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# **انات انتخاب انتخاب المحالية محالية محالي محالية مححاليية مححاليية مححاليية مححا**









**T**ight your night

Politecnico di Milano - School of Design A.Y. 2022-2023 MSc. Product Service System Design Course: Innovation Studio Uncertain Times

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## Hello! We're the Passengers



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# Process

The start of our project comes from a first phase of general research about the assigned theme: inclusion and energy inequality along with understanding energy consumption patterns in households, including ours.

We then identified a set of objects and needs - cooking, lighting, heating - that are highly energy intensive and essential. Our intuition was always around creating shared systems for these fundamental functions. Further research brought us to the public lighting system in Italy, that consumed almost twice more collective energy than other Europen cities and certain new policies that encouraged turning them off at night creating a partial black-out situation. This was our starting point for thinking about a shared lighting system that could help people during these dark times.

Preliminary research

preliminary

research in

order to better

understand

the theme

Uncertain point we

Times

DNERGENT THINKING

As a starting of concepts point we Hence we

developed our first ideas

First develpment

CONFROENTIMMENC

Scenario

Then we

converged

them into a

scenario

Onthe Contraction of the Contrac

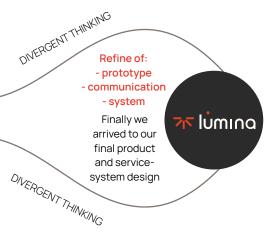
Testing ideas

DIVERCENTTHINKING

With a clearer idea of the context we were able to develop and test more coherent concepts

DVERGENT THINKING





#### Starting point:

From the beginning the assignment theme was: inclusion and energy inequality

ONERCENTTHINKING

The product: Final ideation of the product

#### 

# Scenario

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## Energy poverty: An overview

#### WHAT IS IT?

The inability to access clean, affordable and modern energy services is commonly known as energy poverty.

In less developed countries, it mainly deals with the lack of access to energy infrastructures including fuel. Whereas in developed countries, it consists of a complex and multidimensional issue which lies at the intersection between household income, energy costs and the energy efficiency of households' appliance: therefore it concerns more economic vulnerability than poverty.

In the context of European Union, where there is a heavy dependency on energy and electrical appliances, poor access to essential energy services -including lighting, cooking, heating and coolingleads consumers to this condition of uncertainty and deprivation.

#### IMPACT

Energy poverty can significantly impact various aspects of everyday life and lead to unmet basic needs.

An adequately warm space and access to electricity can significantly improve standards of living, lead to better health conditions, positively impact education and income, and can even increase job opportunities improving also productivity: it overall creates a positive impact on people's welfare. Studies have shown that energy-poor households are more likely to report problems regarding poor health and emotional wellbeing.

#### **EFFECTS ON URBAN LIGHTING**

Energy poverty is a widespread problem that has an impact on millions of people worldwide, referring as said to the lack of dependable and reasonably priced energy. Access to urban lighting is one aspect of energy poverty that is especially important. Residents may not be provided with safe or affordable lighting in many urban areas, which has a huge relevance on their daily lives. This situation can lead to a range of negative consequences, including reduced social engagement, decreased safety and security, and constrained economic opportunities.

People may find it challenging to participate in social activities at night and to move around safely due to a lack of urban lighting. For instance, it may be hard for individuals to meet up with friends, visit a restaurant or even just stroll through their own neighborhoods. Additionally, it influences even more those who conduct business and work after hours.

This may limit one's options for employment, particularly if depending on evening or nighttime work. The promotion of social interaction, security and economic chances in society is greatly aided by urban lighting. It allows people to engage with their community, access work and move around safely. It plays a significant role in fostering a sense of comfort, freedom and wellbeing in the neighborhood.

## Planned blackouts in Europe

Cities across Europe are testing energy conservation means by switching off public lights. In the year 2022, many cities across Europe were pushed to turn off their street lights at night, due to concerns of energy crises. Cities in Austria, Germany and Italy have reduced street lighting or turned off commercial signs. Spain made it mandatory for shops to turn off their lights at night. In France, 14 communes in the Val d'Oise department north of Paris are trialing measures to fully switch off public lighting at night. Local authorities estimate shutting off street lights for three-and-ahalf hours every night will help curb energy consumption by about a quarter.

These measures are backed by light pollution activists and scientists, who argue that excessive artificial light wreaks havoc on human health and the environment.

#### ENERG

Lights off and home working: Milan's new energy-saving plan for winter

Milan's mayor has unveiled new measures to save energy including switching street lights off earlier and closing some government offices on Fridays.

#### 0 🛅 🎽 👌

Published: 14 October 2022 16:17 CEST Updated: 14 October 2022 17:19 CEST







Officials in Berlin have switched off nighttime lighting on 200 monuments and public buildings, including the Brandenburg Gate.

#### Opinion | Mark Gilbert

#### The City of Light May Go Dark This Winter

Europe's energy crisis could mean blackouts once temperatures drop.



Will the lights stay on? Photographer: Anita Pouchard Serra/Bloomberg



## Milan 2030

Sam and Marta are friends since highschool and they have formed a very strong bond. They had a routine of going for a walk in the park every Friday after work to catch up about their lives.

It's been one month since they haven't been able to meet, due to the new policy about switching street lights off. Indeed, the government took this decision when the energy prices started to rise towards an unsustainable standard, which has affected people's ordinary routines. The lighting goes off from 7PM to 5AM in the morning, so citizens have to schedule their habits around this timing, in order not to be out during "pitch black" times.

Sam and Marta are already tired of this situation since the only thing they do is go to work and back home for the rest of the day, with not much leisure time. They want to get back to their weekly catch-ups, but they don't know how to accomplish that.

