Not Another Social Media App:
Design to Assist Community Interaction in the Digital Age

By

Amy Minh Trang Nguyen

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Abstract

This Master of Design Research project explores the question “how can design assist community interaction in the digital age?” by examining community dynamics in the era of social media and understanding the role of design in this space. The study identifies the widening gap between virtual and physical communities, which leads to the design exploration for an appropriate solution. The design outcome offers a hybrid social experience that leverages digital technology to support and enhance community interaction.

Humans are social beings. We live with families, we work in teams, and we bond over shared beliefs. The human brain is hard-wired to connect; it’s an important part of our adaptive skills (Lieberman, 2013). When coming together, we form communities for support and companionship. As the internet becomes an integral part of daily life, face-to-face communication is no longer the only way to build connections. In the online space, human interaction can be designed and mediated through digital means. There are currently numerous community platforms to help fulfill the human need to connect. However, when interviewed many young adults said they feel disconnected from the people around them, despite being socially active online.

A comparative analysis of three community platforms– Facebook Groups, Meetup and Mighty Networks – pinpoints the gap between product directions and user needs. Moreover, the study shows a lack of emphasis on building local communities. As a result, it reveals opportunities for a new design intervention.

The research is conducted through participatory methods, such as in-depth interviews and focus group activities, to study how young adults interact with community in the digital age. The participants are carefully recruited to fit the research focus and ensure effective collaboration. As they share valuable insights and inspire the solution, they become an important part of the project. The collected qualitative data help build a user mental model and direct the design exploration.

The synthesis of primary and secondary research results in the design of a hyperlocal community platform that allows users to interact with the communities around them. This mobile-native experience blends virtual interactions into the physical world which gives young adults an easy way to build new relationships. The design solution aims to narrow the gap between online and in-person connections by introducing a new but familiar way of interacting. This in turn will reinvigorate digital natives’ social lives.

Key Terms

Face-to-face Interaction

Face-to-face interaction is social communication carried out without any mediating technology. It involves more than one individual interacting, in the same physical space, using verbal and non-verbal cues. (Baym, 2015)

Mediated Interaction

Mediated interaction is the interaction between people enabled by communication technologies. For example, phone calls, text messaging, emails, instant messaging, social networks and more. (Baym, 2015)

Online Community

Online Community is a group of people with shared interests or purposes who use the internet to interact. One online platform can be considered a community but also can host many different groups. Most online communities are not tied to geographical space. (Baym, 2015)

Local Community

A local Community is a group of people that is organized around common values within a shared geographical location. (Baym, 2015)

Digital Native

The generation of people who grew up in the era of ubiquitous technology, including computers and the internet. They are comfortable with technology and computers from an early age and consider technology to be an integral and necessary part of their lives. (Prensky, 2001)

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1. Context & Framing

Over the past two decades, the internet has worked its way into people's lives and become a necessity of the modern world. We spend more and more time online, as digital technology is embedded into numerous daily activities. The internet has completely transformed not only how we function but also how we connect and build relationships with others (Atwood, 2011). As it eliminated many constraints of the physical world, the internet allowed us to expand our social network across the globe. Naturally, new connections and communities started to form online. In this virtual space, human interactions can be directed through digital means (Friedman, 2017). Mediated online interactions (Thompson, 2020) are facilitated through digital interfaces, carefully crafted by design professionals. This study explores the question:

"How can design assist community interaction in the digital age?"

In recent years, while online communities and social media are thriving, physical communities appear to be "less attractive", especially among the digital generations who embrace and rely heavily on technology. According to DataReportal's July 2022 global overview (Kemp, 2022), more than half of the world uses social media (59%). Facebook, the largest social platform, publishes an analytic report on user demographics, which shows the largest group of users is 25-34 years old (31.2%), and close behind is 18-24 years old (31%) (Barnhart, 2022). Based on these statistics, teenagers and young adults are leading the adoption of social media into daily life.

45% of U.S. teens say they are "almost constantly" online (Anderson & Jiang, 2018)

85% of all millennials use social media (Vogels, 2019)

A study, conducted by the Pew Research Center on American teenagers and social media (Lenhart, 2015), pointed out that 54% of those surveyed said they text their friends at least once a day. In comparison, only 33% said they talk face-to-face with their friends consistently. This behaviour is known as "anti-social networking" (Stout, 2010), a term which refers to an unwillingness or inability to interact with others in-person due to preoccupation with digital media. It's not difficult to spot "anti-social networking" among the youth nowadays. How many times have you walked into a restaurant or a bar and seen people looking down at their phones, scrolling on social media, despite being surrounded by others?

