

Ciao! Ciao!

DESIGNING PATHS TO ADDRESS THE COMMUNICATION GAP AFTER SOCIAL DISTANCING.

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8 Abstract

Abstract

Meeting people is not the same as two years ago, and the main reason for this change is Covid-19. It transformed many things, such as the dynamic of social interactions and the importance of technology. The rapid growth of the internet, together with restrictions given to us due to the pandemic, made a significant impact on society's social interactions.

This paper explores how technology became a more significant part of our daily lives, how we understand its limits, and how all those topics can change the way things are designed from now on. It narrows down to Milan and its daily transit as a starting point to place the project in a tangible area.

With all information gathered, Ciao! Ciao! was conceived as a communication campaign to bring people together, considering Milan commuters, giving them a tool to begin conversations and create connections with a common starting point. All aspects of the project take into account the society that it is taken part of, keeping in mind the user's best interest.

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Incontrare persone non è più come due anni fa, e la ragione principale di questo cambiamento è il Covid-19. Il virus ha trasformato molte cose, come la dinamica delle interazioni sociali e l'importanza della tecnologia. La rapida crescita di internet, insieme alle restrizioni messe in atto a causa della pandemia, hanno avuto un impatto significativo sulle interazioni sociali nella nostra società.

Questa tesi esplora come la tecnologia è diventata una parte più significativa della nostra vita quotidiana, come comprendiamo i suoi limiti, e come tutti questi argomenti possono cambiare il modo in cui progettate d'ora in avanti. La tesi si concentra sua Milano e sul suo transito quotidiano come punto di partenza per collo-care il progetto in un'area tangibile.

Dopo aver raccolto le informazioni necessarie, Ciao!Ciao! è stato concepito come una campagna di comunicazione per avvicinare le persone, pensando soprattutto ai pendolari di Milano, offrendo loro uno strumento per iniziare conversazioni e creare connessioni con un punto di partenza comune. Tutti gli aspetti del progetto tengono conto della società di cui fa parte e dell'interesse dell'utente.

10 Introduction

Introduction

Covid-19 took the world by surprise in 2019, and quickly we were given safe measurements to slow down the contamination so the hospital and medical staff could keep up with the amount of care demanded by the ones that fell sick with the disease. Social distance was one of the measurements suggested by the World Health Organization from the beginning of the pandemic. Suddenly, we were confined inside our houses, having video calls with co-workers, friends, and family, unable to be physically close to them; as social animals, we need to be part of groups by nature.

All that happened in the last couple of years changed our way of doing things, made us adapt to new situations, and made us rely on the internet to do almost everything, including meeting people. The digital world has become a massive part of people's lives; we were encouraged to migrate our daily activities to our computer screens, in a matter of necessity, and because we had to adapt so quickly, many things went unnoticed, one of them being data privacy. Since the beginning of the internet, its interest has been discussed; with massive data breaches, the exposure of government surveillance, and misinformation, measurements needed to be created. The European Union developed in 2018 the General Data Protection Regulation (GDPR) to stop companies from collecting EU-based user data without their knowledge.

Design is a field that is constantly evolving and changing together with people. With many changes to the way we live, it is also important to question **how we think about design and to whom are we designing?** After two years of daily

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changes in our priorities, this paper will explore a design branch that takes society as its focus instead of having a human-centered design.

Commuting in Milan is a daily task for most of us who live in the city; this paper breaks down the public transport system and the nine different municipalities of Milan created by the Comune di Milano. As a foreigner living in the city during this very delicate period, this project came from my own urge to meet people; I saw myself living in a city where I know a maximum of five people, and with no prospect of making more friends, better saying, not knowing where to start. In July, I started working in an office in the historical center; the company recommended going there three times per week. I had to take a bus and the metro to get there; after a while, I started noticing the same boy going to school in his e-scooter while I waited for my ride, the same people on the bus all going to the same place without even looking at each other. But there was this woman reading a book on the back of the bus, she would ride with me two times a week, we both got out at the same station, and by the end of the year, I felt that we were friends, I knew her taste for books, how long she took to read one, but I didn't know her name, I still don't and probably never will. But this got me thinking, how could I be friends with this woman? We already have some things in common: we like the same genre of books, live in the same neighborhood, and work in the same area. I have people I talk to at work who I know less than what I know about her.

The thesis explores the current state of our daily life based on the changes that have occurred in the last two years and how communication design can help overcome the gap created. It concludes with a social communication campaign that aims to answer the question: **How to make friends after social distance?**

1.

Commuting in Milan

Milan is the second biggest city in Italy, according to "L'Annuario 2021. I dati dell'area Metropolitana di Milano". The metropolitan city of Milan has 3.249.821 habitants, 14,2% of them being foreigners. These inhabitants are distributed across 1.575,65 km². This whole area is covered by several means of public transportation: buses, tram, metro lines, and trains. The goal of this chapter is to explore an overview of the experience of commuting via public transportation in the lives of those who live in Milan, Italy.

Furthermore, this chapter will cover public transportation in the city, compare it with other cities in Italy, and how the Municipality of Milan divided the town into nine municipalities/zones.

^{1 &}quot;L'Annuario 2021. I dati dell'area metropolitana di Milano" made by Città Metropolitana di Milano. https://www.cittametropolitana.mi.it/export/sites/default/statistica/doc/documenti_2021/Annuario-Statistico-2021.pdf Access on February 22th, 2022.

1.1

Public Transportation

Milan is the second-largest municipality in Italy and the capital of Lombardy. The city is one of the country's most important transportation hubs as it is one of the most important nodes for air, rail, road, and public transport networks. ATM, a public constrained business enterprise owned through the municipality, is the carrier company. The company was founded in 1931; from there, it expanded to car-sharing and bike-sharing outside the city with the funicular railway in Como. ATM is responsible for public transportation in Lombardy's capital and 46 provincial municipalities, serving a population of 2.51 million peoples. With a fleet of 19 tram lines covering 180,3 kilometers with 493 vehicles and has 703 streetcar stops throughout the territory; 113 buses covering 1,176.4 kilometers with a fleet of 1,366 vehicles; 4 metro lines working with 113 stops in the extension of 96,8 kilometers, and one line under construction is scheduled to open in late 2022. The Group has run Copenhagen automated underground through its subsidiary Metro Service since January 1, 2008: the 21-kilometer line is automated and among the most advanced in the world.

There are four types of public transport that connect all the Metropolitan cities of the Province of Milan: tram, bus, metro, and train. The average commute distance in Milan in a single trip is 7.1 km; the average amount of time a commuter spends in the public transportation is 43 minutes in a single direction, making it so that the average of a daily commute is something around one and a half hours.

² According to the ATM. https://www.atm.it/en/llGruppo/ChiSiamo/Pages/Attivita.aspx Access on February 22nd, 2022.

³ CARTA DELLA MOBILITÀ ATM 2020 by ATM. https://www.atm.it/it/llGruppo/Governance/Documents/Carta%20della%20Mobilità%202020.pdf Access on February 22nd, 2022.

⁴ Milan and Lombardy Public Transit Statistics by Moovit Insights https://moovitapp.com/insights/en/Moovit_Insights_Public_Transit_Index_Italy_Milano_e_Lombardia-223. Access on December 20th, 2021.

Compared to Rome, the biggest city in Italy, with a population of 4.227.588 habitants, distributed in 5.363,28 km², the average commute is 6.3 km, with an average time of 48 minutes for a single trip. It is interesting to notice, that Rome has 0.8 km less territory to cover but has an average of commuting time 5 minutes higher than Milan. The report released by Statista Research Department in January 2019₅ shows that in 2018, 496 million passengers rode the subway in Milan, while the number in Rome was 310 million passengers. Despite the difference in population, Milano has the highest daily ridership₆ of Italy and one of the biggest in Europe.

1.2

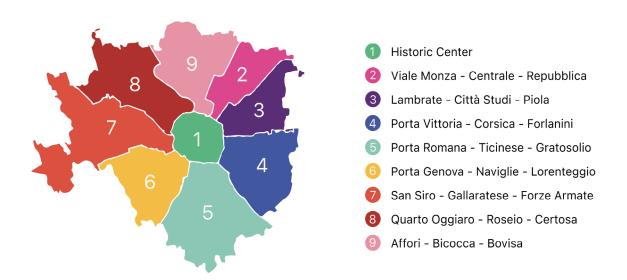
Milan's Municipalities

The city is divided into nine municipalities (Italian: municipi or zone). They are numbered from 1 to 9. The plan to organize the city was founded in 1997, implemented in 1999, and reformed in 2016. Before that, the city was divided into 20 administrative districts. The Consiglio di Municipio is the local government of each municipality (Borough Council). Every Council comprises a President and 40 members for boroughs with a population of more than 100,000 people, or 30 members for smaller boroughs. These districts are organized in a sunburst pattern, except for Municipio 1, which corresponds to the historic city center (formerly defined as part of an old Spanish walled city, nowadays mostly demolished). The other zones were determined from the northeastern part of the city and then

The report on the Annual number of subway passengers in the selected Italian cities 2018 on January 2019, by Statista Research Department. https://www.statista.com/statistics/824027/annual-sub-way-passengers-in-the-selected-cities/ Access on March 4th, 2022.

⁶ Ibid.

numbered clockwise (see image below). Neighborhoods are often referred to by number, but each section also has a formal name and is usually a list of essential districts or regions in that area.



Graphic 01: Milan's Municipalities.

Zone 1: It is the city's least inhabited zone and one of the smallest in terms of space, with Piazza del Duomo, Sforza Castle, and Sempione Park taking up a large portion of it. Museums and governmental buildings occupy a substantial part of the zone. As a result of the traffic restrictions, the zone is primarily defined by numerous pedestrians and plenty of public transport, such as bus, train, and metro lines M1, M2, M3, and future M4, easily accessible by bike.

Zone 2: The Milano Centrale train station, the city's most essential and one of Italy's most important railway hubs, is located in the eponymous Zone 2 neighborhood. The metro lines M1, M2, and M3 and the suburban rail stations Milano Repubblica and Milano Greco Pirelli can be found in this zone. The Naviglio Martesana canal, which runs through most of Zone 2, has played an essential part in the develop-

ment of the Milanese area; between the 19th and 20th centuries, the railway system, which was primarily located in what is now Zone 2, took up this function.

Zone 3: The zone is located in the city's north-eastern section. University campuses occupy a considerable portion of its area, and the region is also known as Città Studi. It is home to one of Milan's major railway stations, Milano Lambrate. The metro lines M2 and M3 and the suburban rail stations Dateo, Lambrate, and Porta Venezia can be found.

Zone 4: In zone 4, there are the Calvairate Library and the Oglio Library of the Milanese Library System. The Antonianum library has a section dedicated to Milan and its territory, located in the neighborhood. Five suburban rail stations are located here: Porta Romana, Porta Vittoria, Dateo, Forlanini, and Rogoredo. The future line M4 passes through this municipality together with M3.