## What does it mean to live in the dark again?

#### PROS

#### **Melatonin Production**

The main function of melatonin is to provide the body with information on the length of day and night, by acting as a transducer of light; it is defined as a sort of "biological clock", which allows our body to adapt to the surrounding environment.

#### Prevents light pollution

It refers to the presence of unwanted, inappropriate or excessive artificial lighting. Light pollution leads directly to further environmental chemical pollution due to excess energy production, also unnecessarly increasing global warming

#### Prevents insect apocalypse

The causes of this event are linked to pollution, land consumption, climate change, as a new research brings to light another: ALAN.

The acronym stands for "Artificial Light At Night": This phenomenon creates a lot of problems for insects, especially those nocturnal: fireflies struggle to find their partner, many moths die against lamps and too much light makes any insect species an easy prey because it is clearly visible to birds, bats and other predators.

#### CONS

#### Affects local businesses

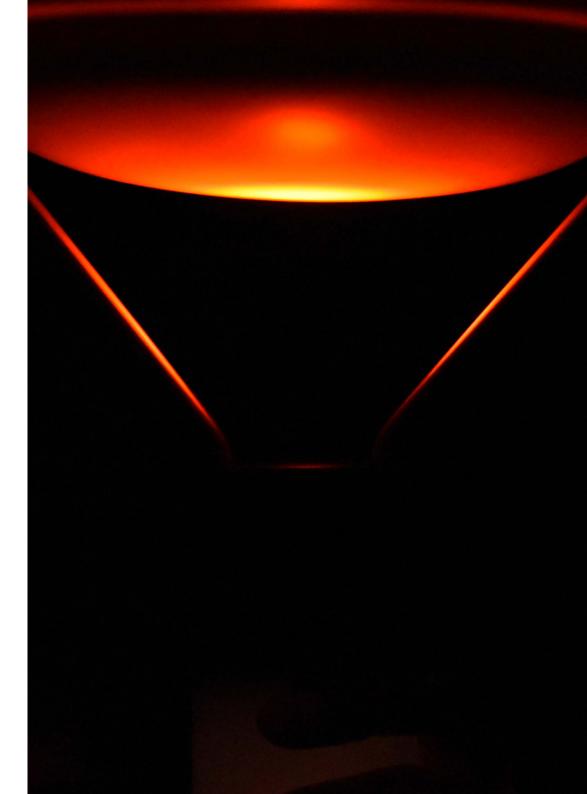
The government took the decision of cut off the electricity in the street when the energy prices started to rise towards an unsustainable standard. The consequence of this action was reflected on people, mainly traders, small businesses and ordinary citizens.

#### **Restrics movement**

Citizens will have to compromise on their freedom of movement due to comfort and safety concerns.

# Product

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To provide good visibility at night while also giving people a more comfortable outdoor experience even when the lights are out. Thus, giving back the freedom of moving and socializing without being forced to stay inside.



## What is Lumina?

Lumina is portable red light lamp thought to be used outdoor during periods of public light blackouts. Lumina aims at a new vision of light, made for joining people together even in times of necessity. This is made possible thanks to at a new approach towards darkness, which gets embraced by the use of red light and its benefits, as something not to extinguish but to enhance. This product-service system is guaranteed for everyone at anytime.



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## Why red light?

The reasons behind the choice of a red wavelenght light are supported by a deep research focused on a better night vision, light pollution and eyes health.

Indeed, the glare from bright white light at night can leave you squinting and straining to see clearly. Red light has a very low frequency as it travels so it falls off faster: this allows the eyes to adjust to the darkness outside without experiencing a blurring effect and compromising the night vision. That is why red lights is used in airplane cockpits and submarines, and why astronomers and stargazers always carry red flashlights.

Although green and blue wavelenght lights share the same non-glaring effect, it is proved that being exposed to them for a longer period of time still affect the sight's wellbeing. Eventually, red light seems to be the best possible choice when talking about outdoor night vision.

al to Wit

### Benefits

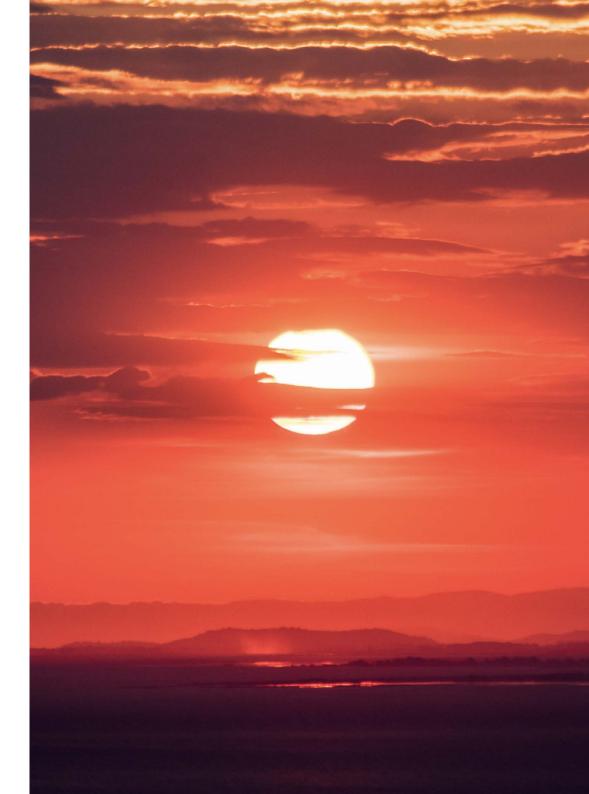


#### Improved Visibility

Red light is an extremely effective solution to preserve night vision, since it is nonglaring due to the fact that red light have the highest wavelength and a very low frequency as it travels, so the eyes can adapt faster to it compared to white light.