Since digital natives are much more comfortable communicating through mediated interaction, face-to-face interaction becomes less favourable. Gary Small, a neuroscientist and the author of "iBrain: Surviving the Technological Alteration of the Modern Mind," believes that digital natives have a more challenging time reading social cues (Asghar, 2013). "Even though young digital natives are very good with tech skills, they are weak with face-to-face human contact skills," he said. Other studies argue that technology is bringing young people closer than ever – many teens said social media better connects them to others' feelings and lives (Lenhart, 2015). This study doesn't intend to join the debate of whether technology is saving us or ruining us. It looks at how digital media can be shaped to support a balanced social life for the digital generations.

Mediated communication (Baym, 2015) is the new social language for digital natives. Texting, posting, commenting and so on is how they self-express, communicate and build connections socially. Like all languages, this new language was created by humans. People access the digital world through interfaces, which are carefully crafted to create experiences. The experience on social platforms, in particular, is designed to connect people online. For example, "Story" is a feature on Instagram that allows users to share a snapshot, in real-time, with their community and receive "reactions", in the form of text messages or icons. This interaction can only exist via technology. Similarly, other virtual interactions are tailored exclusively to support users in the online space.

This is the social language that young people are more familiar and comfortable with, which explains why they struggle to communicate interpersonally. The study takes a closer look at the current online social landscape and examines how social interaction is facilitated, in this space, to find opportunities for design intervention.

2. Secondary Research

2.1. Social Interaction in The Digital Age

In a survey, conducted by Nancy Baym in 2002, many participants expressed that they prefer face-to-face conversations over telecommunication or online communication (Baym, 2015). Most of the participants ranked face-to-face as the most personal way of communicating. They thought talking over the phone is personal as well but not as intimate and the internet was the least personal. Phrases such as “hear their voices”, and “see their reactions” appeared several times throughout the participants’ responses. Baym referred to them as non-verbal social cues, which are often absent in meditated human interactions. The survey pointed out the tendency to rank media based on the range of verbal and non-verbal social cues they provide. Because face-to-face interaction is considered the norm, other kinds of communication were compared to it. Thus, the internet was seen as “a lesser version of the real thing” (Baym, 2015).

In person-to-person interaction, non-verbal cues are important because of their ability to convey emotion. For example, smiling at someone, nodding, and using hand gestures are ways to express reactions and emotions which are difficult to be transmitted through media. As discussed in section 1, digital natives rely heavily on mediated communication and virtual interaction. They are more comfortable interacting with limited cues, which requires less effort in transferring and processing information. In time, they lose interest in face-to-face interaction and spend less time with the real people around them.

Baym, in her book “Personal Connections in The Digital Age”, stated that viewing mediated communication as a diminished form of face-to-face communication is “…selling people short, failing to recognize the extent to which we are driven to maximize our communication satisfaction and interaction.” (Baym, 2015, pg.63). Moreover, this “communication imperative” (Walther, 1994) motivates people to be creative and work around the barriers of online mediated communication. This study pushes the constraint of mediated human interaction through research and design explorations to find a solution that can help digital natives achieve more of a balance between digital and physical social interaction.

One might argue that we don’t need to add one more digital solution on top of the countless existing social applications out there. Businesses and organizations have been continually utilizing the internet and technologies to foster meaningful personal connections, which is why Facebook, Instagram and other forms of mediated interactions continue to grow. A study on the impact of communication media on human connection revealed that in the digital age, most

relationships are “media multiplexity”, meaning they are conducted on more than one media (Haythornthwaite, 2005). Moreover, stronger relationships use more media which indicates that in this context, more is more. The design solution, that stems from this study, focuses on creating a new channel for digital natives to interact with their communities, not only online but also in person.

2.2. Modes of Social Interaction

In the digital age, human interactions exist in various forms through media, and when people can choose between different media, the media become significant (Baym, 2015), representing the message and the relationship between users. Moreover, each medium has its purpose. For example, email is often chosen for formal communication between individuals in professional relationships while texting is more common for casual relationships.