Zone 5: It is a diverse area of neighborhoods of different social and cultural backgrounds, including areas historically central and new peripheral areas. The metro line M4 and M3 cross the district. Inside the municipality, there are monuments of historical and architectural value protected by constraint, such as Porta Ticinese and one of the first examples of Gothic architecture in Italy, the Chiaravalle Abbey. There are many parks and green areas; one is the South Milan Agricultural Park, a regional park and the largest peri-urban park in Europe. The entire area of 46300 hectares is subject to environmental constraints.

Zone 6: It extends towards the south-west from the circle of Spanish Bastions, in the stretch of the Darsena di Porta Ticinese, to the borders between the city and Corsico. It includes the area of the Porta

Genova, Giambellino, Lorenteggio, and Barona neighborhoods and is crossed by the Naviglio Grande. In addition, part of the Southern Agricultural Park is included in this area.

Zone 7: Is the one with the largest number of green areas in the entire City of Milan. In the areas of Muggiano and Assiano, you can admire the Fontanili, waterways used to irrigate fields, many of which were designed and built-in Roman times and have been in the same places for millennia, used for irrigation. It is also home to the football stadium Stadio Giuseppe Meazza, commonly known as San Siro. The metro lines M1 and M5 connect the area.

Zone 8: The zone is in the city's northwestern outskirts. City Life, the residential, commercial, and business district, is in this area. The region is home to M1 and M5 metro lines and the suburban rail station Milano Domodossola, Milano Quarto Oggiaro, Milano Certosa, and Milano Villapizzone.

Zone 9: corresponds to the northern part of the city connected by M3 and M5 metro lines and the rail stations Milano Garibaldi, Milano Lancetti, and Milano Bovisa The region is home to many skyscrapers, to the Isola neighborhood, Bosco Verticale, Bicocca, Bovisa, Porta Nuova district, and many parks.

It is crucial to understand how public transportation and Milan's municipalities work to develop an efficient and relevant project thought specific for the city. Therefore, I can create a project that takes advantage of this structure and mechanics.

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Glimpse on Covid-19

In December 2019, the first case of Covid-19 in Wuhan, China, was identified. March 2020, the pandemic started to spread in the western part of the world; the contaminations were quick and since then spread worldwide, resulting in a pandemic still going on. Social isolation is one of many strategies⁷ for reducing the spread of the novel coronavirus (SARS-CoV-2) that causes COVID-19 recommended by the World Health Organization.

People had to start adapting their lives; the way they see work, friends, food, health, their core values changed, zoom call introduced. We couldn't see our loved ones, taking public transport was too dangerous, and masks became as important as our house key.

During the past two years, there were good and bad days. Some months we were strict inside our houses, but lately, things started to look better, and we can slowly have a routine outside of our apartments. The trick here is that we don't know how to return to our old life. Humans, by nature, are social animals, they need to live in groups. So, the urge to meet people and make connections again is there, but on the other side, we have a new instruction manual of things we shouldn't do, and many of them include some restrictions on social interactions.

World Health Organization https://www.who.int Access on March 22nd, 2022.

Glimpse on Covid-19

2.1

Social Distance

Social distance (sometimes known as physical distance) involves preserving a 1.5 meters distance between people. It is meant to reduce disease spread by limiting close contact to avoid increasing the number of people going to hospitals. This precaution provides additional time for healthcare providers, hospitals, and other institutions to prepare, prevent the sickness, and assist people who have been diagnosed with coronavirus. Staying at home, restricting travel, avoiding busy areas, no-contact greetings, and physically isolating oneself from people are all examples of social distancing techniques.

"First and foremost, the measures carried a strong psychological message, which is the fear of others, along with the idea that others are potential carriers of deadly germs and life-threatening diseases. The alarming rate of contamination and death from the virus contributed to establishing more panic, and even paranoia among many. What is particularly concerning is the fact that this psychological effect could potentially remain in our communities, even long after the pandemic. [...] As we navigate through life, much of what fulfills us are the bonds we create with other people, and more often than not, those bonds materialize through physical interactions." (Sikali, 2020)

Instead of in-person contact, social distance encourages the use of things like online video and phone conversation as a way to minimize its impact on our lives. As Sikali (2020) says, "[...] today we must provide outright support for our peers, and particularly the most vulnerable individuals in our communities. The emotional support that we can collectively give is vital to their well-being, and it can limit the negative effects that social isolation can have on their mental health." The internet gave us the tools to make things possible when we are not able to be physically present.



Designing for Society

This chapter aims to analyze the role designers play in our society, which tools we can use to enhance the user experience and explore better the impact that public spaces can have on bringing people together. This chapter also introduces an approach to design focused on society based on the manifest published in 2020⁸ by Projects by IF, a technology studio based in London, focused on creating data-enabled products and educating on data responsibility.

⁸ Society-Centered Design. https://societycentered.design/#principles. Access on February 23rd, 2022.

3.1

Design Experience focused on Society

Humans have been building tools and technology to pursue new ideas for societal needs since the start of time. Individual and communal visions that shape our cultural identity, social structures, economies, cultural development, and environments have all benefited from design.

According to Brown (2019), design enriches our lives through images, forms, texture, color, sound, and smell by triggering emotions. We may use those technologies to create experiences that encourage active participation and engagement. To create a successful experience for the user, we must consider three characteristics: active involvement and an experience that feels authentic and genuine. Finally, it should be designed with precision and thoughtfulness.

Much has been said on the relevance of human-centered design (HCD) in innovation, but what is not pointed out is how people can adapt a product or to an inconvenient experience. If we adjust this viewing to society, the probability of having a more significant impact is higher. Sarah Gold, CEO at Projects by IF, writes in her article published by O'Reilly that the result of a product design with HCD in mind grants us "superpowers." "You have a portable supercomputer that can summon a taxi to you in seconds. You're very aware of your surroundings. You can chat and transact instantaneously from anywhere. These superpowers, however, come at a price: your attention is a scarce commodity, and your data sifted through a sea of advertisements."

⁹ Society-Centered Design by Sarah Gold published in July, 2020. https://www.oreilly.com/radar/society-centered-design/ Access on February 23rd, 2022.

She complements by saying that the notion that data must necessarily represent one person is a flaw in individual design. However, this is not the case. In almost every scenario, data represents a large number of people. Your location data shows where you've been with other people, such as when you see your friends or walk your kids to school. Data is social by nature and represents society.

"We want to move beyond human-centered design to society-centered design. We must design for the collective. We must design for society. Designing for society means designing for the broader context of systems that we impact and shape. We can redefine our social contract with each other, and with the world that we steward. To do this, we must be intentional about citizen empowerment, civic commons, public health, equity, and the planet." (Society centered Design by IF, 2020)

Changing the environment of ideas and advancing toward real-world solutions is the goal of society-centered design. It's a problem-solving technique involving society at every stage of the process.

The manifesto touches on essential parts of our present scenario, with the change of perspective that Covid-19 brought to us, where we've become more conscious of our connection and responsibility to our communities. It's crucial to broaden our perspectives, where society as a whole becomes the focus.

3.2

How do public transportation bring people together

In a city like Milan, where one of the main ways of transportation is public, people from different social classes share the same space. No matter how different their lives are, everyone is on the same bus, train, tram, or metro; during their commute, they share a moment, a space, and their destination.

For some cities like New York, the metro has a significant social role, as the article published in *The New York Magazine*, The Case for the Subway by Jonathan Mahler¹⁰, says:

"The subway may no longer be a technological marvel, but it continues to perform a daily magic trick: It brings people together, but it also spreads people out. It is this paradox — these constant expansions and contractions, like a beating heart — that keep the human capital flowing and the city growing. New York's subway has no zones and no hours of operation. It connects rich and poor neighborhoods alike. The subway has never been segregated. It is always open, and the fare is always the same no matter how far you need to go. In New York, movement — anywhere, anytime — is a right."

It might not be that common to talk to someone while using the public transport, what might be more common is seeing someone more than once while sitting patiently for your stop. It can bring up a comfortable feeling of wondering where that person goes, where they came from is often a good way to pass the time and exercise imagination.

The New York Magazine, The Case for the Subway by Jonathan Mahler. https://www.nytimes.com/2018/01/03/magazine/subway-new-york-city-public-transportation-wealth-inequality.html Access on March 2nd, 2022.



Panoramic of Digital Culture

The rise of technology and its constant evolution plays a significant role in our lives. It's important to understand where we stand when we think about our relationship with the internet. This chapter gives a panoramic view of the moment we are living, considering digital culture, data privacy and our lack of understanding its harm, social media, and an overview into two apps that are in the interest of this project.

4.1

Digital Culture

We live in a world where the internet and the world wide web have gone from being at the vanguard of a new frontier of communication technology to being an incredible unremarkable part of our culture and the daily lives of most people in just three decades.

The internet has become a central component of most people's work, leisure, social, and political lives. Its relevance is currently defined by its ordinary character and generalization, not by novelty, originality, or transformation capacity. As Miller (2020) said, the online world is no longer a separate domain from the offline or real-world but has merged into it.

The growing popularity of mobile technology, notably mobile phones, has only aided this integration. The latest generation of phones allows us to maintain near-constant touch with the internet and our friends, relatives, bosses, and significant others. As a result, digital culture has evolved to encompass more than just sitting at a computer. For this project, the mobility given by smartphones is crucial, not just to keep in contact with loved ones but also to expand and meet new people.

Today, we live in a moment where we are encouraged to use the internet to do everything possible. Work, school, parties, therapy, and shopping are some of the things that we now do in the digital world. With the World Health Organization's recommendation of social distance as a measure to contain the spread of Covid-19, we were

encouraged to migrate our daily activities to our computer screens. And now, more than ever, we are dependent on the internet and all that surrounds it, which brings us to Data Privacy; how much do we want to share with the internet? Do we control this data collection? What measurements are being created to protect us from the big companies?

4.2

Overview of Data Privacy

Data privacy refers to the choice made by the user on the amount of data allowed to be shared with or conveyed to others. This information can include a person's name, address, phone number, and online or offline conduct. During the past decade, the topic became of interest to news outlets which led to a public debate on privacy. Consequently, there are two extremes in this debate: On one side we have people who abandon messenger apps from their phones and do not use online banking because they do not want to leave any traces in the digital world. On the other side of the extreme, we have the group that argues they would have nothing to hide, hence it would not matter if their online activity was being tracked. Obviously, the debate is not that simple, and a lot of people would not identify with either of these sides, but with something in between. In order to understand the importance of data privacy, it is important to understand why data matters so much in today's world.

The web itself emerged from a liberal idea in which everyone could access everything. In other words, at the beginning of the internet, everything was free and without economic interests. Whenever companies hid their content behind a paywall, they could be sure to lose their users to competing services which did not

charge the user. However, offering free content was also not a long-term option. The solution was to make money with user data. For example, Google which was until then only a search engine knew what internet users were looking for. Consequently, they sold this information to advertisers which then could better target online users. Besides that, Google used the collected data to improve its own search algorithm. Today we know Google has become the most used search engine in the world and 84% of its revenue comes from advertising. This example shows how important data has become for Google's business model — by design this company is interested in getting the most precise data from users all over the world. Similarly, people think of Facebook, mainly as a social network, but often forget that 97% of the company's profit comes from the advertising sector.