#### **Melatonin Production**

It is shown that red light wavelengths stimulate the production of melatonin, a naturally occurring hormone that helps regulate sleep cycles and influence the circadian rhythm, as well as helping with boosting energy levels after meals.





Diffused light is softer and less glaring than direct rays. It comes from all directions, causing light to be better distributed, having less sharp shadows. It seems to hug the objects and people it reaches.

Thus, diffused light is better to stay together with other people, making it possible to see people around more clearly, without getting blinded by a direct light beam pointed into one's eyes.

#### Key Features

## Portable

Lumina is easy to bring around thanks to its efficient size and immediate handle.

## Outdoor

Lumina is designed for the outdoor, since the portability and the study of light are key factors in making it suitable. Nonetheless, Lumina can be a great lamp also if used in your house at night.

## Community

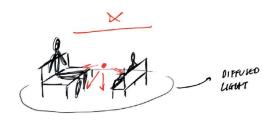
Lumina becomes the great vessel to bring people together, becoming the bonfire to sit around to with your beloved ones.

## Accessible

Lumina is made available to everyone in case of necessity, as well as being widespread throughout the urban area.

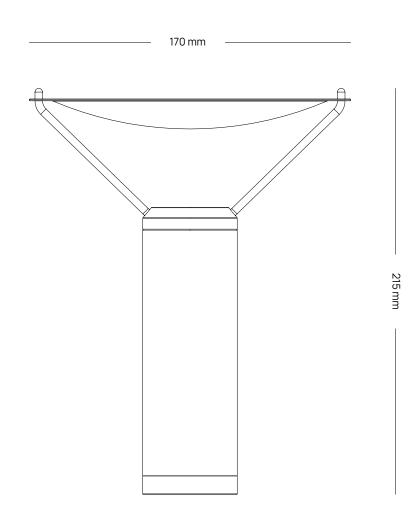
#### From the shape of light

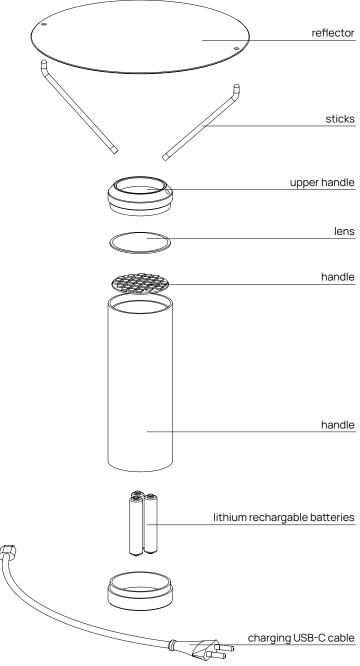




Lumina gets its peculiar appearance from its light shape. It all started with understanding what was the best light solution for our aim. Through deep reaserch and testing it was clear that a light shining upwards in an outdoor context was useless and bothering. Therefore, we opted for a diffused light facing downwards, since there was the need to light the walking path of the user and the surrounding area, creating a small halo of light. It enhances the aim of Lumina to make people socialize and be part of the circle.

#### To the shape of Lumina



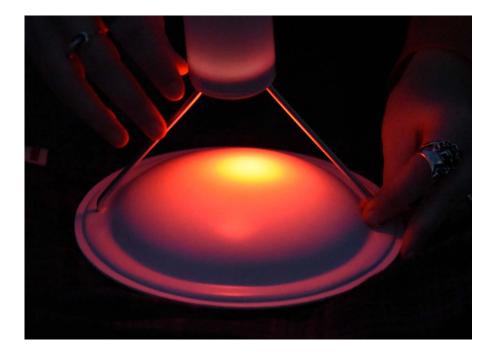




#### MAIN MATERIAL

Aluminium both:

- brushed - white powder coated A



#### The reflector

The reflector is one of the key elements of Lumina. Its spherical cap shape facing down helps reflecting the light on the underlying surface and sides. Through the rough white highly reflective surface and the reflection coming from within the handle, the light get diffused uniformly, reaching the effect of a soft warming light.



## How to use Lumina?



Lumina, as already said, can be portable and brought around thanks to its easy-to-grab handle, but at the same time can be put on its flat base in a steady position, creating a nice moment of recollection. Once again, it evokes the symbolic value of a bonfire's warmth, further enhanced by the color of the red light.



# Service

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## Introduction

#### AIM

The purpose of Lumina is to provide a reliable and convenient service that helps citizens of Milan staying connected during the night hours. We want to make it easy for people to rent our product and use it to navigate the city, so they can continue to enjoy their social lives despite the darkness. By providing access to high-quality lamps in strategic locations throughout the city, we aim at making the night hours brighter and more enjoyable for everyone.

#### **FUNCTIONS**

The service can be accessed through a mobile app, which displays locations near the user where lamps can be rented for either shortterm or long-term periods. Short-term rentals, which last for 32 hours, require the user to provide their card details as a guarantee, while long-term rentals, which can be booked for periods of up to two months, require a deposit fee and from that, a small amount of charge. To obtain a rented lamp, users simply need to go to a designated locker location and use a QR code provided by the app to claim their lamp. These lockers are situated in strategic locations throughout the city to make it convenient for people to access them. Users will receive a notification from the app reminding them to return the lamp 12 hours before the end of the rental period in order to receive their deposit back.

#### TARGETS

- · Offer a reliable and convenient service to users.
- · Increase its accessibility and availability in more areas of Milan.
- Foster partnerships with local businesses to offer discounts and special promotions to Lumina users.
- Significantly reduce energy consumption.
- Continuously improve the user experience and satisfaction with the service.

### Connected

Lumina helps people stay connected to each other, even after the sun goes down. It allows to continue enjoying the leisure time with friends and loved ones, without letting the darkness hold them back.

### > Reliable

Lumina is committed to providing a reliable service that users can count on to stay safe during the dark hours.