John B. Thompson (2020), a British sociologist, distinguished four basic types of interactions, including face-to-face interaction, mediated interaction, mediated quasi-interaction and mediated online interaction. He developed a way of thinking about media through a sociological lens.

1. Face-to-face interaction: It takes place in the context of co-presence and evolves multiple non-verbal and verbal cues. It’s dialogical, which means it involves a two-way flow of information.

2. Mediated interaction: It allows interaction to stretch across space and time. It has a narrow range of non-verbal or symbolic cues and is also dialogical. Some examples of mediated interaction are telephone conversations and emails.

3. Mediated quasi-interaction: Similar to mediated interaction, it stretches across space and time and involves a certain narrowing of symbolic cues. It’s monological in character, which means the flow of communication is one-way, oriented toward the recipients. For example, TV, radio and newspapers.

4. Mediated online interaction: Similarly to the other types of mediated interactions, it involves the stretching of time and space and the narrowing of symbolic cues. But it’s different in two key aspects; it’s dialogical and oriented toward multiple other people – many-to-many. For example, social media platforms.

Mediated quasi-interaction is out of the scope of this research because it's monological. Thus, it's not discussed any further in this paper.

Types of interaction	Space-time constitution	Range of symbolic cues	Degree of interactivity	Action orientation
Face-to-face interaction	context of co-presence	full	dialogical	co-present others
Mediated interaction	stretched out in space and time	narrowing	dialogical	one-to-one
Mediated quasi-interaction	stretched out in space and time	narrowing	monological	one-to-many
Mediated online interaction	stretched out in space and time	narrowing	dialogical	many-to-many

Fig1. Four types of interaction. (Thompson, 2020)

In distinguishing the different types of interaction, Thompson (2020) emphasizes that technologies evolve constantly and blur the lines between modes of interaction. The purpose of this study is to encourage in-person interaction among digital natives without dismissing the value of mediated interaction. Thus, the appropriate medium to achieve this goal is one with the characteristics of both face-to-face interaction and mediated interaction. Through this medium, design can create a woven path between different modes of interaction that helps users move toward a more balanced social life.

2.3. Opportunity for Intervention: Competitive Analysis

To put the proposed solution into perspective, a competitive analysis was initiated to understand the existing solutions and identify potential areas for improvement. There are countless social media platforms currently available but for this study, the analysis focused exclusively on social platforms that support community interaction. It looks at three distinctive platforms, Facebook Groups, Mighty Networks and Meetup, to ensure objectivity and diversity as they offer different sets of interactions and target different groups of audiences. In selecting these particular candidates, the study takes a step back from the current scope to have a more holistic view of the online social landscape.

1. Facebook Groups:

1.8 billion users

Tens of millions of groups

It's a built-in community-focused module on the Facebook app. Facebook Groups is where existing Facebook users can create and join communities based on shared interests. All communities are hosted and centralized within the app.

2. Mighty Networks:

Over 10,000 customers

It's a community-building service that provides users with the tool to create and customize their communities. Each community built with Mighty Network is unique and independent. Members can only join via invitations to specific communities.

3. Meetup:

28 million members

Over 260,000 meetup groups

It's a community platform for hosting in-person and virtual activities and events. Community members come together by attending group gatherings.

When comparing the platforms side-by-side, it becomes apparent that they share a similar structure that can be broken down into components. The study analyzed each component by testing user flows, functionalities and interactions. There are five components under each platform – including the main feed, the community search and recommendation flow, the request and join a community flow, and the community page (member view and admin view).

