with simple smart products.

Brief:
An interactive lighting product that creates a pleasant experience by creating added value.

Client:
- Start-up companies
- Lighting equipment manufacturing companies

Challenges:
The main challenges include the following:
- Creating an attractive scenario for the user
- Proper performance of the product and creation of added value in the product
- Creating a new positive experience against the product

Outcome:
An interactive lighting product in the form of a natural plant container and creating a pleasant experience through interaction as a completely personal user product that is economical.

Research and Overview

Phases of the general process of product development

- **Planning:** Marketing, Design, Production, and other duties.
- **Concept development:** Marketing, Design, Production
- **System level design**
- **Detailed design**

*In this design project, the goal was only to complete phases 1 and 2 as a predetermined schedule.

Phase one: **Planning**

Marketing: Product project type category, Competitive Strategy, Determining the market opportunity
Examining market segments
Designing: Evaluating new technologies with a focus on product architecture
Build: Identify production constraints
Other Duties: In this section, the objectives of financial planning and general management of the research are not addressed. And only the up-to-date and required technology review has been done.

Marketing

1.Product project type category
Improve the experience of using similar existing products
→ Trying to make changes in order to interact more and experience the pleasure of using and competing with other similar products.

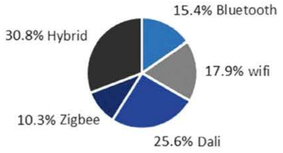
2.Competitive Strategy
Focus on the customer
→ Examining the needs and preferences of current and new customers and providing new features

3.Market Research
- *Determining the market opportunity*
- *Market Segments*

→ Business model design, Global LED market segments

Review of global market segments

Automotive lighting market shares 2015



Global wireless smart lighting market share breakdown 2015

Top products on the market

Business Model Canvas

The topics raised in the business model canvas by the designer can be divided into three main categories:

- The central part of the canvas:

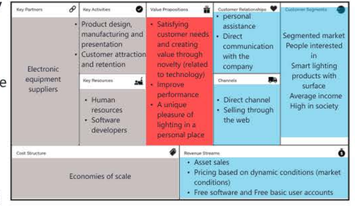
discussions about value creation and business value proposition

- The Left Area:

Discussions and concerns about the core business space

- The Right Area:

Discussions and questions related to customer and customer communication

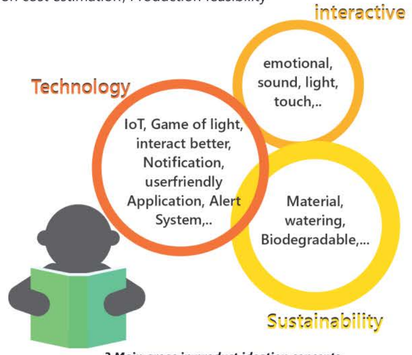


Phase Two: **Concept development**

Marketing: Gathering customer requirements, Identification of leader users, Identify competitive products

Designing:
Checking the feasibility of product concepts, The importance of lighting and its profound effect on human performance and behavior, Making and testing experimental samples, Development of industrial design concepts, The issue of lighting design based on applications of this technology in industrial design

Build:
Construction cost estimation, Production feasibility

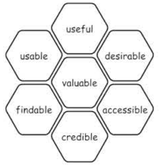


3 Main areas in product ideation concepts

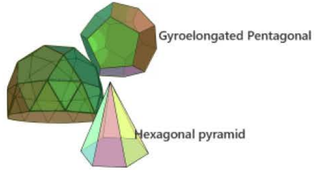
Ideation and Development

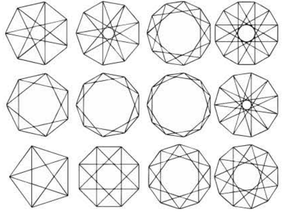
Key Words

Interactive lighting, Houseplants, Technology, Pleasant experience, The effect of light, Light play, Mode change, The price is right



Sketeches





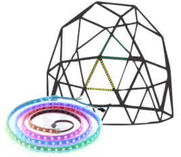
Final Concept

Features

- Using Internet of Things technology (IoT)
- Design suitable for all types of personal space
- Using available materials (ABS/Plexiglass)
- Reasonable cost
- Application design
- Use of batteries and municipal electricity
- Promoting social responsibility in the maintenance and preservation of plants
- Smart way to better maintain houseplants and interact with a natural phenomenon

The recommended material for the lower part of the final product is ABS. The reason for choosing the appropriate resistance and also the protection of the technical and electronic parts is the best option available.

The recommended material for the middle and upper part of the finished product is plexiglass which has light weight and good resistance and spreads the light reflected from the LEDs well in the space.



RGB LEDs

LED filaments have been used in the prototype for quick implementation and presentation of the initial product concept.

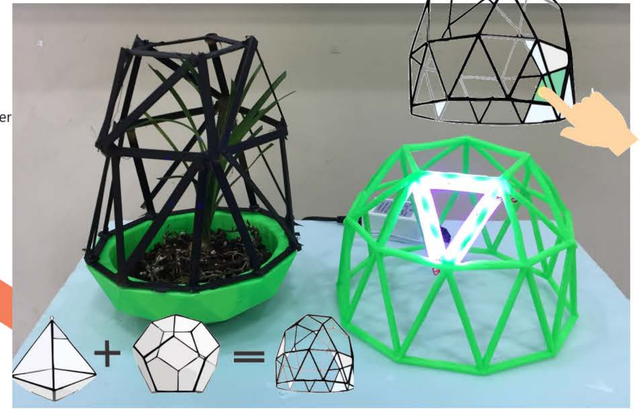
The possibility of turning on desired spaces by the user.

The ability to adjust the amount of light distribution during the day and night according to the user's opinion

Ability to check soil moisture level and battery life and warn the user in the form of notification when its necessary

The possibility of turning on and off lighting in two modes of single-color lighting or multi-color geometric pattern lighting

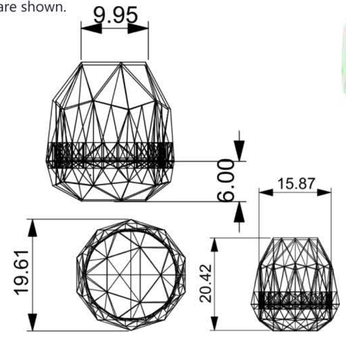
Protoype



Prototype and Outcome

Technical drawing and dimensions

In this section, the dimensions and sizes of the final product are shown.