## Sustainable

Lumina's commitment to sustainability is evident in its energy-efficient LED technology and natural materials, making it a responsible choice for environmentally conscious consumers.

## Convenient

Whether you are at home or on the go, the Lumina app makes it easy to find your nearest location to pick up a lamp.

## Service Offerings

#### **MAIN OFFERINGS**

- Lamp rental service: Allows users to rent lamps for short-term and long-term through a mobile app and a QR locker access system.
- After-dark event organization: Organizes events featuring the lamps.

#### SECONDARY OFFERINGS

- Customer engagement service: A service that provides users with ideas and suggestions for games, activities and other ways to make the most out of their Lumina rental experience.
- Customer support: Provides assistance and support to users with any questions or issues they may have with the service.

#### Maintenance:

Ensures that the lamps are in good working order and fix any possible issue detected.

Space rental:

Lumina pays private companies a fee for space, but not public institutions since the government itself funds and starts Lumina.



#### SHORT TERM

Customers can pay for each lamp rental on an individual basis for short term rentals of up to 32 hours. No deposit is required for this plan, but customers will need to provide their credit card details as a guarantee. No fee will be charged.



Subscription Models

#### LONG TERM

Customers can pay a discounted rate for long term rentals of 1 week, 1 month or 2 months. A deposit is required for this plan, which will be returned to the customer upon the successful return of the lamp. From the deposit, a small fee will be charged only.

### Stakeholders

The Lumina PSS has a diverse group of stakeholders who all play a role in the success of the service.

#### App development team:

The team responsible for developing and maintaining the mobile app that users interact with to access the service.

#### Customer service team:

The team responsible for providing support and assistance to customers with any questions or issues they may have.

#### Marketing team:

The team responsible for promoting the PSS to potential customers and increasing awareness and adoption of the service.

#### Users:

The primary user group of the PSS who rent lamps during dark hours.

#### Government:

The regulatory body that initiated the PSS as a solution to the energy crisis and provides funding

**Public Institutions** (schools, hospitals, post office, metro, stations):

Places where there are Lumino lockers available for users to collect their lamps, and they are funded by the government.

Private Companies (Cafe, Tabbacheria, supermarkets...):

Places where there are Lumina lockers available for users to collect their lamps; thus, they are paid a fee for space by Lumina.

#### Manufacturers:

Companies in charge of producing the lamps used in the PSS.

#### Suppliers:

Companies that take care of supplying the lockers with the lamps accordingly.

#### Maintenance:

Teams responsible for ensuring that the lamps are in good working order and fixing any issues that may arise.



## Storyboard



Sam is scrolling on his phone in his living room knowing that in less than 30 minutes the urban lights will be off and they will have to cancel the plans they made with friends.



After booking the short term rental, he picks up his jacket to go get the lamp as soon as possible.



He comes accross this ad on their social media about a lamp called Lumina.



He arrives at his location and finds the locker, scans the QR code given by the app after booking.



He decides to give it a try and install the app because he really wants to meet his friends.



Sam is surprised to see how Lumina works and the amount of locations near him where he could pick up his lamp. He tells his friends about it and the plan is on again.



He picks up the lamp and goes to meet his friends.



Sam has a great time with his friends. They had their Lumina lamp which made them feel cozy and happy.

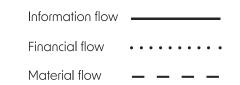


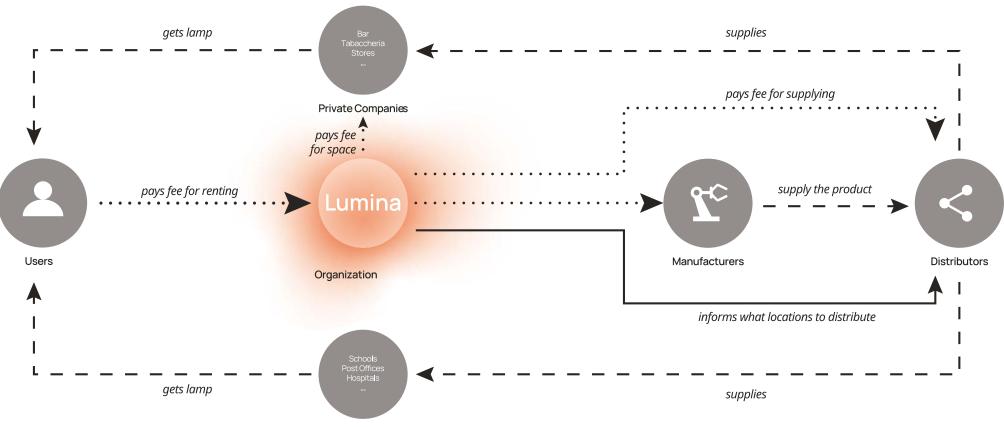
On the next day, Sam gets a reminder with the time left to return his lamp. He returns the lamp at the nearest location and feels happy to know there's such solutions and he'll keep seeing his friends.

## System Map

The Lumina PSS system map illustrates how the various components of the service work together to provide a convenient and reliable way for users to rent high-quality lamps during the night hours. The mobile app connects users to lamp lockers and lamps, while teams responsible for producing, maintenance, customer service, and funding ensure the smooth operation of the service.

Together, these components make up the Lumina PSS and allow it to provide a valuable service to its users.





**Public Institutions** 

### Persona

## Customer Journey



Marta is a 28-year-old woman living in Milan. She moved to Milan from Sicily when she was 4 years old and has called the city home ever since. After finishing high school, Marta was hired by a large company where she now works as a secretary. She values the closeknit community at her office and considers her colleagues to be like a second family. Even after a long and stressful day at work, Marta and her coworkers often go out for beers at a nearby pub that they frequent. Marta values her social connections and loves spending time with her friends. She finds that socializing and connecting with others helps her feel energized and fulfilled. One of Marta's main needs is to be able to comfortably socialize and spend time with her friends after dark, but the lack of public lighting in Milan makes it difficult for her to do so.