Data can tell a lot about a person: what illnesses we deal with, our desires, our fears. Additionally, these data points are saved and stored forever. Big data knows us better than we do ourselves because it memorizes everything about us as the story of an Austrian law student shows. In 2011, Max Scherms requested to know what information Facebook saved about him, he received a document with over 1200 pages. It contained every image he had clicked on and every ad he had seen. Facebook created a profile of his digital twin and used it to offer business associates a precise profile of him. The problem with data is that it's collected and computed by algorithms which are not

¹¹ Google Q4 search ad revenue: \$43.3 billion Google Q4 search ad revenue: \$43.3 billion by Danny Goodwin on February 2, 2022. https://searchengineland.com/google-q4-2021-earnings-379735 Access on March 16th, 2022.

Meta's (formerly Facebook Inc.) advertising revenue worldwide from 2019 to 2021. https://www.statista.com/statistics/271258/facebooks-advertising-revenue-worldwide/ Access on March 16th, 2022.

¹³ Data Protection Commissioner v Facebook and Max Schrems at epic.org. https://epic.org/documents/data-protection-commissioner-v-facebook-and-max-schrems-standard-contractu-al-clauses/ Access on March 16th, 2022.

comprehensible for various reasons. Primarily, these algorithms build the foundation of data driven companies, as such they are kept secret from the public. Moreover, algorithms can become so complex that even software architects have difficulties understanding them. Hence, the general public has no chance to evaluate what happens with their private data after its collection. This can lead to corrupt datasets as the case of Catherine Taylor illustrates. Taylor applied to a job at the local Red Cross, but was rejected due to criminal charges on her record. She looked into it and found out that the charges belonged to another person who happened to have the same name and birthday as her. Upon further investigations, Taylor discovered that at least ten data brokers had false records on her. The example shows that big data does not guarantee to be free of error, which can have big impacts on things like criminal records or credit scores. Moreover, it shows that we are not in control of this data, even if it belongs to us. Companies with a monopoly have the power over it, thus data and the knowledge gained from it is ultimately undemocratized.

Technology alone is insufficient to ensure data privacy because it only acts as a tool or medium, created by humans. However, the topic of data privacy acquired growing interest in the past years. For example, the European Union created a data privacy law to protect individual data rights. If a website outside the EU collects data from EU residents, it must comply with the GDPR. Cookie consent is a cornerstone of the legislation to assure protection for EU-based users.

Little-known firms tracking data used in credit scores - The Washington Post by Ylan Q, Mui. https://www.washingtonpost.com/business/economy/little-known-firms-tracking-data-used-in-credit-scores/2011/05/24/glQAXHcWII_story.html Access on March 16th, 2022.

4.2.1

Europe's GDPR

The General Data Protection Regulation (GDPR) is the world's most stringent privacy and security law. Even though it was designed and passed by the European Union (EU), it imposes duties on organizations targeting or collecting EU citizens' data. On May 25, 2018, the regulation went into effect. Those who break the GDPR's privacy and security regulations will face severe fines, with penalties ranging in the tens of millions of euros. The GDPR signals Europe's hard stance on data privacy and security when more individuals commit their data to cloud services, so data breaches are becoming more common.

Cookie consent is a cornerstone of GDPR compliance for websites with EU-based users, despite cookies being only referenced once in the GDPR. Website cookies are one of the most popular ways to gather and share personal data online. As a result, the GDPR's most commonly utilized legal basis for allowing websites to use personal data and cookies is end-user permission to cookies.

According to the GDPR^{**} a website may only collect personal data from users once they have provided their explicit agreement to the specific purposes for which the data will be used. Some of the GDPR cookie mandatory criteria for websites are:

- · Before any cookie activation, explicit consent must be obtained;
- Users must be able to turn on the cookies individually, rather than being compelled to consent to all or none;
- · Permission must be freely granted and cannot be forced;
- · Consents must be as easy to revoke as they are to give;
- At least once a year, authorization must be renewed.

¹⁵ Europe's GDPR. https://gdpr.eu/what-is-gdpr/ Access on March 10th, 2022.

¹⁶ Ibid.

Cookie banners allow users to select and approve specific cookies for activation rather than others while visiting a website, which is how GDPR cookie compliance should be handled on websites.

Following the GDPR guidelines, the European Data Protection Board's (EDPB) rules from May 2020 explain valid permission on websites.

According to EDPB guidelines, the website's cookie banner cannot feature pre-ticked checkboxes. For the website to activate cookies and process personal data, users must freely offer a clear and affirmative action to signal their consent.

4.3

Social Networks

Since the end of the nineteenth century, the term "social media" has been used in sociology to describe interactions between individuals, groups, organizations, and society. User interfaces that are simple, accessible, and interactive have been made possible by advances in online technology and web 2.0. As Tuten and Solomon (2018) said, social media are online platforms for communication, collaboration, and nurturing among interconnected and interdependent networks of people, communities, and organizations, aided by the digital era's technological capabilities and mobility.

Guidelines 05/2020 on consent under Regulation 2016/679. https://edpb.europa.eu/sites/default/files/file1/edpb_guidelines_202005_consent_en.pdf Access on March 19th, 2022.

Social networks have changed how our modern society interacts, and accordingly, to Datareportal 4.62 billion people worldwide now use social media. The most popular internet activity in the world is social media. They are participatory systems where users can post, create, share, and play. They are communication, socializing, and dating platforms that allow people to interact in real-time. Facebook, LinkedIn, Tinder, Twitter, Bumble, Youtube, Tik-Tok, and Instagram are the most popular social networking platforms. Users can find communities, entertainment, e-commerce, and publication opportunities on the networks.

Users of online dating sites can interact and form romantic relationships with people they might not otherwise meet. Interestingly, online dating profiles can be more public (e.g., available to a broader audience because users typically want to connect with people outside their social networks) and contain more sensitive material than other social media profiles. Users may be motivated to include information, such as sexual quirks and religious convictions, that they believe will assist them in finding a compatible love partner but would not discuss with friends (e.g., Facebook, Instagram, Twitter). To better understand how we use and give data to those apps, let's deep dive at the two most prominent online dating apps, Tinder and Bumble.

Digital 2021 October Global Statshot Report. https://datareportal.com/reports/digital-2021-october-global-statshot Access on March 15th, 2022.

4.3.1

Tinder

Tinder is a mobile dating app that was first released in 2012. Tinder profiles are simple, with only a name, age, interests, and a brief bio. Users choose their ideal match by indicating their age and gender preferences and giving a short biography. The app returns a set of profiles that meet the user's specified criteria within a particular geo-range when they open the app (maximum is 100 miles). A photo of a nearby user is then shown to the user. There are three buttons on this screen, and then the swipe motion of each of those buttons, which is very known nowadays. The user can indicate whether they like, dislike, or super like the profile. Both users are alerted if they like each other (otherwise, the two users are not notified of anything). The two matched users can now communicate via text messaging within the program. This is the app's functionality limit, and as a result, it's a very trimmed-down form of online dating. In reality, because there is no formal way of reporting what a user wants from a match, the app can be used for more than just romantic relationships.

One of Tinder's most recent additions is a subscription service that allows users to undo a swipe with unlimited swipes and change their current location to discover people in different areas worldwide. Tinder has also included a tool that allows users to share their Instagram photographs with potential matches on their profiles.

On the client-side of the app, Tinder was disclosing information and estimating the distance between matches. A San Francisco-based engineer, Mike Soares, found and reported the first location issue in early July 2013¹⁹. The API²⁰ returned

Tinder's Privacy Breach Lasted Much Longer than the Company Claimed by Zachary M. Seward. Quartz. Atlantic Media http://qz.com/107739/tinders-privacy-breach-lasted-much-longer-than-the-company-claimed/ Access on March 2nd, 2022.

²⁰ API is the acronym for Application Programming Interface, a software intermediary that allows two applications

the highly precise distance between two users before the updated fix. With very little technical knowledge, an attacker or stalker can locate the exact location using trilateration. Even though the distance was adjusted to a considerably lower precision, Tinder and many other Geosocial programs raise privacy concerns by linking a broad location too far from the personal information about their users.



Figure 01: Tinder. Source: https://tinder.com

4.3.2

Bumble

Bumble is a mobile dating app that was first released in 2014. Creating a profile, sharing messages, photographs, and videos, looking for filters, and integrating with other social networks like Facebook, Instagram, and Spotify are possible with the Bumble app. To take advantage of Bumble's services, you must first register an account with the app. This method allows authentication to be done using one of two methods: a mobile phone number or a Facebook account. Users accept permission to share their names and profile images when creating a Bumble account using their Facebook credentials. Users can also control which extra rights Facebook grants by opting out of allowing access to their email address (if one is

associated with their Facebook account), date of birth, profile photos, gender, page likes, and current town/city.

Like other e-dating apps, Bumble allows users to create a profile with information about themselves, including a brief biography, gender, weight, height, religion, interests, geographic location, and photographs. It is also possible to include activities that the user engages in, such as whether the user smokes, drinks excessively, or participates in sports, among other things. Apart from a name, a date of birth, and a mobile number or a Facebook account, no further information is required. It's worth noting that while creating a profile, the user is asked to authenticate their identity by sending a photo of themselves in a specific pose indicated in the application. Because of the additional labor required to obtain someone else's picture in an unfamiliar pose before the verification, this approach aims to reduce the creation of fraudulent profiles. However, the verification procedure is optional.

After the account is created, the app will provide a stream of profiles for the user by swiping right (showing interest in the profile presented) or left (expressing disinterest in the profile shown). When two users swipe right on one other's profiles, Bumble encourages one to message the other within 24 hours. If this does not happen, the match will expire, and the users will no longer be able to interact. If two people of the opposite gender are matched, the female user must initiate the chat. If the users are of the same gender, they can commence the conversation. The app allows users to send text messages, images, audio recordings, and video calls while talking. Swipe left if the user isn't interested in the profile displayed, and the user will no longer view the previously shown profile. The application will then suggest another potentially compatible person. A nude recognition technique

is also included in the application. It uses artificial intelligence to analyze the photographs sent back and forth to see if they contain sexual material.

In addition to the e-dating mode, Bumble has two more options in the app: Best Friends Forever (BFF) and business (identified as BIZZ). BFF mode focuses on finding a match to form a new friendship, whereas BIZZ mode concentrates on making professional contacts.

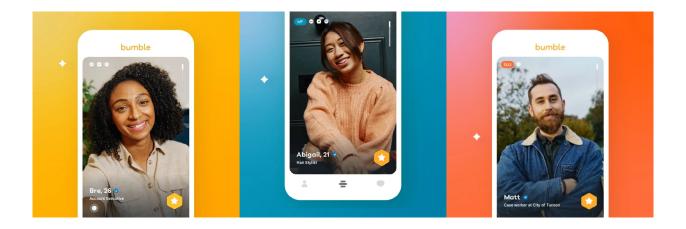


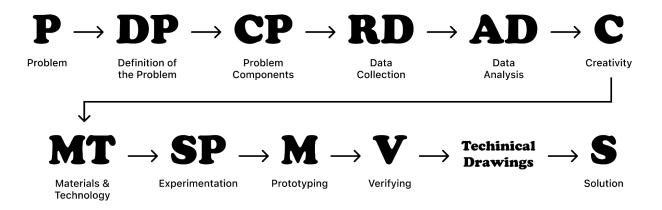
Figure 02: Bumble. Source: https://bumble.com

Both case studies share the basic mechanisms of communication and data collection. Bumble goes a step further than Tinder when giving the certificate profile badge by having another step to reassure that your profile is accurate through identity authentication and offering other app options for matches with friends and professional contact. With the analysis of the two case studies, it is interesting to comprehend that we are already very used to the idea of meeting someone via an app, showing that we are open and seeking connection.