Part				
Part Number	Part Name	Material	N	Manufacturing Method
1	Basic Part	ABS	1	Injection/3D Print
2	Tri Parts	Plexi Glass	20	Injection

Part			
Part Number	Part Name	N	Min Part
Up Side			
U1	Base Structure	1	Yes
U2	Tri Parts	20	No
U3	RGB LED	1m	No
U4	Touch Sensor	20	Yes

Part			
Part Number	Part Name	N	Min Part
Accessories			
A1	Charger wire	1	Yes
A2	Battery	1	yes
A3	Adaptor	1	yes

Part			
Part Number	Part Name	N	Min Part
Down Side			
D1	Base Structure	1	Yes
D2	Soil	100 gr	No
D3	plant	1	yes
D4	USB Port	1	Yes
D5	Power Button	1	Yes
Inner part			
I1	Battery	1	Yes
I2	Wire	-	No
I3	Electronic Board	1	Yes
I4	LED	1	yes
I5	Humidity Sensor	1	yes
I6	Conductive Sensor	1	yes
I7	Light Sensor	1	yes

DFA and DFM

DFM stands for Design for Manufacturing and DFA stands for Design for Assembly. And their difference is in their special focus.

DFM focuses on creating guidelines that are easy to manufacture and cost-effective. DFA focuses on creating guidelines to reduce the number of components and parts required.

Project 5

Strategic design of Se Nan company

Cooperation between Tehran University of Fine Arts and Se Nan Company in the form of short-term internship.

Sep 2020
Project duration: 6 Weeks

Type of project:
Strategic design

Purpose :
Strategic analysis of the well-known company **Nami Nik Nahad (Se Nan)** and its best-sell product

Target:
Consumers of bulk and semi-bulky breads that are produced industrially

Brief:
The internship course was carried out on the topic of the strategic design of a prestigious Iranian brand under the supervision of Se Nan Company. The main purpose was the strategic analysis of the company and its best-sell product in the market. According to the obtained information, suggestions have been presented for the company at the end of the project.

Client:
- Nami Nik Nahad (Se Nan) Company

Challenges:
Analyzing the strategic design of Se Nan company and one of its best-sell products in the Iranian market during a 6-step process. Obtained information from the output of this process must be properly collected and analyzed. The final proposals should be effective and based on the company's main values and vision.

Outcome:
Analyzing the strategic design of Se Nan company and one of its best-sell products in the Iranian market during a 6-step process. Obtained information from the output of this process must be properly collected and analyzed. The final proposals should be effective and based on the company's main values and vision.

Research and Overview

The stages of the design process include 6 parts, which are:

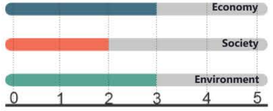
1. Introduction and evaluation of organizational expressions
2. Environmental analysis of the company
3. Environmental analysis of the main product
4. Perceptual map
5. Competitive position analysis
6. Strategic Design

Brief introduction of the company:

Nik Nahad Food Industry Company is the first and only industrial bread producer in Iran with a production capacity of up to 150 tons per day.
Se Nan is prepared and produced with a mixture of available wheat flour, whose characteristics are approved by the food department of the Dutch Industrial Group (Kak). Used flour is controlled and stored in mechanized silos in terms of heat and humidity.

Analysis and evaluation based on the triad of sustainability:

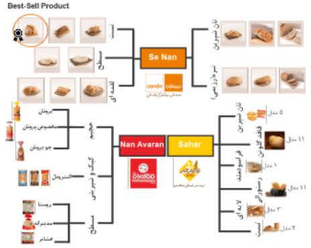
Economy, **Society**, **Environment**



The Se Nan company's products and two main competing companies :

The products of Se Nan company and two other top companies with the names of Nam Avaran and Sahar are categorized as two main competitors based on different types and models.

Golden toast is considered the chosen product of this company due to the amount of demand and sell.



Environmental analysis of the company:

Strengths

S1: High production capacity up to 150 tons per day
S2: Having dedicated transport vehicles for distribution
S3: Sufficient warehouse to store manufactured products
S4: is the only fully automatic industrial factory to date
S5: Buying and storing spare parts for factory machines
S6: High variety of production (15 separate production orders)
S7: High investment volume

Weaknesses

W1: Not providing customers' needs completely
W2: Not using the full capacity of the factory
W3: No export to other countries
W4: Relatively few advertisements

Opportunities

O1: Removing barriers to global trade and being present in the international market
O2: Unmet customer need
O3: Government cooperation to support the "Bread City" project
O4: Increasing investment in private sectors
O5: Industrial production of other agricultural products such as rice bread from rice

Threats

T1: Moving away from the customer's focus
T2: Increase in distribution cost
T3: Iranian taste preference for traditional bread over industrial bread
T4: To the misdirection of cultural actions in the direction of culturalization of industrial bread consumption
T5: Not having enough capital to keep the production line active
T6: Occurrence of embargo or agreement problems
T7: Colorful presence of competitors in other provinces

Environmental analysis of the best-sell product:

Strengths

S1: Use of whole and enriched specialty flour (high nutritional value)
S2: Antibacterial packaging
S3: Complete baking process which makes treatment easier
S4: Appropriate packaging graphics to inform the customer of the nutritional value
S5: Soft texture and low amount of waste
S6: Suitable for the diet of people who have stomach or intestinal problems
S7: Exclusive supply of raw materials

Weaknesses

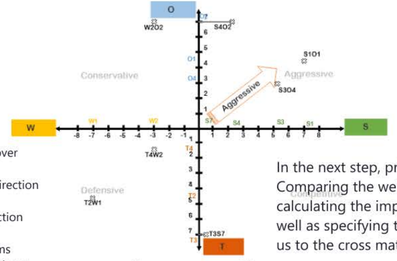
W1: Failure to fully meet customer needs
W2: Lack of proper advertising to make customers aware of the advantages of industrial bread compared to traditional bread

Threats

T1: Presence of similar products in the market
T2: Moving away from the focus of customer attention
T3: The price of raw materials and the lack of access to raw materials
T4: Iranian taste preference for consuming traditional bread over industrial bread

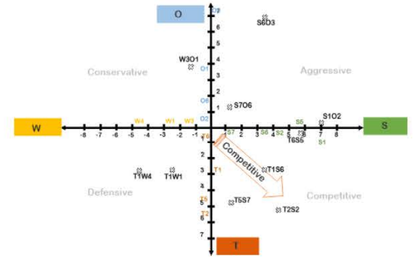
Opportunities

O1: Increasing the tendency of people to consume food with nutritional value appropriate
O2: Increasing the consumption of industrial bread
O3: Expansion of distribution in other provinces



Company cross matrix

In the next step, prioritization is done by the AHP method. Comparing the weight of the points on the 10 scale and calculating the impact coefficients (normalizing the scores) as well as specifying the relationship between the categories leads us to the cross matrix based on the scores.