#### Needs:

- To be able to comfortably socialize and spend time with her friends after dark
- To feel energized and fulfilled through social connections and spending time with friends
- To be able to relieve stress and relax after a long day at work by going out for drinks with her colleagues.

Phase	Awareness	Acquisition			Rental			Return			Feedback
Customer Actions	Becomes aware of Lumino service through marketing and promotion	Installs Lumino App	Creates an account and provices access to location	Selects the short term rental	Provides payment information and confirms booking	Receives confirmation of booking and OR code for locker access	Uses rented lamp during rental period	Receives reminder notification 12 hours before return time	Returns lamp to locker location and uses QR code to unlock	Gets notification that they have successfully returned the lamp	Provides positive feedback on her experience with the service
Customer Thoughts	"I didn't know there was a service like this. It sounds really convenient."	"I'm excited to try out this service"	"Is it safe to share my location with this app"	"I'm looking forward to using the lamp with my friends tonight."	"I feel good about the payment process for my rental."	"So now can I go to this location immediately?"	"I'm enjoying using the lamp during the night. It's making my experience more unique and enjoyable."	lamp and see if t	rd to returning the hey withdraw any om my bank."	"Such a good experience."	"I'm really satisfied with the service."
Emotions	Interest	Expectations	Worried	Curious	Relief	Confused	Happiness	Cur	ious	Happiness	Satisfied
Touchpoint	Marketing channels (social media, billboard)	App store	Lumino App	Lumino	Арр	Lumino App, Locker, Lamp	Lamp	Lumino App, Lamp	Lumino App, Locker, Lamp	Lumino App, Bank Account	Lumino App, Customer Service
Opportunity	Survey new customers to understand how they discovered the Lumino service and identify areas for improvement	reassurance abo	nformation and but the safety and le user's data	Provide more detailed instructions on the process after booking with their actions			Encourage customers to share their feedback through various channels				

### Persona

## Customer Journey



Sam is a 22-year-old computer engineering student at the University of Valencia. He has always been passionate about technology and is excited to be participating in the Erasmus program to study abroad in Milan, Italy. Sam has always dreamed of visiting Italy and is most excited to immerse himself in the country's rich food culture. Despite his excitement, Sam is a little disappointed by the recent policy change in Milan that requires the public lights to be turned off from 5pm until 5am. This means that he and his friends will have to be more careful when going out at night and might not be able to have as much fun as they had hoped.

#### Needs:

- To be able to have a fun and enjoyable experience studying abroad in Milan
- To be able to make new friends and have fun while studying abroad.
- To be able to comfortably explore the city's restaurant gems at night after his classes.

Phase	Awareness	Acqui	sition	Rental Return			Feedback				
Customer Actions	Talks to a friend about this new service called Lumina, it's supposed to be helpful solution to the new lights off policy	Installs Lumino App	Creates an account and provices access to location	Selects the long term rental	Provides payment information and confirms booking	Receives confirmation of booking and QR code for locker access	Uses rented lamp during rental period	Receives reminder notification 12 hours before return time	Returns lamp to locker location and uses QR code to unlock	Gets notification that deposit is returned	Provides positive feedback on her experience with the service
Customer Thoughts	"That sounds interesting"	"I'm willing to try anything. I can't stay home all the time"	"Let's see what all this is about"	"I guess long term is more convenient for someone who is a night owl like me"		"Okay that was very quick. I guess I'm making plans tonight despite the dark"	"Nights have been even better with this lamp. Maybe we don't need public lights after all"		notification, I would return it if not for it"	"Not expensive at all"	"It felt warm having a Lumina in those weeks. I'm definitely using it again"
Emotions		Ø		<b>A</b>			(A)	ł	3		
	Interest	Expectations	Curious	Neutral	Neutral	Excited	Happiness	Gra	teful	Happiness	Satisfied
Touchpoint	Social Media	App store	Lumino App	Lumino	Арр	Lumino App, Locker, Lamp	Lamp	Lumino App, Lamp	Lumino App, Locker, Lamp	Lumino App, Bank Account	Lumino App, Customer Service
Opportunity	Survey new customers to understand how they discovered the Lumino service and identify areas for improvement	the pre signup or so that they fe	i to users through aboarding screens sel confident to n account	Provice explanation for the long term versus short term rental, and explain what kind of persone each rental type would suit			to protect the completely safe	Encourage customers to share their feedback through various channels			

## Business Model Canvas

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
- Local government - Manufacturers and maintenance teams	- Development and maintenance of Lumino app - Manufacture and supply lamps - Provide customer support and maintenance services - Promote the business through different medias	<ul> <li>Provides a convenient and affordable way for customers to have access to public lighting in their neighborhood</li> <li>Offers a safe and fun way for people to connect with friends and spend time together after dark</li> <li>Helps reduce energy consumption and carbon emissions through sustainable lighting solutions</li> </ul>	<ul> <li>Provides a user-friendly app for customers to easily access and manage their rental agreements</li> <li>Offers customer support a positive user experience</li> <li>Encourages customer feedback and continuously improves the service based on customer needs and preferences</li> </ul>	<ul> <li>Individuals or groups who want to enjoy outdoor activities after dark</li> <li>Cafes who utilize the public lighting for their outdoor area of the cafe</li> </ul>
	<ul> <li>Team of developers</li> <li>Customer service team</li> <li>Contracted teams</li> <li>Government funding</li> <li>Lamps and equipment</li> <li>Customer service team</li> </ul>		Channels - Collect & Return Lockers - Lumino app (available on App Store and Google Play) - Customer service team (available by phone, email or through app) - Social Media	