Bruno Munari's Design Methodology

The methodology developed by Bruno Munari (1981) was chosen as a tool for developing this project. The author affirms that designing is easy when one knows what to do. He compares the recipe for green rice and defines it as a series of necessary operations logically dictated by experience. Graphic 02 presents the 12 steps operation created by Bruno Munari. In this project, ten out of twelve methodology steps were applied.



Graphic 02: Bruno Munari's Methodology.

5.1

Problem

As exposed in Graphic 02, Munari's (1981) methodology begins with the step referred to by the author as "Problem." He expounds that the "design problem results from a need."

For this project, the problem in focus is "How to make friends after social distance?" It's also the research question for this paper.

5.2

Definition of the Problem

According to Munari (1981), after the institution of the general problem, it is common to have the false claim to look for an idea that solves the problem immediately. The author indicates that the designer should not look for ideas at this point but needs first to define the problem as a whole and determine the limits within which one intends to work.

According to an article published by The Guardian²¹, "People have become 'more insular and bonding-oriented' amid Covid, and now many aren't sure how to start rebuilding their social lives." After a lengthy social distancing in our homes, we are slowly coming back to offices, gyms, and classrooms, and those places don't feel

Why 'pruning' friends have been so common during the pandemic by Sophie Black by The Guardian. https://www.theguardian.com/lifeandstyle/2022/jan/03/why-pruning-friends-has-been-so-common-during-the-pandemic Access on February 24th, 2022.

natural anymore. Casual friendships in these rooms have not yet been given, and efforts must be made to achieve and rebuild them, but there is still the possibility of making new friends. But we don't know where to start because we are not used to it anymore. So, for this project, I want to start by addressing the ones who are the closest to us in our neighborhood.

5.3

Problem Components

According to Munari (1981), "whatever the problem may be, it can be divided into its components. This operation facilitates the project because it tends to highlight the small, isolated problems that are hidden in the sub-problems."

The already defined and delimited problem is divided into different components in this step. Components" are understood as all the elements that constitute the problem. These can be divided into indirect and direct. The indirect components interfere in the problem only tangentially, not directly affecting its materialization. On the other hand, the direct ones are those components that contribute to the constitution of the final solution, as far as its materialization is concerned.

Some of the indirect components for this project are people's routine, interests, their ability to make friends, the places they have access to, and privacy data. Social media, in-person interactions, daily commute, neighborhood, and public transport are direct elements.

5.4

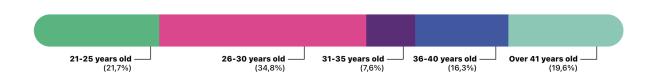
Data Collection and Analysis

After determining the components that constitute the problem, the designer must obtain data regarding each element and analyze them. The data organization allows for in-depth analysis and enhances the development of connections/ relationships between the components. Interestingly, the collection and analysis steps are organized together, as this provides improved visualization of the possible directions of the project. The collection and analysis of data on direct components refer to the research, search, and grouping of visual references that can help generate alternatives in the Creativity stage.

With all the information gathered about Milan and its means of transportation, together with the research on social media and its branches, the survey aims to give data to the three main topics of my thesis (transit, community, and connections). It was spread during February of 2022, gathering 92 participants from more than 40 different nationalities. The four sections of the survey are: basic information, communing in Milan, Connecting, and Observing your surroundings.

Basic Information

How old are you?



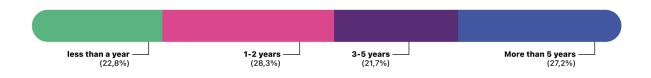
Graphic 03: Survey Question: How old are you?

Nacionalities

	Greece Kaz	akhstan	Poland	S1o	venia	Philippines	Syria
Turk	ey Guatemal	a Bra	azil	Vietnan	England	M	lexico
Souti	n Africa		Germ	244	ina Pa	Tunisia	Marocco
Israel	India	Serbia	Albania		Italy	Leban	
Ukrain	Costa Rica	Argentina		l <mark>ombia</mark> Australia	Cana	France da _{Nethe}	Sweden erland
	Slovakia	Iran Venezuela	Egypt		zstan	Jganda	Zinbabwe

Graphic 04: Survey Question: What is your nationality?

For how long have you been living in Milan?

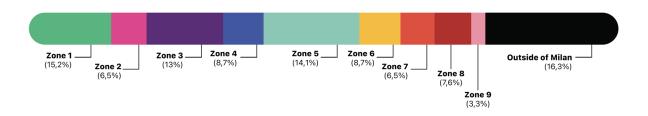


Graphic 05: Survey Question: For how long have you been living in Milan?

From the section, we can see a very diverse group of people, ranging from 21 to over 40 years old. We can see in graphic 05 that we had a very distributed percentage on the years living in Milan, which gives us a balanced perspective. It's interesting to notice the different nationalities present in this survey, spanning across more than 40 countries. Which also reflects how international the city is.

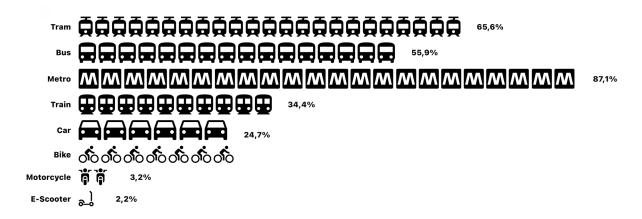
Commuting in Milan

Milan is divided into nine zones, in which zone do you live?



Graphic 06: Survey Question: Milan is divided into nine zones; in which zone do you live?

Do you take any transportation? Which?



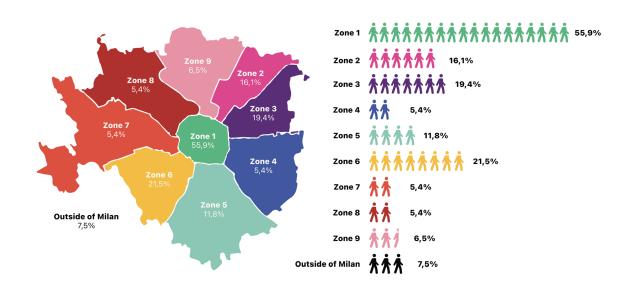
Graphic 07: Survey Question: Do you take any transportation? Which?

How many times per week do you use this means of transportation?



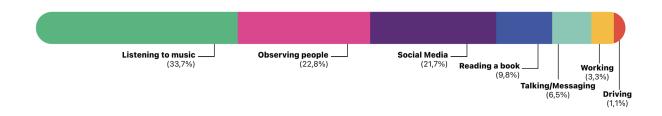
Graphic 08: Survey Question: How many times per week do you use this means of transportation?

Based on the map below, where do you usually go?



Graphic 09: Survey Question: Based on the map below, where do you usually go?

When commuting in the city, what are you usually doing?



Graphic 10: Survey Question: When commuting in the city, what are you usually doing?

This section aims to collect data on how far people travel and how often they use public transportation. And in this survey, it's clear that public transport is the primary way of transportation in the city. We can also observe that zone 1 is more prone to receive people from different neighborhoods than the other zones. If we analyze the zones where they live, we can see a more equally distributed percentage.

Listening to music, observing people, and social media are the most common activities during the commute between the answers. Some participants highlighted what type of music or if it was a podcast/audiobook that they were listening to on their phones.

Connecting





Graphic 11: Survey Question: Did you feel comfortable talking to people in the streets?

Where did you use to meet new people?

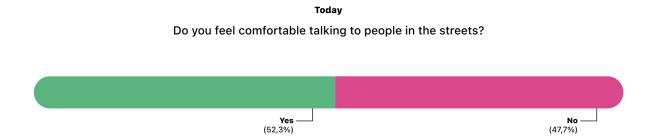
University Bar/Clubs
Social Media Work Hobby Parks
Friends of friends
Neighboorhood

Graphic 12: Survey Question: Where did you use to meet new people?

How did you feel when people you didn't know would start a friendly conversation with you in public?

Curious Scared Happy Nervous Annoyed Uncomfortable Excited Mix Feelings Comfortable

Graphic 13: Survey Question: How did you feel when people you didn't know would start a friendly conversation with you in public?



Graphic 14: Survey Question: Do you feel comfortable talking to people in the streets?

Where do you meet new people?



Graphic 15: Survey Question: Where do you meet new people?

How do you feel when people you don't know start a friendly conversation with you in public?

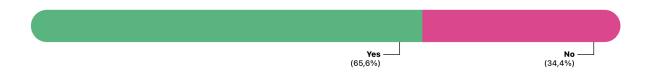


Graphic 16: Survey Question: How do you feel when people you don't know start a friendly conversation with you in public?

This section is divided into two parts for comparison: before social distance and today. We can observe that people were less comfortable talking with strangers after social distance. Social media was the second most popular way to meet new people before social distance, but became the first when asked about today, on the other hand Bar/Clubs lost their relevance during this period. The word Uncomfortable grew together with Nervous when questioned about their feelings on having strangers talk to them. Curious and Comfortable didn't suffer many changes.

Observing your surroundings

Do you recall seeing the same person at least twice in your neighborhood?



Graphic 17: Survey Question: Do you recall seeing the same person at least twice in your neighborhood?

In the last section, I wanted to understand if they are aware of their surroundings and if they interact in any way with another person during the commute. The purpose of the first question (Graphic 17) is to highlight that people are aware of their surroundings, that they take note of their routines.

For the open question of the survey, I wanted to understand what is the factor for an in-person conversation to start, what makes people start a conversation with a stranger in a public space. **Question:** Did you ever start a conversation with someone in any public space? Why did you start the conversation?

25 out of the 73 answers to this question were negative, some of the reasons being "No, I am learning Italian, and I'm not confident to speak Italian yet.", "Never started because I'm still learning the language. But I would totally do it if I could!", "In the past. I now usually don't feel welcome, not speaking fluent Italian.", "No, unless I tell them something (they dropped something, they are blocking a path) - referring to life in Milan only, not my home country.". We can observe that the lack of knowledge in speaking Italian while not being in your home country plays a part here; it creates another barrier between people.

Sixteen of those comments were positive "Yes! Usually to old people who are lonely and happy to talk", "Yes. To be nice, to make new friends, to help someone with information", "Yes, for directions or to compliment an item of clothing they wear. It can also warn them about something like if their bags are open, etc.", "Yes. Person needed a ride when trains were suspended and I was going to have someone to pick me up, so offered her to join us." We notice that these groups are comfortable initiating conversation with small talks or when they need the help.