Product cross matrix

Strategic suggestions for the company:

- Considering the unmet need of the customer in full form, it is suggested to expand the company and use all the capacity of the factory for more production
- The industrial production of other products with agricultural products creates a new target market and Se Nan Company becomes a pioneer in this field.

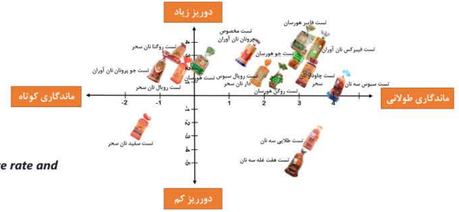
Strategic suggestions for the company:

- Due to the high demand for the company's top product, the expansion of distribution in other provinces of Iran will be a positive and profitable event.
- More advertising in order to raise awareness of the benefits of industrial bread will increase the per capita consumption of industrial bread and the growth of this industry.

Strategic analysis

In this section, taking into account all the samples of similar domestic/foreign products available in the Iranian market, in comparison with the selected product, scoring was done based on three parameters of shelf life, bread texture, the amount of leakage.
According to the collected points, a distribution chart can be made The distribution of samples based on their scores can be seen below.

Scatter distribution based on shelf life and texture of bread



Scatter distribution chart based on waste rate and shelf life

Scatter distribution chart based on bread waste rate and texture of bread

The quantity and quality of different models of selected products and competitors separately during a period of 10 years:

According to the number of product sales and the amount of demand from customers in the Iranian market over a period of 10 years, Se Nan Company is in first place compared to other competitors.

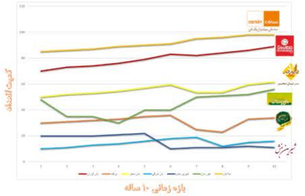
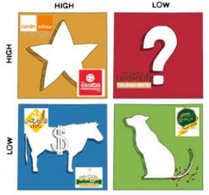


Chart of quality status and quality of Se Nan and competitors

Ideation and Development

BCG Matrix (The Boston Consulting group's product portfolio matrix

Based on the business position and the share that Se Nan Company has in the industrial bread market of Iran.
And also because the top and most popular products of this company are at the peak of their life and considering having enough capital to maintain their share in the market, this company It occupies the position of the **stars** in the model of the Boston Consulting Group.



Examining the company's situation in terms of specific marketing strategies

The current stage of the best-sell product life cycle

According to the examination of the competitive situation and life stages of the selected product (Golden test of Se Nan), its position is in the second stage (growth stage) and it is passing the way to reach the third stage (maturity stage).

BCG positions throughout the product life cycle:

Determining the appropriate strategy of the company to develop the chosen product based on Ansoff's competitive strategy model:

According to the findings and based on the strategy of Se Nan Company, market development is suggested to reach new markets.
This strategy, while not neglecting to move in the direction of diversity and product development to control competitors and influence new markets, can increase sales, attract new customers and be profitable by relying on product supply research in other provinces.

Strategic proposals:

According to the findings and based on the strategy of Se Nan Company, market development is suggested to reach new markets.
To develop the market, a new target market and new customers should be created. This work can be done in the form of the following design:

- Design for children
- Design for export
- Unique bread design for each customer (custom)
- Designing unique packaging

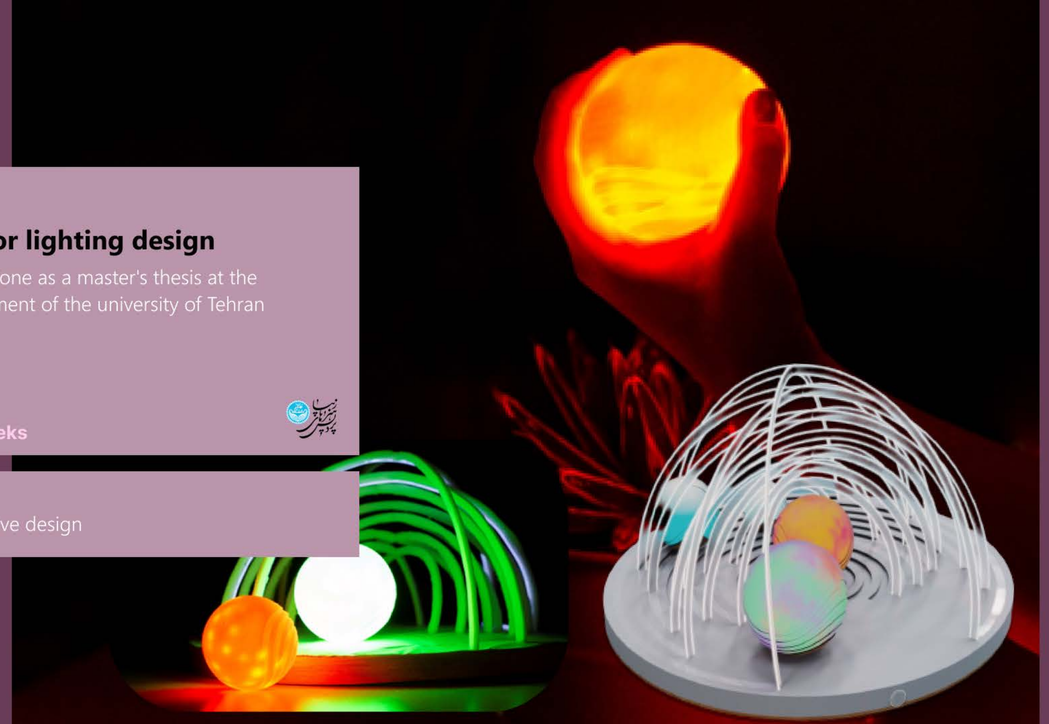
Project 6

Interactive interior lighting design

This design project was done as a master's thesis at the Industrial Design Department of the university of Tehran

Dec 2020
Project duration: 14 Weeks

Type of project:
Product design / Interactive design



Purpose :
According to the increase in the presence in personal space, the importance of light and its effect on human performance and behavior the issue of designing interactive lighting based on technological applications has been considered.