#### Cost Structure

- Salaries - App development and maintenance
- Marketing and advertising - Contracted team fees
- Contracted team fees
   Government funding management fees

#### **Revenue Streams**

- Subscription fees from long term rental plans - Advertising revenue from displaying ads on the lamp

## Service Blueprint

Phase	Awareness	Acquisi	tion	Rental				Return		Feedback	
Physical Evidence	Marketing and promotion materials	App store listing	LuminoApp: onboarding screens	LuminoApp: booking screens	LuminoApp: booking confirmation	Lumino App: OR Code, Lamp Lockers	Lamp	Lumino App: notifications	Lumino App, Iamp lockers		Lumino App, feedback form
Customer Actions	Becomes aware of Lumino service through marketing and promotion	Installs Lumino app	Creates an accound and provides access to location	Selects desired rental duration and pickup location	Provides payment information and confirms booking	confirmation of	Uses rented lamp during rental period	Receives reminder notification 12 hours before return time	Returns lamp to locker location and uses QR code to unlock	Deposit is returned (if a long term rental)	Provides feedback on their experience with the service
Front stage of interactions	Street billboard					Self collect Lumino Locker					
Back stage of interactions	Marketing and promotion planning and execution (by government, marketing team). Creation and distribution of marketing materials (by marketing team, print production team). Evaluation of marketing effectiveness (by government, marketing team)	App development and maintenance activities (by app development team)	Automatic account and location (if permited) registration on database	Inventory management and reservation (by contracted inventory management team) Automatic payment processing (by card-issuing bank) Lamp maintenance and repair (by contracted maintenance team) Customer service (by customer service team) The user experience team great experience with the PSS		ment team) experience team Lamp maintenance and repair (by contracted maintenanc g (by card-issuing bank) works to ensure team) y contracted maintenance team Inventory management (by contracted inventory management team)			ted maintenance	Feedback processing (by customer service team). Analysis and reporting of feedback (by government, customer service team)	
Support Processes	Marketing and promotion activities ( e.g. advertising campaigns, promotional events)		Lumino mobili	∋ app		OR code locker access system			Lumin	o mobile app	

# Branding

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### **Brand Values**

#### WHY

Our product originates from the will of providing a reliable outdoor source of light, purposely designed for the best night vision, that is able to bring people together in times of energetic emergency. Indeed, facing the consequences of a scenario in whtich the governmental policy establishes switching all the street lights off, Lumina offers a concrete solution for the daily needs of citizens, whose habits would be severely affected otherwise. We strongly believe that human interactions and aspirations should always be prioritized, no matter what the external conditions are.

#### **OUR MISSION**

Our purpose can be well summarized by the statement "Light your night", that presents a double meaning depending on how it's read.

Your night, which refers to the personal use of Lumina allowing the user to go out in the dark hours, can become Our night thanks to the social value of our product service system, with the aim of joining people together and "warm up" their night.

#### **OUR VALUES**

## Reliability

A trusty friend that accompanies you whenever needed.

Accessibility

Easy to use and available to everyone at anytime.

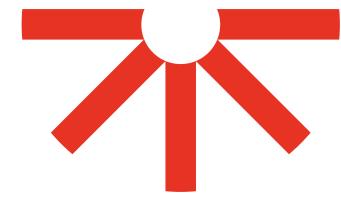
Sociality

A boost to your nightlife, even better when it's shared.

Adaptability

A solid proof that even dark times can be overcome.

## Logo Concept



#### LIGHT DIFFUSION



Spreading direction of rays

The design of the shade enables the light to spread on the surface as a sort of fan that avoids the blinding effect of a direct beam pointing into the eyes, as it would happen for any kind of torch.

#### **CONNECTING PEOPLE**



One gathering point

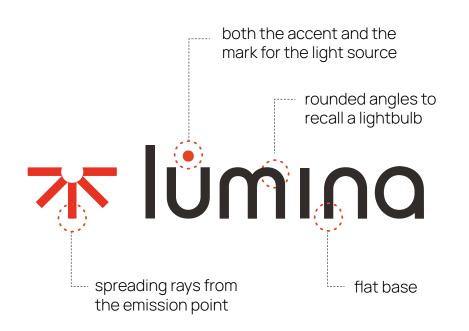
Another meaning embodied by the logo is ideally the converging of people to the same shared spot. This is made possible thanks to the value of having a reliable and public light that can bring citizenes together.

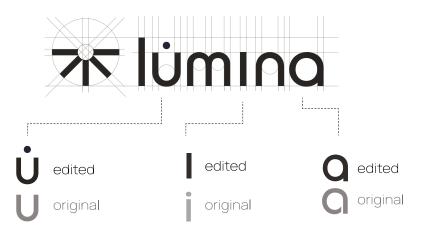
BRANDING

## Logo Construction

# limina

The Lumina logotype takes inspiration from the sinuous shape of a lightbulb while still keeping a fierce and clean character, enhanced by the flat based letters and the bold typeface. In the same way, the logo icon graphically resembles the direction of light coming from Lumina and diffusing on the surface below, as well as conceptually being a meeting point of people that join together in the same place.





## Typography

#### LOGOTYPE

## Bauhaus

### ABCDEFGHIJKUMN OPQRSTUVWXYZ 0123456789 abcdefghijklmnop qrstuvwxyz

The fonts choice fell on two typefaces that both are in harmony with each others and with the overall personality of the brand: reliable but bold.

The font used for the logotype is Bauhaus STD which underwent some editing. This typeface was designed by Herbert Bayer in 1925, based on some experimental work on the Universal typeface and the Bauhaus aesthetic overall, which resulted in geometric yet rounded sans-serif letterforms. **PRIMARY TYPEFACE** 

## Manrope

ABCDEFGHIJKLMN OPQRSTUVWXYZ 0123456789 abcdefghijklmnop qrstuvwxyz

As for the communication, the main font is Manrope used in different weights, an open-source modern sans-serif font family designed by Mikhail Sharanda in 2018. It recalls the same roundness of Bauhaus STD while being very clean and easy to read.