31 people were in between, not close for conversation but also not starting; Here are some examples: "Comment on something funny or complain about something.", "Neighbors with dogs.", "Just once, the person had an adorable dog that was interested in me.", "Not really. I'm a bit shy. Sometimes I will compliment someone's nails, for example, if I like the nail polish.", "There was something interesting they were doing, eating, reading or they had some personal connection.", "Not very often but if a stranger witnesses something that happens to me, usually if it's kind of funny or light, I might start talking to them if they make eye contact with me."

"I didn't start the conversation but kept it going. Once a girl asked me where to take the bus, and it happened while I was going there, so I started talking during our way there. It turned out we had a lot in common (I graduated in International Relations and have Japanese ascendence, and she was studying Asian Studies, was planning to do a master's in International Relations and could speak Japanese. Plus, she would visit a friend in a city I had studied previously). Even though we didn't exchange contacts, it was a friendly conversation with a stranger in a public space." (Participant 87)

They won't start a conversation out of the blue, but they are most likely to start talking if they notice something in common with the other person. They need that little detail that makes them connect with someone else. We can say that they are the ones that are observing people and looking for that connection the most.

Before Social Distance How often did you observe people on the streets?



Graphic 18: Survey Question: How often did you observe people on the streets?

How often did you talk to someone during your commute? (in person)



Graphic 19: Survey Question: How often did you talk to someone during your commute? (in person)

How often did you talk to someone during your commute? (on the phone)



Graphic 20: Survey Question: How often did you talk to someone during your commute? (on the phone)

TodayHow often do you observe people on the streets?



Graphic 21: Survey Question: How often do you observe people on the streets?

How often do you talk to someone during your commute? (in person)



Graphic 22: Survey Question: How often do you talk to someone during your commute? (in person)

How often do you talk to someone during your commute? (on the phone)



Graphic 23: Survey Question: How often do you talk to someone during your commute? (on the phone)

Comparing side-by-side the data collected, we can see a slight increase in the percentage of people that Rarely or Never observe people on the streets. There was an increase of 112% of people that Never talk to someone in person during the commute after social distance. When asked about communicating on the phone, the percentage was quite similar, with a bit of rising on the Always, Often, and Sometimes rate.

5.4.2

Case Study: The Swedish Number

In 2016 in celebration of 250 years of free speech, Sweden's Tourist Association and Stockholm-based agency INGO gave the country its own phone number intending to make it more attractive to tourism. The idea is straightforward, you call the phone number, and the other side of the line is a random Sweden, with whom you can ask questions and find out more about the country and its culture.

The line was open for 79 days; in 197678 calls were received from 190 different countries, the total call duration was 367 days, 09 minutes, and 21 seconds²². The mechanics were risky but straightforward because the success depended on Swedish people to make it work. They needed to download an app to become an ambassador of the project to receive a call. The advertisement campaign of The Swedish Number was streaming on National television, and the face of the campaign was the Prime Minister of Sweden, Stefan Löfven.

Data collected from The Swedish Number website. https://www.theswedishnumber.com Access on February 24th, 2022.

During an interview with Contagious I/O²³, Björn Ståhl, executive creative director at INGO, answers the question of Why the campaign has been so successful:

"One of the reasons is because we kind of made the digital interaction analog again. You know, people can talk badly about places, things, and others on social media, and they can hide behind screens. But we facilitated a personal, real interaction between people, and that makes it difficult to be rude. You call because you're curious. And you pick up the phone because you're interested too. The second one is that because this idea is very media friendly. It's very easy to be picked up and made mainstream globally. Very often, campaigns can do well in certain markets, but this one has gone totally global and resonated with everyone."



Figure 03: The Swedish Number. Source: https://www.theswedishnumber.com

²³ Contagious I/O interview with Björn Ståhl from August 22th, 2016. https://www.contagious.com/news-and-views/insight-strategy-the-swedish-number Access on February 24th, 2022.

5.4.3

Case Study: Swipe Night

Tinder and ad agency 72andSunny released an interactive swipe night game in October 2019. The app allowed users to play the story and make choices that would affect the result of the story. Swipe Night was intended to connect users to new matches based on their game choices. It is different from Tinder's regular matching, based solely on geographic proximity. The story unfolded on Sunday over four weeks, with every week followed by the previous week's story.

During an interview for CNN Business²⁴, a spokesperson for Tinder said that the matches jumped 26% compared to a typical Sunday night, and messages increased 12%, mentioning that the purpose of Swipe Night is to create a discussion among users.

The mechanics of the game is very similar to the Tinder app itself. You navigate through the story making two choices, using the swipe left or right, decisions that can lead you to different paths. Every week you reach an end that is a consequence of your choices, but the following week starts on a common ground where your result of last week it's not taken at the count, making all the users start from the identical commonplace.

When users finished the night's episode, they were given the option to share their choices on their profiles. If you're sharing results with a fully open profile, you'll see all choices made throughout the game. Even if the profile isn't fully open, other users can see the ending

[&]quot;Tinder created an interactive show. Gen Z loves it" by Kerry Flynn for CNN Business. https://edition.cnn.com/2019/10/23/media/tinder-interactive-show-swipe-night/index.html Access on February 24th, 2022.

someone played through the "badge" profile picture. Finally, even if the user chooses not to share the swipe night results, the app can recommend a high-level match based on the results of Tinder's algorithm.

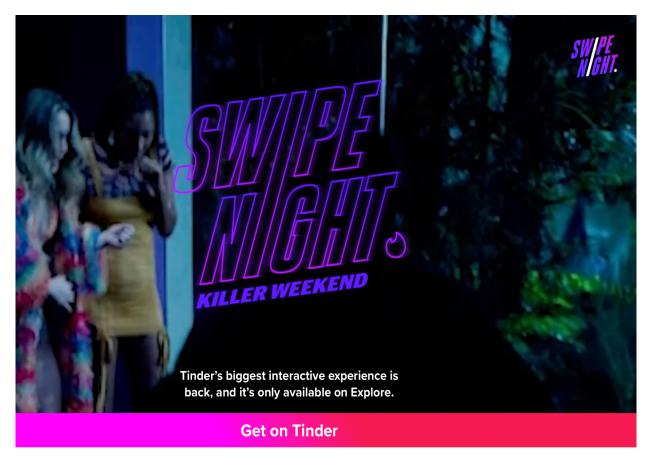


Figure 04: Swipe Night by Tinder. Source: https://tinder.com/swipe-night/season-2

5.4.4

Outcomes, observations, takeaways

The survey was essential to the project. I was able to collect import insights from the answers, such as:

- Common interest can be a valuable conversation starter with a stranger;
- People are open to others, even if the social distance made the process more difficult;
- Social Media became the number one tool to meet people;
- During a commute, people are aware of one another, and observing them is a common thing during that time.

With the study cases, it's noticeable that people are craving entertainment guided by curiosity. In the first case study, The Swedish Number, curiosity and the easy, simple, and familiar way to reach someone, the phone call were the main factors in the project's success.

The second case study, Swipe Night by Tinder, touches on another point: the value of knowing information about other people, giving not just a "badge" to the user but a conversation starter. With this information, the user has another indication that they might have something in common, which is very desirable when finding a partner or making friends.



Project Conception

This chapter presents the project's design process following Bruno Munari's methodology, which includes the initial phase of the project's concept: brainstorming, user flow, mood board, and the choice of technology and materials. This chapter will put in perspective the first decisions made on the project.

6.1

Creativity

The solution lies in creative coordination considering the data collected and analyzed regarding the components of the problem. Thus, according to Munari (1981), creativity stays within the limits of the problem. Creativity is defined and delimited as the one where connections are collected, and analyzed data are established in a graphic language.

6.1.1

Brainstorming

"How to make friends after social distance?"

Culture City Nature Neighboorhood Routine

Connection Public Transportation

Conversation Starter Work Data Privacy Digital

Common Interest Social Media Parks

Friends Quick chat People

Graphic 24: Brainstorming.

The first step was gathering all the information acquired via the survey and case studies and brainstorming on the topic. For it, I started with words that I collected during the research and the surveys, keeping in mind the parameters of the problem. From the brainstorm, I took Common Interest, Conversation Starter, Data Privacy, and Quick Chat as a starting point on the conversation mechanism. Public Transport, Digital, and Neighborhood will be the foundation for the project.

6.1.2 **Mood board**



Graphic 25: . Mood board.

For the moodboard, I was looking for fun and eye-catching colors and graphics. As a consequence of the use of the nine Milan's municipalities, the base color palette also has nine colors, each corresponding to one zone. Flat and bold graphics to grab the attention of the ones passing by in the streets. When thinking on the website, I wanted the design to be clean, responsive and to have some animated elements throughout the pages.

6.2

Materials and Technology

According to Munari (1981), the step "Materials and Technologies" consists of performing another data collection but related to the materials and technologies that the designer has at his disposal to carry out the project. QR code, wheat-past poster and end-to-end encryption are the base materials for the project.

QR code ("quick response") is a two-dimensional bar code invented by Japanese company Denso Wave. Information is encoded vertically and horizontally, containing up to hundreds of times more data than traditional barcodes. To access the data, the user takes a picture of the code with a smartphone camera which processes the image and directs the user to the digital product.

Digital devices such as camera-equipped mobile devices and related applications are leading the spread of QR codes. On the other hand, printed and paper-based materials are still essential to provide the information. QR codes are frequently used on printed materials to enhance the attractive and insightful aspects of the printed matter. It became commonly used for the lack of contact between the person and the object in the last years, which is the right tool to direct users to the website sinuously. Nine QR Codes will be created for this project, the intention being that this code will be used not just to direct the user to the website but also to recognize the region the user is scanning the code. So, the platform doesn't need access to any geolocation, keeping the data sharing at zero.

6.2.2

Wheat-Paste Posters

This technique of street art has its name because wheat paste (also called flour and water paste, flour paste, or paste) is a gel or liquid adhesive made from flour or starch and water. A good wheat starch paste has strength compatible with many paper artifacts, remains reversible over time, is not highly acidic or alkaline, and is white.

Activists and advocates of various subcultures often use this glue to post promotions and artwork. It has also been widely used in advertising posters since the 19th century. Circus posters have developed a considerable culture around paste making and poster campaigns. In alcohol and nightclub advertising, the Henri de Toulouse Lautrec poster was so famous in the 1890s that an explanation was published on removing the glued sign without damaging it.

Commercial poster hangers always "cooked" their paste until the 1970s, but since then, many have bought cooked instant paste. It is applied to the back of the paper and then placed on flat surfaces, especially concrete and metal. That's because it doesn't adhere well to wood or plastic. Cheap, coarse paper, such as newspaper, works well because it can be soaked in the mixture for a short time to saturate the fibers. For this project what counts is the ease with which this type of poster can be spread around the city, which is already very common to see in the streets of Milan. The quantity of posters matters to the effectiveness of this project, so the user can easily find them during commute.

6.2.3

End-to-End Encryption

End-to-end encryption, in a nutshell, is a communication system in which only the person communicating can read the message. It is the best-known way to protect your digital communications. Eavesdroppers²⁵ do not have access to the encryption key needed to decrypt the conversation—even companies running messaging services.