Target:
The statistical population in this research is 184 people, people between 20 and 35 years old, who were selected as available sampling from among 262 people who were questioned through an online questionnaire.

Brief:
The product can focus on the user's needs and interests and accordingly influence the user's feelings when interacting and communicating with the user through one or more interactive functions.

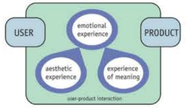
Client:
- Start-up companies
- Lighting equipment manufacturing companies

Challenges:
The main challenges include the following:
- How to use interactive lighting in interior spaces to enhance people's life experience ?
- How are new technologies used in lighting tools effectively in creating a new user experience?

Outcome:
Creating a pleasant experience by interacting with the lighting product, as well as remote control and personalization of the light source, are important influencing factors of this product.

Research and Overview

The interaction between the user and the interactive product needs to consider a number of dependent components, including the concept of use, the type of work, and the type of user, which optimizes the interaction between the product and the user.
Also, the form and type of interaction design should be in accordance with usability goals.

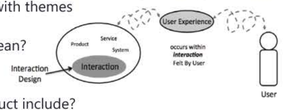


The **double diamond model** is considered the chosen methodology. The main factor is this model will consider the **human-centered** themes in its updated model, and will achieve the goals of this design project as best as possible.

Creating design goal by 5WH technique :

By using this technique and defining appropriate answers in line with the design project, it was tried to analyze the design problem properly so that the designer can get a proper understanding of all its aspects. Questions with themes

- Who will use the product?
- What does interactive lighting design mean?
- When will this product be used?
- Where is the product used?
- What goals does the design of this product include?
- .....



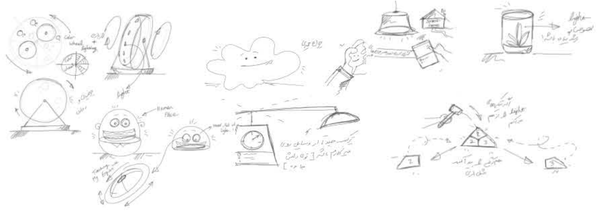
Ideation and Development

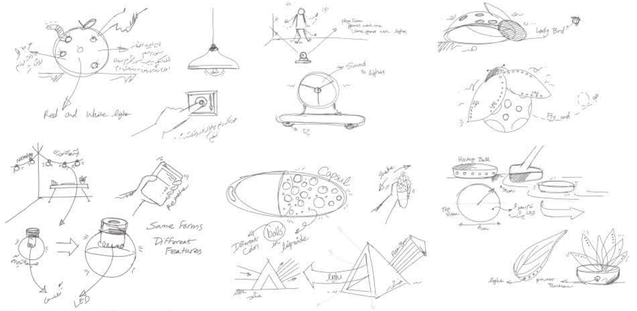
Mind Map : This technique controls the inputs. Collecting thoughts taken from the issue and visualization of relationships between related subjects and fields have been used.

it has been done in two stages. In the first stage, the subject of the design problem is placed in the center of the map, and the fields related to it and the subsets of each field are placed around that figure.
In the next step, for a better understanding of overlaps and connections between different topics, the relationship between them is marked with red markers.

Brain Storm and Fast Visualization

This step was done and recorded during a 120-minute meeting of the team consisting of 5 designers. The output of which is the drawing of ideas during group brainstorming. These designs include quick sketching of ideas with enough detail to convey each idea.





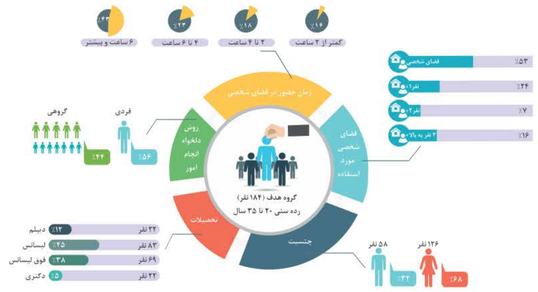
Exploratory Research

At this stage, it is necessary to focus more on the scope of the design problem, specifying the target group and understanding the nature of the end users of the product and other things such as their interactions, challenges, needs, and demands in their daily life.
The designer has used the following two techniques to obtain this information :

- Questionnaires
- Follow the object

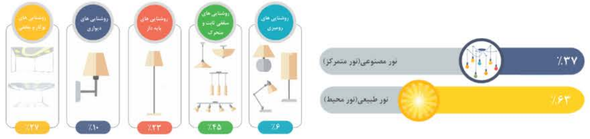
Questionnaires

This questionnaire was shared with more than 1000 people under the title "Interactive indoor lighting to improve life experience". Among them, 495 people have visited the questionnaire and among them, 262 people have given full answers. The results are shown in the infographic below.



Cognitive information infographic of the target group

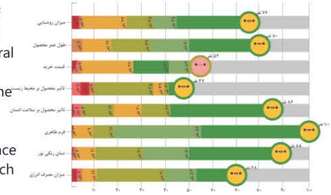
After obtaining the cognitive information of the target group, questions have been asked to identify the tastes and topics related to their personal space, such as decoration style and color palettes, which are their favorites. The answer of the target group to these two questions is shown in the figure below.



Distribution of the target group's interest in choosing types of lighting products for personal space and interest in the light source (artificial/natural).