## Colour Palette

The color palette portrays the main characters of the scenario: the red light against the colors associated with the sky. The primary colors used are After Dark, a gloomy dark grey that represents the pure night sky without any street light on, and Faded Glare, a contrasting warm white. The accents are given by the secondary ones which are the Bonfire Spark red coming from Lumina light and Early Sky, a pale greyish blue color that gives brightness and positivity to the overall palette.

#### After Dark

RGB: #302B28 CMYK: 70, 61, 58, 71

#### Bonfire Spark

RGB: #E14525 CMYK: 4, 84, 92, 0

#### Early Sky

RGB: #B4D0D8 CMYK: 34, 9, 15, 0

#### Faded Glare

#### RGB: #FEFBF6 CMYK: 1, 1, 4, 0

# **Tight your night**

## Moodboard

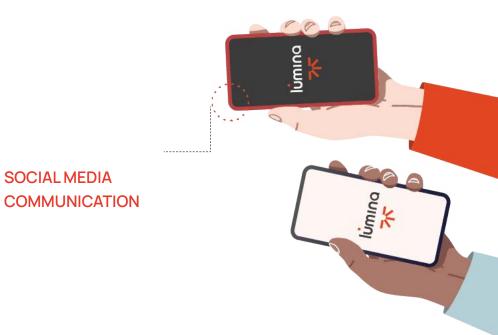
The moodboard is a conceptual collection of photos inspired by the feelings of living in a possible future scenario where the public lighting will be shut off.

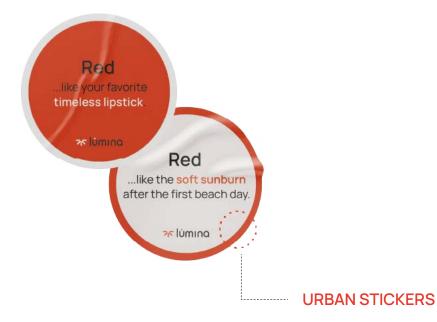
At first, what results is a sense of sad isolation, as shown by the photos from the windows, followed by the need of feeling the human touch and joining again a community. This last part is represented by the bonfire as a meeting point, with the idea of warmth and moment of recollection around something that feels shared and safe: these are the same values and intentions that the brand aims at achieving with Lumina.



# Advertising Campaigns

The brand advertisemnt is based on various diffusing channels that can be found in different spots and moments of the day: Lumina is spread through social media on your smartphone, urban stickers scattered all around the city and eventually billboards for a greater visibility. In this way, any kind of user is made aware and informed of this public light service.



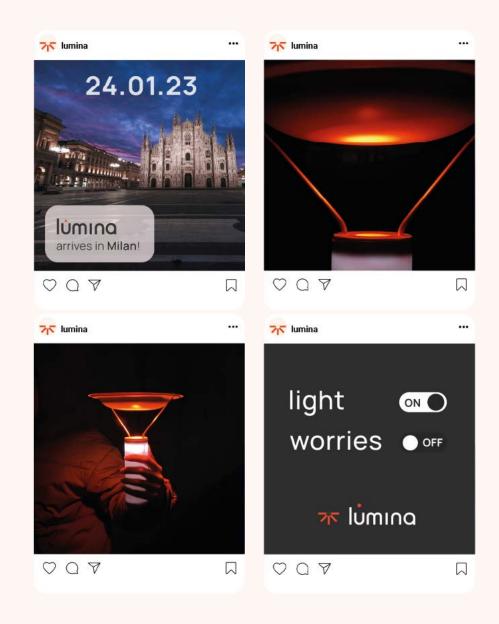




# Social Media

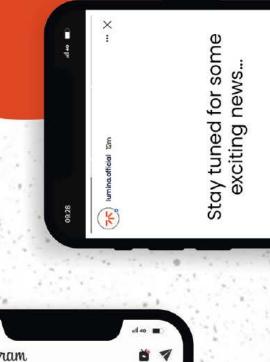
Lumina communicates with the younger audience through its official profile on social media, such as Instagram. Here, the users are kept updated with the latest drop or launch of the product in their city, as well as being entertained by the content of the page.

The relationship between the productservice system and the users is always based on the reliability and trust that people have on the brand, thanks to a clear and friendly communication. Also by clicking the link on the profile bio, the audience is redirected to the official website of Lumina to find out and know better about the service.





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75 lùmina

## Urban Stickers

In order to reinforce the friendly and funny spirit of the brand, the urban stickers are used for two reasons: firstly to reach a wider and faster spread across the city, and then they also serve as riddles almost.

Indeed, thanks to the interaction of Lumina's red light with the white/red background and quotes of the stickers, they change their appearence whether they get illuminated by the daylight or the red light. When it's dark outside and Lumina is switched on, only the white or red text of the sticker blends into the background, making some words disappear.

The quotes on the stickers play with the symbolic value of red that reminds of some pleasant things or moments of the everyday life.



Red or white writings disappear when illuminated by red light.

#### Red

like your blushing cheeks when someone compliments you. Red

like the soft sunburn after the first beach day.

#### Red

like your favourite timeless lipstick.

#### Red

like those juicy tomatoes on your bruschetta.

#### Red

like the flame of the fireplace that warms you up in winter days.

#### Red

like when you switch off all of your worries.