Some popular messaging apps have introduced end-to-end encryption as a default (WhatsApp, iMessage) or optional feature (Facebook Messenger, Telegram). As a result, decades after being used only in niche applications and communities, end-to-end encryption is readily available and is used by millions and even billions of users. This technology will be a default of the website, giving the user the data privacy promised.

Definition of *eavesdrop* intransitive verb: to listen secretly to what is said in private. According to Merriam-Webster. https://www.merriam-webster.com/dictionary/eavesdrop Access on March 1st, 2022.

│ Ciao!Ciao!

Ciao!Ciao! is the solution to the question: "How to make friends after social distance?" After extended research about commuting in Milan, designing for society, data privacy, and the information acquired through the survey, the website aims to answer the question. This chapter will clarify all design decisions regarding mechanics and visual identity.

7.1

Project Mission

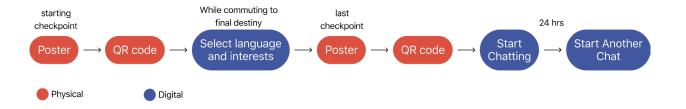
Commuting in Milan is part of the routine of many people, as seen in the first chapter with data collected by Moovit and the survey made for this thesis. We could also observe the impact of social distance as a consequence of Covid-19 since March 2019, people are more distant but the natural urge to meet people, make friends, be part of a group didn't change, if not have increased.

The mission of Ciao! Ciao! is to give a start to the ones looking for connection. The goal is to make people meet other people that they wouldn't connect so easily. It could be for a quick chat during lunch, the beginning of a friendship, someone to walk the dog with, exchange opinions on coffee, find out the best place to eat kebabs in the city, doesn't matter the outcome, what matters is the conversation.

7.1.1

User Flow

The first decision was that it is a website; with this platform, I can host all the functions I listed in graphic 26 below without the long process of downloading an app. The project is thought to be used primarily with a smartphone and during transit, which most likely means users will use their internet mobile data. My goal is to make it as straightforward as possible the whole journey.



Graphic 26: User Flow.

Physical interaction means anything that has to be encountered in real life, and Digital means everything that is happening within the website. This first user journey is to map out the path necessary from start to end to engage in a conversation through this website. The user finds the first wheat-paste posters spread in each neighborhood and scans the QR code to mark their starting point. The signs will have different colors corresponding to the municipalities. The code sends the user to a website where the user can select their interests and language of preference on their way to the final destination. Arriving there, the user finds another poster in the streets and scans the new QR code marking his last checkpoint; they will be matched with someone who has checked at least one common interest. The language here is not a barrier because a translator will be available if needed. The chat will start with a conversation starter about the topic in common to break the ice. The user can leave the chat at any time, and, after 24 hours, the conversation is ended, allowing meeting another person.

7.1.2

Personas

Three Personas were created based on the survey to represent different types of users:

- Alina, 24 years old, Brazilian student living in Milan for less than one year in zone 9.
- Nina, 32 years old, Italian teacher, born and raised in Milan, living in zone 3.
- Ernie, 45 years old, German consultant, living in Milan for two years at zone 7.



Alina

The Observer

"Once a girl asked me where to take the bus, and it happened I was going there, so I started talking on our way there. Even though we didn't exchange contacts, it was a friendly conversation with a stranger in a public space."

Alina moved to Milan six months ago to start her master's degree in mechanical Age: 24 years old engineering. She likes to spend her weekends exploring the city and finding Occupation: Student new pizza restaurants. She is always connected to the internet and constantly Nacionality: Brazilian talking to her family via WhatsApp.

Creative Empathetic Adventorous Sportive) Easy-going

Living in Milan for: less than a year Milan's municipalities: Zone 9 Means of transportation: Usage per week: 4 to 5 days

Technology and Apps









Goals

- Explore the city
- Make friends
- Learn Italian

Frustations

- · Too many online classes
- · Missing her family
- · Feels lonely



Age: 32 years old Occupation: Teacher Nacionality: Italian



Technology and Apps





Nina

The Local

"I don't talk to people very often during my commute, but if a stranger witnesses something that happens to me, usually if it's funny or light, I might start talking to them if they make eye contact with me."

Nina was born in Milan, and she is a kindergarten teacher. She moved to a new apartment with her boyfriend, eight kilometers from the school. Nina has many friends and family in town whom she spends a lot with. Her favorite way to pass the time is to go to museums and see exhibitions by contemporary artists.

Living in Milan for: more than 5 years Milan's municipalities: Zone 3 Means of transportation: Usage per week: 6 to 7 days

Goals

- Teach in a different country
 Commuting is too long
- Read more books
- Practice English

Frustations

- · She doesn't travel as much as she wants
- · She is tired of the same exhibitions

Graphic 28: Personas: Nina, 32.



Age: **45 years old**Occupation: **Consultant**Nacionality: **German**



Technology and Apps





Ernie

The Traveller

"Once, my neighbor needed a ride when trains had a strike, and my husband and I were on our way to get a car sharing, so I offered her to join us. But I usually don't talk to anyone during the commute cause I don't know Italian."

Ernie works from home, but his jobs require him to travel a lot, and now he is slowly starting to travel again. He moved to Milan because of his husband's work. They like to go hiking on the weekends and take care of their garden. During the week, they often eat out to explore the city's best restaurants.

Goals

- Learn how to cook
- Move to a bigger place
- · Get a car

Frustations

- · Doesn't know the city
- · Problems with the language
- · Difficulties on making friends

Graphic 29: Personas: Ernie, 45.

7.1.3

User Journey

Three user journeys were designed to understand the project's impact on people's lives. Each persona was given a scenario to exemplify the project.

Alina, 24 She has been living in Milan for 2		Bummed	Intrigued
years in zone 9. Her primary means of transportation are bus, metro, tram, and train.	Doing	Aria leaves her house on her way to the university.	At the bus stop, Aria sees the poster.
Scenario Alina is going from her house (zone 9) to the university (zone 8), feeling lonely and missing home, her friends and family.	Thinking	She feels lonely and misses her family.	She considers scanning the QR because it is an anonymous conversation, and it is easier for her to talk to someone.

Graphic 30: Alina's user journey.

Concerned	Interested	Excited	Motivated
+°°	(6,2)	733 1	(5°3)
She scans the QR code, select interests, and language.	She scans the second QR code at her university and immediately starts the chat.	She talks with the person before class.	She talks to her classmates about the campaign.
She is concerned about talking to someone in Italian.	She is interested that the person she is talking to speaks Italian, but she can translate the conversation, which is a relief.	She is excited to find that this girls goes to the same university and they are going to have lunch together.	She feels that talking to new people can be easy when having something to talk to.

		Bummed	Interested
		437	(-3)
Nina, 32			
Nina was born and raised in Milan, currently she lives in zone 3 and her primary mains of transportation is tram, metro and train.	Doing	Nina just saw a exhibition in a museum.	Outside of the museum, she sees the Ciao!Ciao! poster.
Scenario During the weekend, Nina is going from a museum (zone 01) to home (zone 3) after visiting an exhibition that didn't get her too excited.	Thinking	She is feeling upsed with the exhibition, she was expecting something different/ new this time.	She is interested on on the campaign.

Graphic 31: Nina's user journey.

Motivated	Motivated Excited		Refreshed
63	آ ن	23	
3			
She scans the QR code and looks at the topics of interest.	She scans the second QR code close to her house, and start chatting.	She talks about the exhibition she just went to in the city center.	She explains Ciao!Ciao! to her boyfriend, and invite him to go to an artist performance next week.
She finds the topics fun, and she is looking forward to scan the next QR code and experience something new.	She is excited to have Art as her conversation started.	She feels good to talk about her experience today at the museum and exchange some knowledge on what to visit next.	She feels refreshed and happy to discover a new permonce artist in town.

France 45		Annoyed	Relieved
Ernie, 45 Ernie is a German consultant, living in Milan for 2 years in zone 7, his primary mains of transportation is tram, metro, bus, train, and car sharing.	Doing	Ernie just arrived by train at the Centrale Station.	He deide to get a car sharing.
Scenario Ernie just got back from the Airport, he took a train to Centrale Station (zone 2) and now he is going home (zone 7) after a long day of travelling.	Thinking	He is annoyed by the long trip and irritated by the hour ride he still has to get home.	He is eager to get home, and happy pay extra to get a car and get home faster

Graphic 32: Ernie's user journey.

Amused	Pleased	Excited	Fascinated
73	63	43	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
He sees Ciao!Ciao! posters and scan the QR code.	He drives to his house.	He found a poster close to his house and scanned the QR code.	He talks to his husband about Clao!Ciao!
He is plesed to see something new happening in town, and curious to give it a try.	He keeps thinking about Ciao!Ciao! and feels comforted by the idea that he is not alone on his commute.	He is curious to talk with this stranger and understands more about the project.	He is fascinated with the project and less annoyed with commuting in the city now that he doesn't feel alone.

7.1.4

Chat

Conversation Starter, 24 hours, and end-to-end encryption are the three pillars of Ciao!Ciao!'s chat.

Common interest is the key to people interacting with each other; as seen on the survey, people are just waiting to have that one thing in common to talk with someone. These are the topics available inside the platform: Books, Games, Coffee, Sports, Environment, Art, Films, Food, Music, Travel, Hobbies, Pets, Nature, and Milan. Each topic will have a library of 10 questions randomly selected when starting a chat. (Attachments, page 101) Twenty-four hours is the time you have in the chat, the reason being that the intention is for the website to be a point to meet, and from there, they can share their social media channels. End-to-end encryption gives maximum data privacy to the users.

Another feature of the chat is the translate option. If you match someone who doesn't speak the same language, you can easily translate the messages and continue talking.

7.2

Brand Identity

The name chosen for this project is Ciao!Ciao!

Ciao is the standard greeting used in Italy, and it's effortless to pronounce to non-Italian speakers. The double use of the word resembles a conversation between two people, which sums up the idea of the website.

Ciao! Ciao!

Cooper Std

SF Pro Text Regular SF Pro Text Medium SF Pro Text Heavy

Graphic 33: Logo and Font.

7.2.1

Color Palette

When working with several municipalities, it was an easy choice to make the palette very bright and fun. Each color will represent a zone, creating a visual element to which zone such colors have the proper saturation to work for print and digital materials.

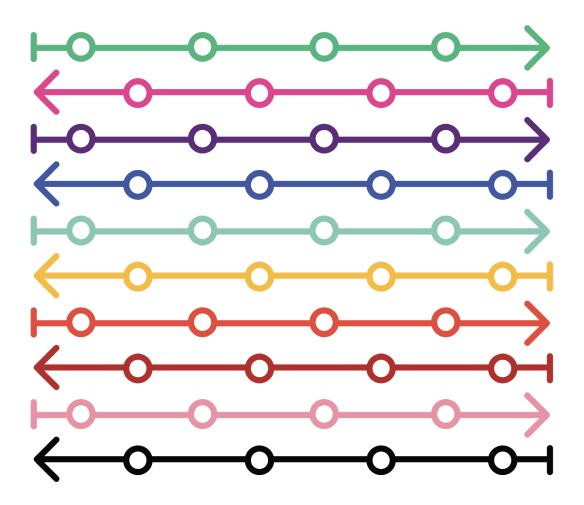


Graphic 34: Color Pallet.