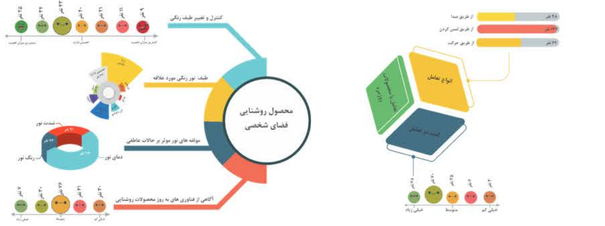
In another part of this survey, a part of the characteristics related to a lighting product was asked in the form of several short questions in a row to determine the importance of each according to the opinion of the target group.

The distribution charts of the importance of each feature were placed next to each other in a general chart, which can be seen below.



Distribution of the importance of different lighting product components

Another part of the question deals with issues related to the personal space lighting product, including the importance of changing and controlling the color spectrum, the color of the favorite light spectrum, etc. The findings obtained from this section are shown in the figure below.



Infographic of topics related to personal space lighting products and the importance types of interaction

Examining people's responses to this question and describing their functional interests and other topics of interest related to the lighting product, some keywords were common and repeated many times.

In order to better analyze and understand the results of qualitative data analysis, the elements of interest and their frequency are shown in the following diagram.

Favorite elements in lighting products according to the target group

Follow the object

This technique was chosen as an ethnographic method with the aim of gaining deep insight into the use of everyday lighting products as well as the behaviors formed by people around them.
By observing lighting products, in different times and contexts, a comprehensive insight is obtained on how to use or not use them at different times. For this purpose, **10** people were randomly selected.

Distribution of randomly selected places to perform the technique in Tehran city

Image Boards

In order to reach an interpretative impression of the findings obtained from the research conducted in the previous phase, this phase, this technique was used as the first step of ideation phase

.

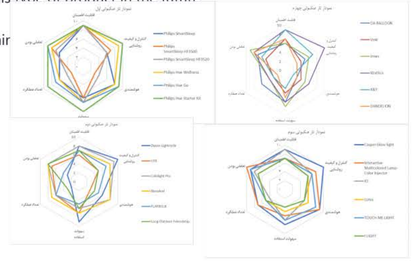
It is used as a factor to create more focus and establish a more favorable communication for the designer, as well as a visual reminder and to inspire in the ideation phase.

Market Trend Analysis

The main purpose is to gain insight in relation to the scenario and identify the dominant characteristics of the market, and consumer preferences, as well as collect data and market behaviors to predict the strategy of this type of product in the future.

20 items of lighting products are examined and compared with positionir
The listed components are as follows:

- Reliability
- Lighting quality and control
- Intelligence
- Ease of use
- Number of functions
- Interactivity



Personas

This technique is used in the more accurate summarization of the information collected through exploratory and field research to identify and reach behavioral patterns in the form of characterization at this stage of the design process.

Different aspects as well as goals and behaviors of people, the following personas are considered as a human interpretation throughout the process.

Criteria and sub-criteria necessary

The main criteria that have been considered in the design of this lighting product are in the following category:
Aesthetics, Functional and technical, Ergonomics, Life Experience, Economics, Environment, Interactions

Brain Storm

After defining the design criteria, a brainstorming technique was used to create design ideas. In a 60-minute meeting with the presence of 4 designers, according to the considered criteria, the brainstorming session was held in two stages.

The first stage is to produce initial ideas and the second stage is to further develop ideas and provide details to combine some concepts.
The first stage is to produce initial ideas and the second stage is to further develop ideas and provide details to combine some concepts.

Sketeching

Prototype and Outcome

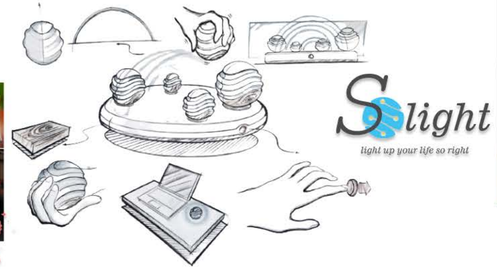
The best idea

A great idea is to have multi-piece interactive lighting. The topic of the solar system and the placement of the planets and the sun together in the form of a collection was chosen as a suitable platform for the development and presentation of the final design solution.
Considering the design criteria, several concepts have been obtained with this chosen topic.

Story Borad

After evaluating the ideas the designer reaches the top 3 ideas. In order to create a better connection with the idea and also to achieve a deeper insight into the interaction of the user and the products and finding effective factors between the user and the product, and the platform and design context.

Final designs of the top idea named **Solight:**



Rapid-Prototyping

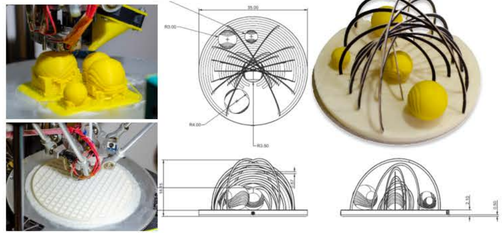
After building three interactive samples, each sample was provided to 3 different users. During the interaction with the product, the behaviors and interactions that took place were examined and observed. And people's feedback regarding the use of samples was considered.
The third sample was the most popular among the three samples. Therefore, it was chosen as the **best idea.**


Idea N.1

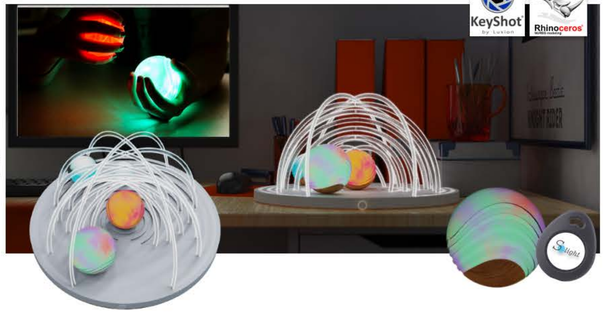

Idea N.2

Idea N.3

Rapid Prototyping od best idea



3D Product Design



Analyzes and features

Solight consists of a main body on which other parts of the product, i.e. circuits and smart balls, are placed. Four smart balls of different sizes are intended for it. The main body is light gray and the lower part of the body and the balls are made of wood.