# Red

...like when you switch off all of your worries

### <mark>≫ lù</mark>m

# Red

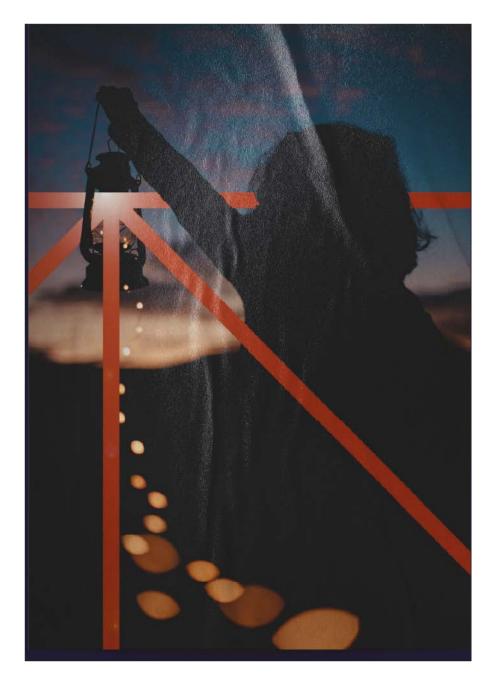
...like the flame of the fireplace that warms you up in winter days.

≫ lúmina



### Billboards

The actual explicit advertising campaign is diplayed on the street billboards, which represent some social gatherings and meeting moments, during the dark hours, made possible by Lumina. The overall feeling conveyed is a warm and genuine state of happiness of people that are brought together even on times of emergency, where these very human moments are still precious and don't get left behind. The idea of the bonfire returns as a metaphor that best embodies the values and the mission of the brand.







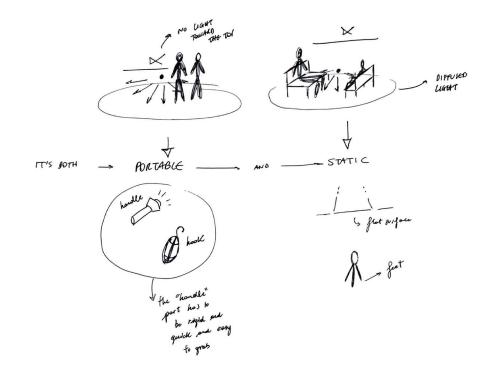
# **کت انmina** light your night

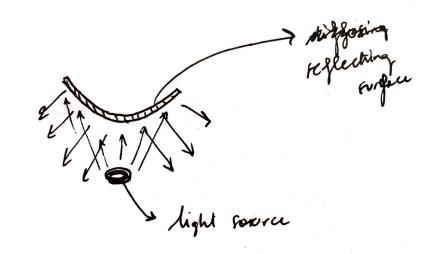


# Annex

# Ideation of Lumina

#### First Sketches





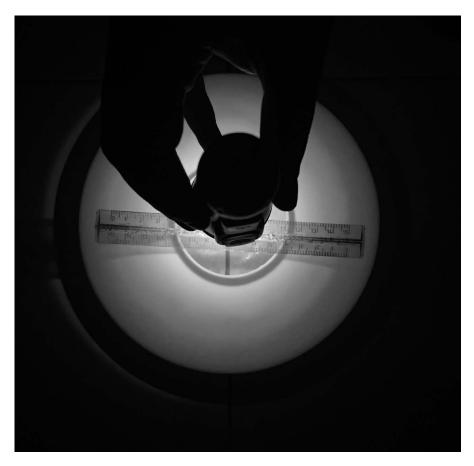
As already mentioned the shape of the light gave the shape of the Lumina. But of course, it was a bit longer than that. The first step was to envision what light we wanted from our product. So based on our mission and why, and also our research on night visibility, we opted for a light diffused through its reflection downwards and on the sides. Understanding also how it could be transported was a main factor. Having decided those two things, we could start to ideate.

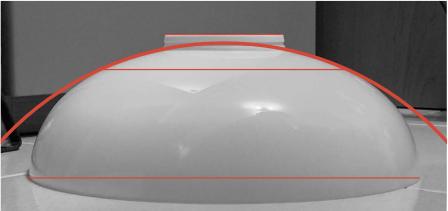
# Lo-fi prototyping

We started with a low-fi prototype to 3D sketch and just get a feel of our concept. It was nice to already see that there was a reflection of light similar to what we wanted, even if the material was not similar to the one we needed.









# Prototyping

The reflection of light was the main we dived into while making the prototype to better understand dimensions and the shape. So we focused on understanding the diameter of the lamp reflector and the distance there should be between the light source and reflector so that the whole surface is illuminate and the light doesn't go beyond the reflector. Also, to not disturb the people using it by blinding them having the direct light in their eyes.





Hence the lamp reflector is the first part we prototyped and the one that took more time. We opted for thermoforming using thermoformable polystyrene that comes also with a rough opaque finish, which is what we needed for the light reflection we wanted. The mold was done using low density rigid polyurethane foam for the spherical cap surface and a wood base with drilled holes around the diameter of the other piece to have the flat part.











The other key parts for the prototype are the aluminum sticks holding the top part and connecting it to the handle, and the piece holding them at the top of the handle. The sticks were bended with the right angle using a resin hammer while being held by a clamp. The other piece was done using forex and we drilled three holes: two for the sticks and one to make the light pass through. In this piece we attached a red acetate sheet for red light.

# The Video

The video was done outdoors as our scenario requested. It was difficult to find a place of total darkness outdoors and that was an interesting point thinking about our research and light pollution. The darkest area we found was a green area, which was perfect for our product.













The video was structured to play and show our payoff and why. In the first part we have the individuals walking alone in the same direction, this also relates to our logo. Then we have a moment of transition where we move from individuals alone to individuals together. So from "light your night" to "light our night", making the y of "your" disappear, while the video transitions. The video continues with the people around the light talking and having a nice time together. And lastly Lumina is taken out of the frame.





# **EVOLVING** for shared system