7.2.2

Components

For a clean and minimalist design, one component was created to be repeated throughout the media. The main element is the arrow, which references the public transportation maps, especially for metro lines. The lines are meant to cross to represent the idea of connections.



Graphic 35: Components.

7.3

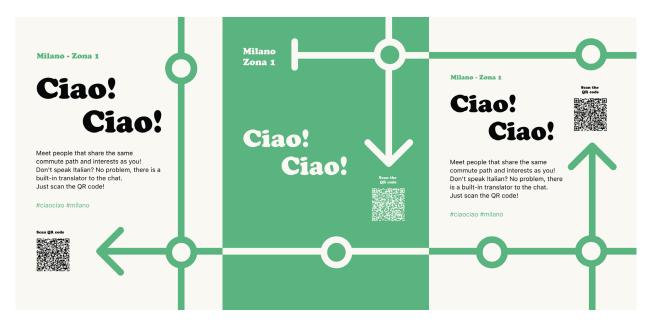
Prototyping

To better illustrate the function of the website, a prototype of the platform was created on Figma, which was the primary tool to develop the Ciao!Ciao!; the software allowed the creation of visuals and the prototype of the digital platform.

7.3.1

Poster

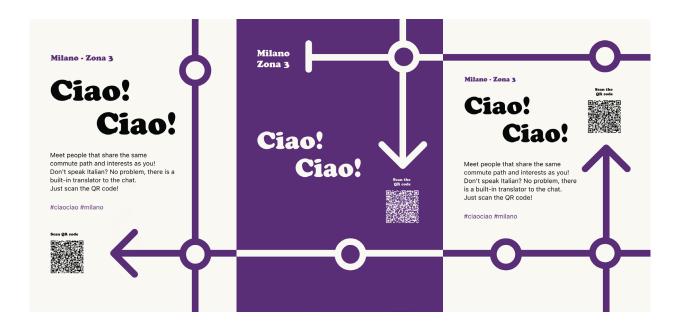
Ciao!Ciao! is a social campaign that benefits from the number of posters spread around the city; it's crucial to have enough signs in the city that are easy to find, making the user experience more engaging. The posters are colorful and easy to spot, with a quick text inviting people to participate and a big QR code to lead the users to the website.



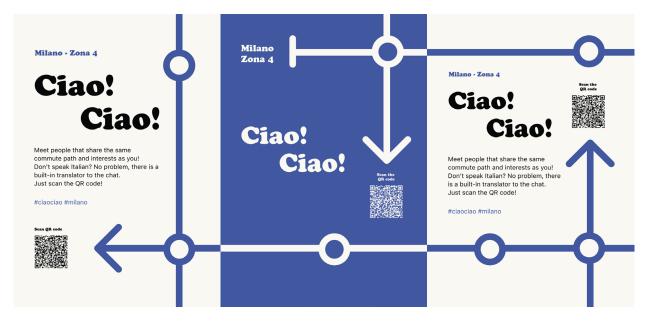
Graphic 36: Poster - Zone 1.



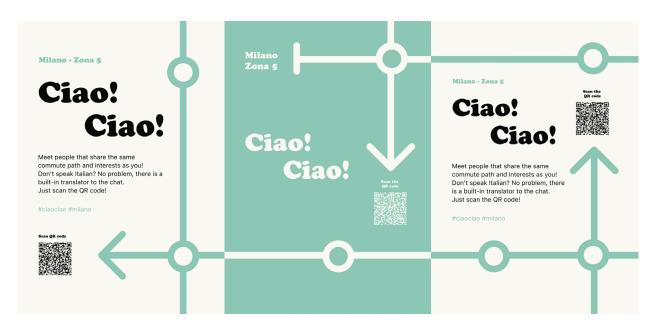
Graphic 37: Poster - Zone 2.



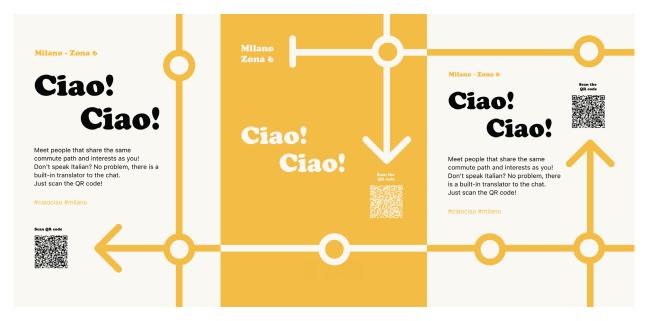
Graphic 38: Poster - Zone 3.



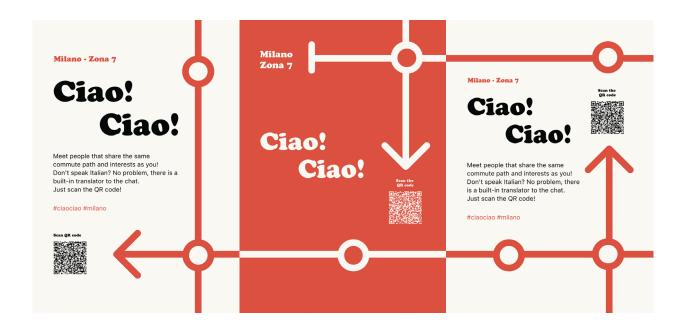
Graphic 39: Poster - Zone 4.



Graphic 40: Poster - Zone 5.



Graphic 41: Poster - Zone 6.



Graphic 42: Poster - Zone 7.



Graphic 43: Poster - Zone 8.



Graphic 44: Poster - Zone 9.

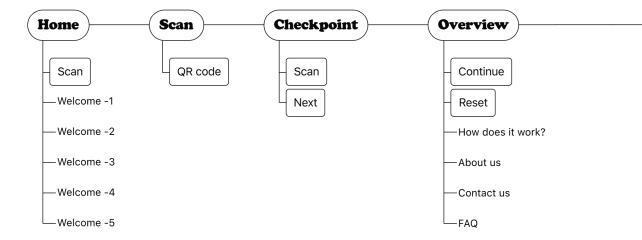


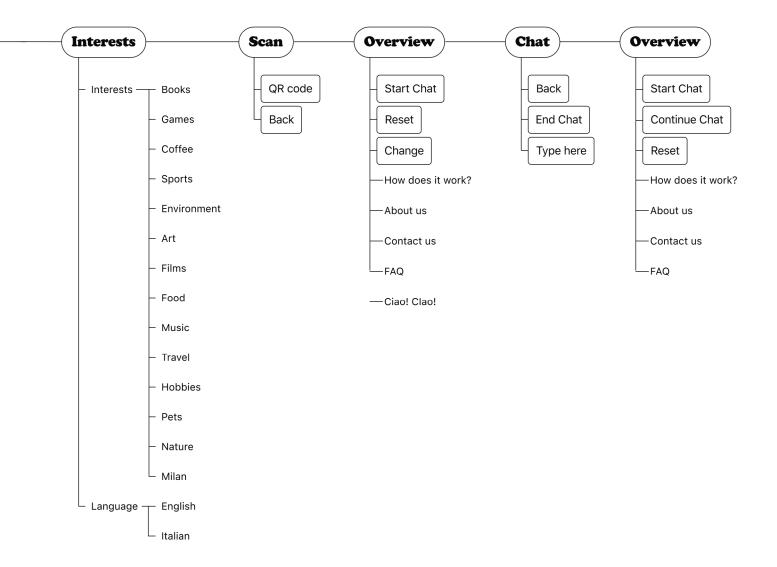
Graphic 45: Poster Mockup.

7.3.2

Website

The website will have the mobile dimensions as a default, considering that you can't use it on the computer by the necessary step of scanning the QR code.





7.3.3

Ciao!Ciao! UI

Two situations define the user journey: first, when you start the journey by scanning the QR code found on one of the posters spread in the city; second, when you access via URL or by the decision to reset your path.

First path

The first path starts when the user scans the QR code printed on the poster.

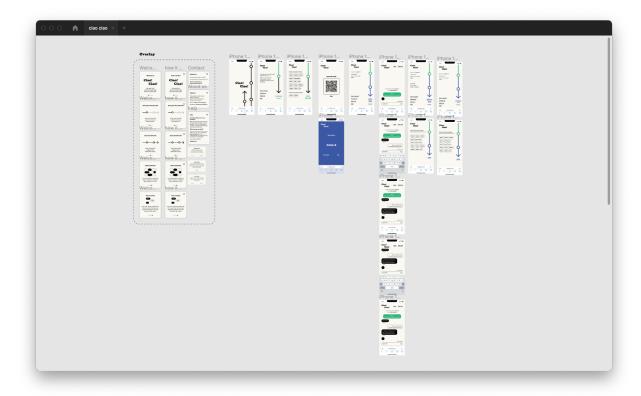
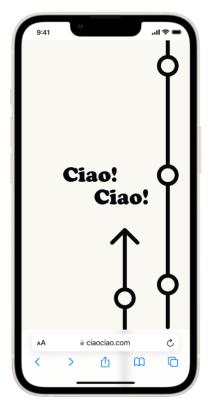
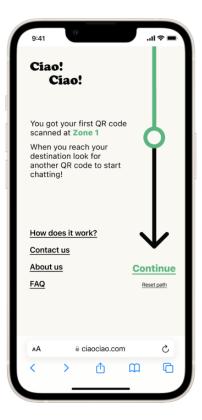
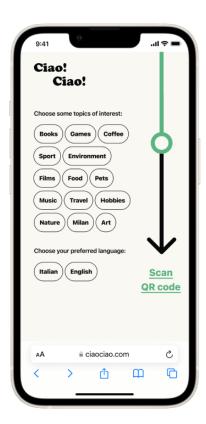


Figure 05: Figma Prototype overview.

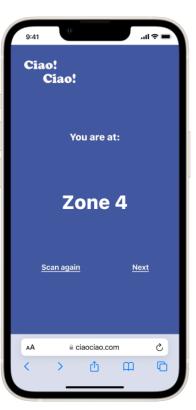






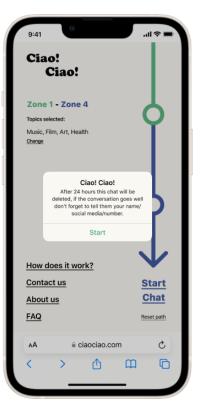


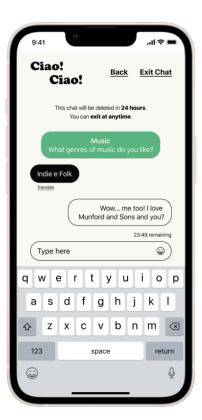


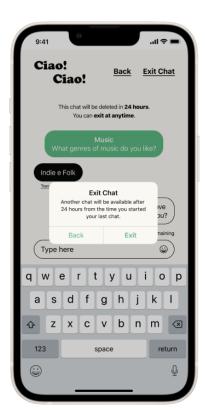


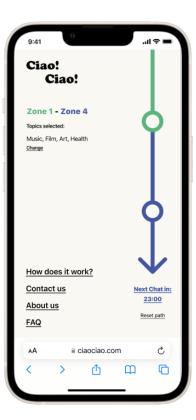
Graphic 47: Mockups - First path 01.