The features of this product briefly include the following:

- **Wireless charging of Solight smart balls** through the main body
- Controlling the balls and the main body by t**he Solight application**
- Specific programs are considered in App by default, which gives the ability to adjust and change personally to users as well.
- The user can enter the application and **choose a favorite color spectrum** from among the considered spectrums. If more than one color item is selected, the result of all the selected spectrums will be displayed in the sphere as a gradient.
- With **three direct hits on the body of the balls**, the program activates the **color change** of the Smart balls. And after the light is dimmed in the sphere, it can change the color of the light spectrum with each hit.
- When **the balls collide with each other, the colors of the balls are mixed** with each other and the color output is the combination of two colors.
- The smallest ball among the balls is suggested to the user as **a visual and audio reminder** and warning element. The user can **synchronize the daily tasks** calendar with the application.
- In the product packaging, four **RFID tags** will also be provided along with Solight. So that the user can **define a default program for each of the tag**s, and every time the balls are near the tags, they will automatically run the pre-defined program.

ball 1(yellow)+ ball 2 (blue)= ball 3 (green)

- Currently, three infrastructures can be used for this interactive lighting product:
- 1) Using Arduino "MKR hardware" and using "Arduino" Cloud service as a cloud service
- 2) Utilizing Blink hardware and Blink Cloud service as a cloud service
- 3) Using ESP8266 hardware and configuring the cloud service in a completely personalized way

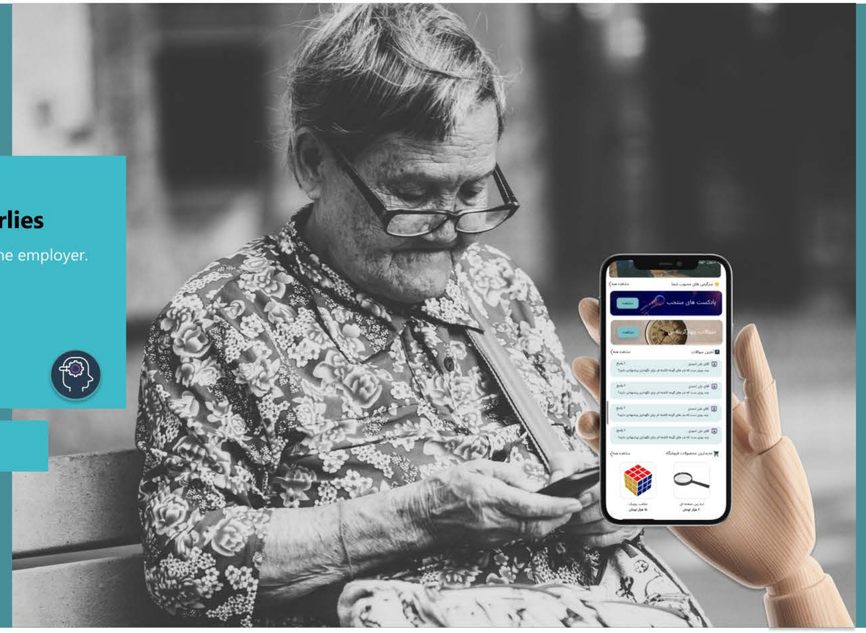
Project 7

Yad-Yar App to interact with elderlies

This design project was done as a direct order from the employer.

Jul 2021
Project duration: 8 weeks

Type of project:
Ptoduct design/ Digital Art Therapy



Purpose :
Designing an entertainment application to interact with people on the verge of old age with the main goal of having a positive impact on cognitive functions

Target:
The statistical population in this design project is people 50 years and older

Brief:
The isolation of the elderly from society due to age growth, suffering from everyday life, and distance from the virtual space, which is an unbearable need in today's world, especially in Iran. **Yad-Yar** is an application for people on the verge of old age with the aim of preventing the feeling of isolation and exclusion as they approach old age.

Client:
- Start-up companies
- Scientific Association of Gerontology and Geriatric Medicine of Iran
- Alzheimer's Association of Iran

Challenges:
- Designing a suitable platform through teaching and learning while interacting with each other
- Designing a digital platform based on the culture of elderly people and referring to their shared memories

Outcome:
The system designed for the very first time is provided for Iranian users in the target age group. It helps to keep the user active by encouraging the user to participate directly in the program and provide mental references, focus in mental files to have a positive effect on improving cognitive functions such as memory.

Research and Overview

Yad-Yar application design as a user-centered product has been done according to the user experience design process, which includes the following steps:

Empathize → Define the problem → Ideate → Prototype → Test

The information obtained in the first two phases are summarized as follows:
Since the design of the desired system and the considered perspective are interdisciplinary in the field of art, psychology, and digital media. The following items have been studied to help the designer to provide the best design solution that suits the needs of the users : **Cognitive Psychology, Brain memory, Cognitive abilities, Art Therapy, Relational, tactile and sensory features in digital media,**
Also for the proper definition of the design problem and the proper understanding of the path ahead, the most popular mobile applications and their features with the aim of improving cognitive functions have been examined.

Lumosity **Elevate** **Peak** **Memory Games** **Brain Tests** **Reception 24** **Macherapp**

The strengths and weaknesses of each program were examined. In general, support and technical problems and the lack of providing a specific program according to the needs of people in age groups are the basic issues of these kind of programs.

Interviews with experts
The result obtained with 4 experts related to the field of design is as follows:
This design system is in the field of providing **entertainment, services, and communication** between users with the aim of **improving the lifestyle of the group** for whom it is designed.
The placement of a section for the sale of products is one of the secondary features that were determined after conducting user research, needs assessment, and its dimensions.
In the continuation of the process and by performing the standard techniques of the user experience design process, various aspects of the tangible and real product are considered.

Ideation and Development

Benchmarking

The continuous and constant process of measuring the products, services, and processes of a business with similar examples and modeling them improves performance and guides the designer in the proper direction.
In this part, 6 popular entertaining applications in the chart that improve cognitive skills of concentration have been examined in detail and tested. 3 of them were Iranian service applications in the field of health.

Personas

Hypothetical personas actually describe the interests, pains, goals, and behavior of a typical customer. This stage makes it easier for the designer to make targeted decisions about the design and development of products and services.

This stage has been done through user research and collecting qualitative and quantitative information including interviews and questionnaires from real users.

User interview

7 women between the ages of 50 and 65 were interviewed. They have been asked about their experience of using various entertainment/ service/online shopping applications on mobile and the challenges they face.
And also daily life, activities, interests, and crises that they faced physically and mentally after the age of fifty were asked.

It was observed that most people have not been able to adapt themselves to the leap of technology and the digital world, because the needs of this group have not been specifically met in the design of digital systems, which in the eyes of the majority have an understandable space.
The key phrases that help the designer in the continuation of the design process that people mentioned are given in the two images above, including daily life as well as virtual space, challenges, and advantages

Questionnaire

In order to complete the qualitative research that was conducted in the interview with users, a flat questionnaire titled "Knowing the needs of users after the age of fifty" was designed and provided to a wider age range of people. It was answered online by 90 people who were over fifty years old and live in Iran.

By considering the results obtained in this stage and combining them with the output of the interviews, it can be concluded that the purposefulness of the process is life passing by and the prevention of isolation of people who are approaching old age is a significant issue.
According to the answers in both quantitative and qualitative research, the following four factors are very important:
Communication and socializing -Having fun -Learning new skills - Transferring experiences and memories

Design Brief

Design's Goals

- Create targeted entertainment
- Improving the quality of life in line with successful aging
- Interacting by sharing experiences with each other

Project key outputs

Application provides targeted services and entertainment to improve lifestyle and cognitive functions.

Key Words

- Active aging
- Digital art therapy
- entertainment
- Mental discipline
- Targeted interaction
- Cognitive skills
- Improve lifestyle

They are people on the threshold of old age between 55 and 64 years old. They are literate and can normally use a smartphone. They are also healthy and do not suffer from cognitive errors.

This application is designed exclusively for Iranian users. It is user-friendly and it becomes a fun space for sharing daily activities based on the needs and interests.

Creative product features

It is needful to make sure that the design team is aligned with the demands and needs.
Therefore based on the evaluation of the obtained information, there are key elements containing the details of the project and summarizing and specifying the criteria up to this stage has been presented as a design brief.

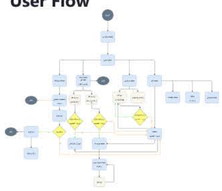
Information Architecture

At this step, the relationship between the customer and the product, all the channels have been examined in which the two interact with each other in detail to show the most important events and experiences, and how to meet the expectations of their users.

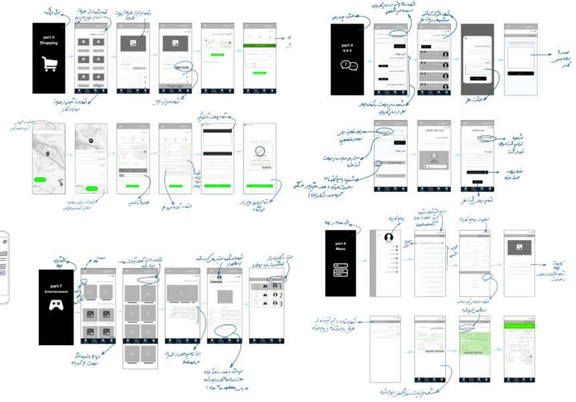
This work is carried out in five phases: Recognition phase, Research phase, Selection phase, Delivery phase, and follow-up phase.

User Journy Map

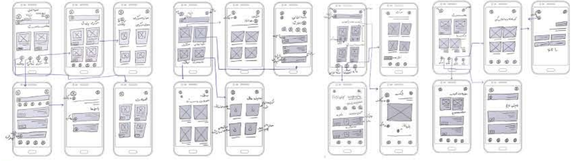
User Flow



At this stage, based on the pages considered for the application, the relationship between them is defined as a flow by the designer.



Wireframing



Prototype and Outcome

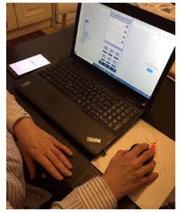
Low Fidelity Wireframe

Prototyping the basic skeleton of the application with little detail has been done in Adobe XD software.

Interactions

Usability Testing

4 users participated in the test and they were asked to think loudly and recount the things they encounter while doing processes.
The test results show that the users in general communicated with the different parts of the program.
Reliable features, presenting content in a concise, and reaching their goal by doing fewer actions have been mentioned.



Successful and unsuccessful scenarios have been discussed after passing this stage, and some ideas have been established for the next phase.

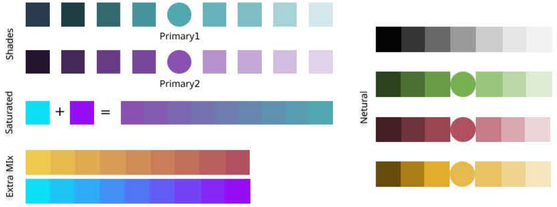
Yad Yar Application

Low Fidelity design

Design System

Logo Design

Color Style



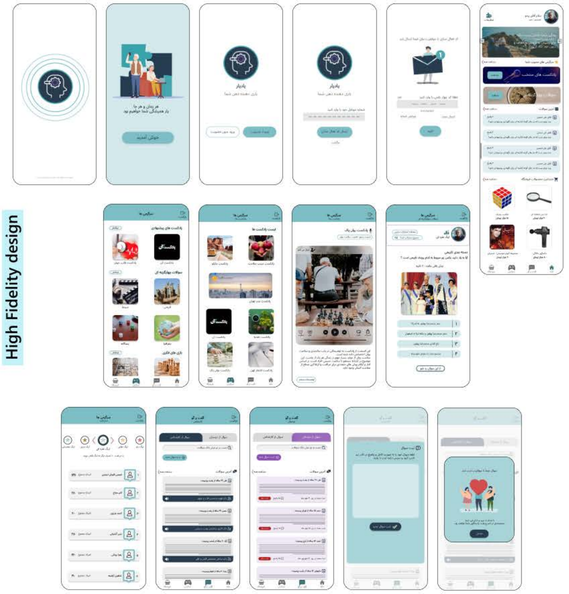
Typography

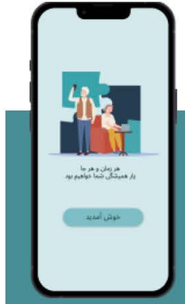
الف.آ Kohinoor font (فونت کوه نور)

Large Title,	20px
Headline,	16px
Sub headline,	14px
Call Out,	11px
Body,	14 px

Illustration

High Fidelity design





According to the user's research, the design priority has been considered for mobile devices.