Graphic 48: Mockups - First path 02.

Second path

The second path starts when the user resets the checkpoints.

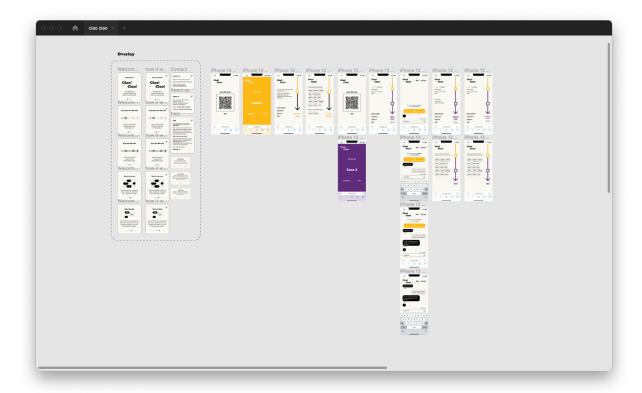
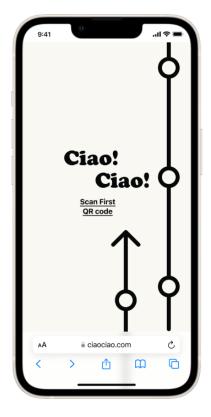


Figure 06: Figma Prototype overview.

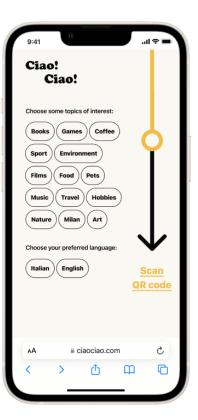








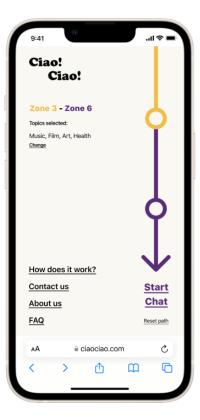




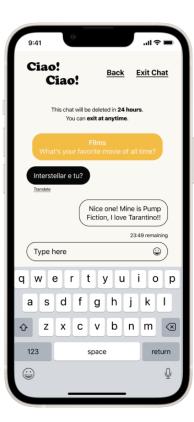
Graphic 49: Mockups - Second path 01.





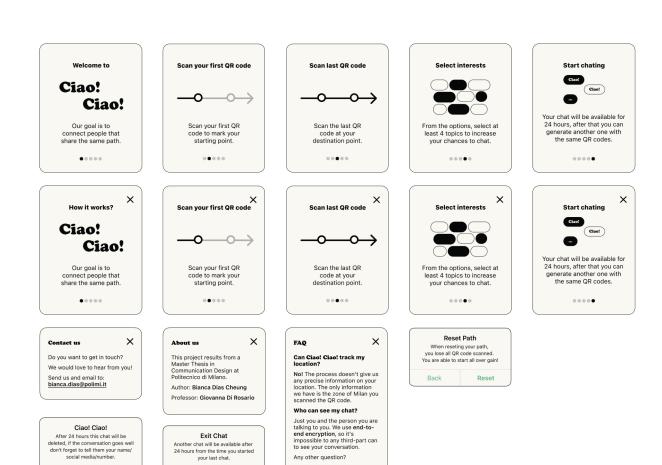








Graphic 50: Mockups - Second path 02.



Any other question? Contact us

Back Exit

Graphic 51: Overlays.

Start

Conclusion 91

Conclusion

This thesis explored several aspects of living in Milan in 2022, which consists of a society that it's going toward a life without some of the restrictions created since the pandemic started in 2019, recovering from the social distance impact on people's social life, with a more meaningful role of technology in our daily life.

Designing for society with data privacy concerns in mind creates a strong project foundation. It was also essential to the development of this thesis and the creation of this project to understand how the city works in its transit flow, in order to create a campaign that is relevant to Milan.

There are aspects of this project that are important to highlight, such as the idea of slowing down the rhythm we are experiencing nowadays. In which you have many quick and superficial interactions with social media. Still, in this project, the users take the time and effort to talk with one other person during the 24 hours available to chat.

I believe Ciao! Ciao! is a relevant communication project for this intrigued moment we live. Combining the premise of public transportation to put people from different social classes in the same place with giving space for interaction and casual conversations. It is a valuable tool to get people talking and interacting, using available resources within reach of a large part of the population.

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Conversations Starters

Books

1	Which book are	ou currently	/ reading?
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- 2. What is your favorite book genre?
- 3. What was the first book you read?
- 4. How many books did you read last year?
- 5. Have you read a book twice? Which one?
- 6. Do you have a favorite book quote?
- 7. Do you prefer paperbacks or eBooks?
- 8. What factors are important to you when choosing a book to read?
- 9. What is the longest book you've ever read?
- 10. Have you ever read a book and then watched a movie? Which was better?

Games

- 1. What was the first game you ever played?
- 2. What is your favorite board game?
- 3. What game are you playing right now?
- 4. Is there an upcoming game you are looking forward to playing?
- 5. Have you ever played a video game in an arcade?
- 6. What is your favorite game to play alone?
- 7. What is your favorite party game?
- 8. What is your all-time favorite game?
- 9. What game have you spent the most hours on?
- 10. What is a game you didn't expect to enjoy but ended up liking?

Coffee

1. When do you drink coffee? Do you drink it at the same time every day?

- 2. How do you take your coffee?
- 3. What food goes well with coffee?
- 4. Do you drink coffee for the taste or pick you up?
- 5. Do you have a favorite coffee mug?
- 6. What is your favorite coffee shop in town?
- 7. Do you prefer coffee from any coffee-producing nation, such as Brazil, Colombia, Indonesia, Ethiopia, or Kenya?
- 8. What's the most number of cups you have drunk in one day?
- 9. When is the best time to drink coffee?
- 10. Do you like to buy whole-bean coffee or pre-ground coffee?

Sports

- 1. What sport do you like and why?
- 2. Do you play any sports?
- 3. What sports did you play as a child?
- 4. What team sports do you like?
- 5. What could be a new Olympic sport?
- 6. What is your first memory of sport?
- 7. What is your favorite player?
- 8. Have you watched any sports live at a sports ground or stadium?
- 9. If you could meet one sportsperson, who would it be and why?
- 10. What is your best experience with sports?

Environment

- 1. Do you recycle? If so, what kinds of things do you recycle?
- 2. Do you try to buy environmentally friendly products?
- 3. What is your favorite environmentally friendly product?

- 4. How do you feel when you hear about global warming?
- 5. Where can a person go to breathe fresh air?
- 6. Do you think there are lessons to learn from nature?
- 7. Do you have any good advice to be more environmentally friendly?
- 8. What can you do to make this world a better place?
- 9. What are some things that your community is doing to help the environment?
- 10. What do you do to conserve energy?

Art

- 1. What is your favorite art piece?
- 2. What is your favorite artist?
- 3. Which piece made you like art?
- 4. Are you in any way artistic?
- 5. What other things come under the term "art"?
- 6. What could, under no circumstances, be art?
- 7. Have you visited any art galleries or museums recently?
- 8. Do you own any exciting art pieces, or would you like to? What sort of art would you buy/collect?
- 9. Is it possible to appreciate art without liking it?
- 10. Have you ever been to a museum late at night?

Films

- 1. What is your favorite movie of all time?
- 2. What is the worst movie you have ever seen?
- 3. How do you choose which movie to watch?
- 4. Are you looking forward to any upcoming movies?
- 5. Do you like independent films?
- 6. Tell me about a movie from your home country!
- 7. What is your favorite actor or actress?

- 8. What was the last movie you watched?
- 9. Which movie can you watch repeatedly and don't get tired of it?

10. One film that you couldn't finish.

Food

- 1. What's your favorite dish to make?
- 2. How have you learned the cooking skills that you have?
- 3. What are the three ingredients that you can't cook without?
- 4. What is your go-to recipe?
- 5. What is the strangest food you have ever tried?
- 6. What is your favorite cuisine?
- 7. What was the last meal you cooked?
- 8. What food can't you stand?
- 9. What is your favorite pizza?
- 10. Do you have a favorite restaurant?

Music

- 1. What genres of music do you like?
- 2. Can you name a hit song from the past year?
- 3. Who is your favorite musician, band, or group?
- 4. Do you enjoy live music? Have you been to any concerts?
- 5. Do you like karaoke? What is your go-to song?
- 6. What is your favorite music video?
- 7. What movie has a very memorable soundtrack?
- 8. What song best represents you?
- 9. Top 5 music to start the day.
- 10. What is your favorite lyric line from a song?

Travel

- 1. Do you like to try local food when you travel?
- 2. In your opinion, what's the best place for a vacation in Italy?
- 3. Do you prefer visiting beaches or mountains?
- 4. Where did you go on your last trip?
- 5. What forms of transportation do you choose to use when you travel?
- 6. What is the longest time you have been away from home?
- 7. Have you ever missed a flight? What happened?
- 8. What are some things you always take with you on a trip?
- 9. What countries would you like to visit?
- 10. What is your funniest vacation memory?

Hobbies

- 1. Do you have any hobbies?
- 2. Did you use to have a hobby as a child?
- 3. Is there a hobby you are thinking about starting these days?
- 4. Are there some hobbies you would like to start later in life?
- 5. What is a hobby you have but doesn't do anymore?
- 6. How much time do you spend on your hobbies?
- 7. Describe your hobby in 3 emojis!
- 8. What do you like the most about your hobby?
- 9. Does your hobby influence your choice of friends?
- 10. Why did you start your hobby?

Pets

- 1. Do you have any pets?
- 2. Did you have pets as a child?
- 3. Do you wonder what animals are thinking?
- 4. What is the most exotic pet you have ever seen?
- 5. What is the name of your pet? Why?
- 6. What is your favorite activity with your pet?
- 7. Describe your pet personality in 3 emojis!
- 8. Guess each other pet names. Give one clue!
- 9. What is a unique thing your pet does?
- 10. One thing your pet taught you.

Nature

- 1. Have you ever been camping?
- 2. Do you practice any sport involving nature?
- 3. What was the last place you went to appreciate nature?
- 4. What is the longest hike you have been on?
- 5. What is your favorite activity to do in nature?
- 6. Mountain or beach?
- 7. What is your favorite park in the city?
- 8. What is your favorite plant?
- 9. What activities do you enjoy on rainy days?
- 10. Have you ever hugged a tree?

Milan

- 1. Where is your favorite restaurant in Milan?
- 2. Where is your favorite park in the city?
- 3. Do you have any secret spots in Milan?
- 4. What is your favorite activity to do in Milan?
- 5. What do you love the most in the city?
- 6. What do you do during the weekends in the city?
- 7. Describe Milan in 3 emojis!
- 8. What is your favorite Milan sightseeing?
- 9. What is your favorite Milan Week?
- 10. One thing you like the most about the city!