An important principle that was always considered in this design is the design for user expectation.

Limited scrolling to prevent loss of needed attention for important actions

Design target group have special characteristics therefore there are many things to focus on, such as readability, using proper labels, clear language, and making important item pop,...

According to the serial position effect, users can easily remember the first and last items in a series best of all in the bottom navigation bar

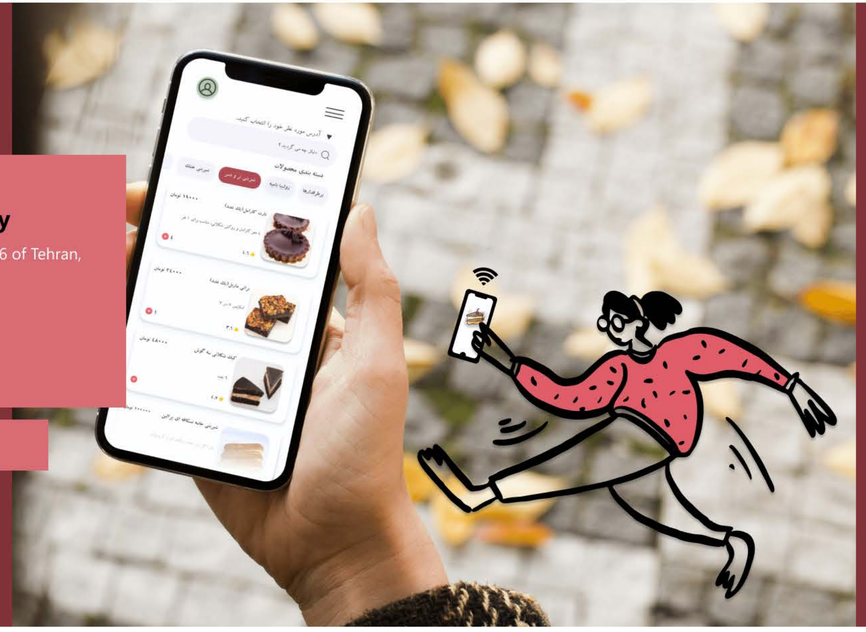
Project 8

Fard Tavakoli Pastry in Tehran City

This work has been done for a pastry shop in District 6 of Tehran, Iran.

Nov 2021
Project duration: 2 Weeks

Type of project:
UI/ UX design



Purpose :
Web/ Mobile design a for online pastry shop.

Target:
Customers of 10 main areas of Tehran.

Brief:
Minimal digital product design based on the nostalgic personality of the pastry shop

Client:
- Tavakoli pastry shop

Challenges:
- Redesigning the brand character
- Adding online-sales to the bakery business plan
- Prepare the first version in a short time to establish direct communication with customers and collect feedback in the first stage and apply the necessary changes and improvements in the second version.

Outcome:
Designing first version of two interactive and user-friendly products by maintaining the personality of the brand.

Ideation and Development

Introduction

This store has been operating for many years in one of Tehran's nostalgic streets and is one of the best in its category.It offers various products with mysterious and extraordinary recipes to many customers.
Generation after generation is loyal customers and this long history is the special thing about this local store.

As covid-19 has accelerated the growing desire to spend more time online instead of in-person shopping, Fard Tavakoli pastry is also interested in having an online store to create a better shopping experience for its customers.

Design System

Logo Design

Previous one

In the design of the store app, maintaining **the authenticity of the brand** like in customers' minds is contained. Therefore, their **logo** have been used with the least amount of change compared to its previous example.

New one

Changing the **main color** and **re-designing the interior elements** has caused the nostalgic atmosphere of the brand and having a design with **a retro flavor** compared to the previous design.

Color Style

Shades

Primary 1

Mix

Typography

الف.آ A Danesh (فونت دانش)

Large Title,	20px
Headline,	16px
Sub headline,	14px
Call Out,	11px
Body,	14 px

Illustration

Prototype and Outcome

App design

This is a real-time buying online pastry shop. Customers get a huge selection of products from different categories. App combines all of the leading features of the online store app for tracking orders and online Pay. They can use it easily to track their orders from Pastry to home.

Customers get an improved shopping experience where everything feels streamlined and convenient. The app takes care of everything, from tracking orders to handling gift cards. Also, it provides some handy insights into new types of products for different events.

Customers get push notifications on day-by-day trending products and speed through their checkout process too.

Loyal clients can easily reorder from their personal stores.

It provides a convenient environment where customers can speed through the checkout process, check out products, and see reviews too.

Customized product recommendations
It is based on the different types of products that users have bought before.

Quick access to favorite yummies, which can discover in-app without ever having to lift a finger.

Users want to use more native mobile apps, rather than relying on just web browsers.

Digital Photography..









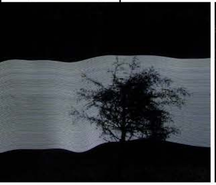
Portrait



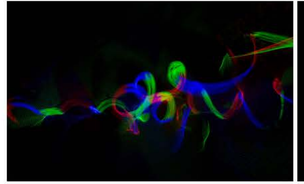
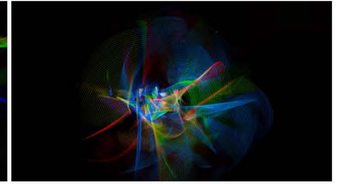


Advertising

Light Painting





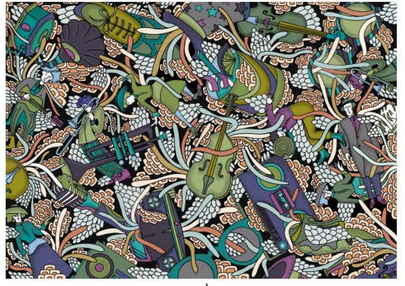
Night Sky

Volunteer visual designer at ***Tav*** which is a hand-made wooden small business. Tav's founder is a person with special needs.

Logo Design

Minimal Character Design

Digital Painting and Doodle Art:



Thanks for your consideration :)