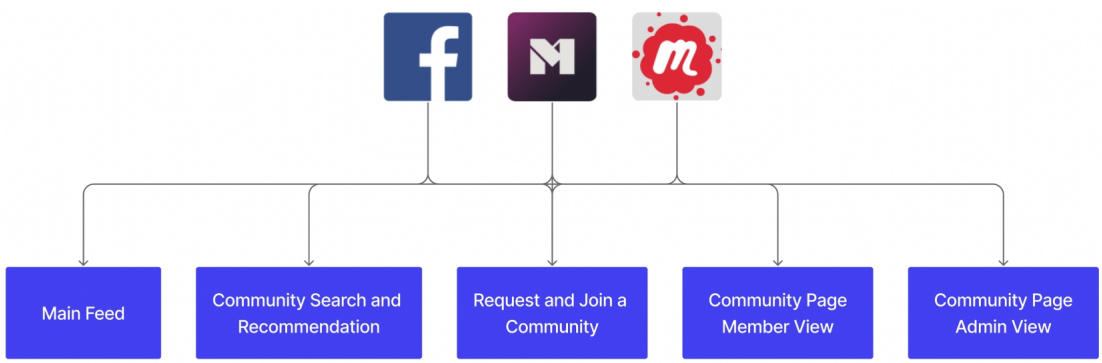

Fig 2. Five main components of community platforms

To start the analysis, the components were laid out vertically, following the unique user flow of each platform. While Facebook Groups and Meetups share the same flow because they host all communities under one central platform, Mighty Networks has a different approach. Each community under Mighty Networks has its own page, with a unique URL, therefore only community members who have access to the URL can request to join.

In other words, Mighty Networks is a network of independent communities which are available exclusively to invited members, while Facebook Groups and Meetups are public hubs of communities, where anyone can join and create communities.

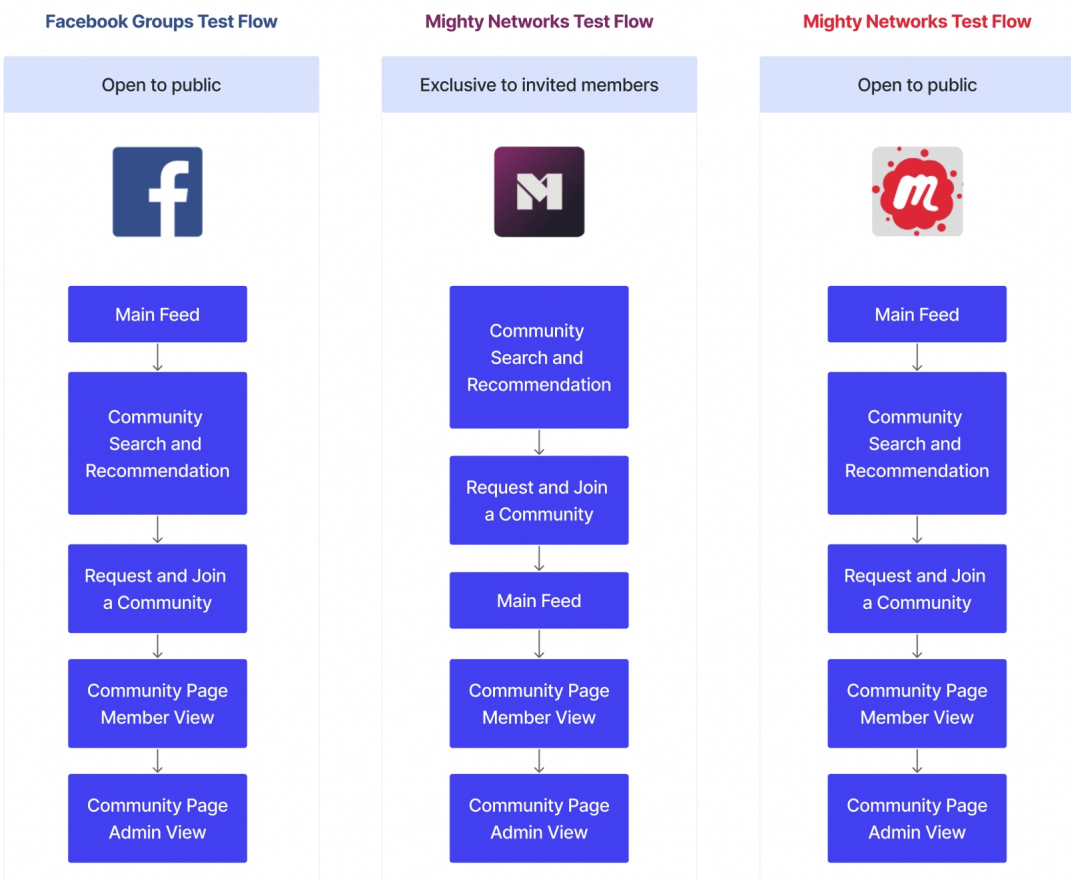

Fig 3. Competitive research test flow

A user account was created for each platform to test the product's end-to-end. By thoroughly analyzing the features under each component, the research unpacked how each platform facilitates community interactions through design. After the test flows were completed, the information was synthesized into notes for comparison.

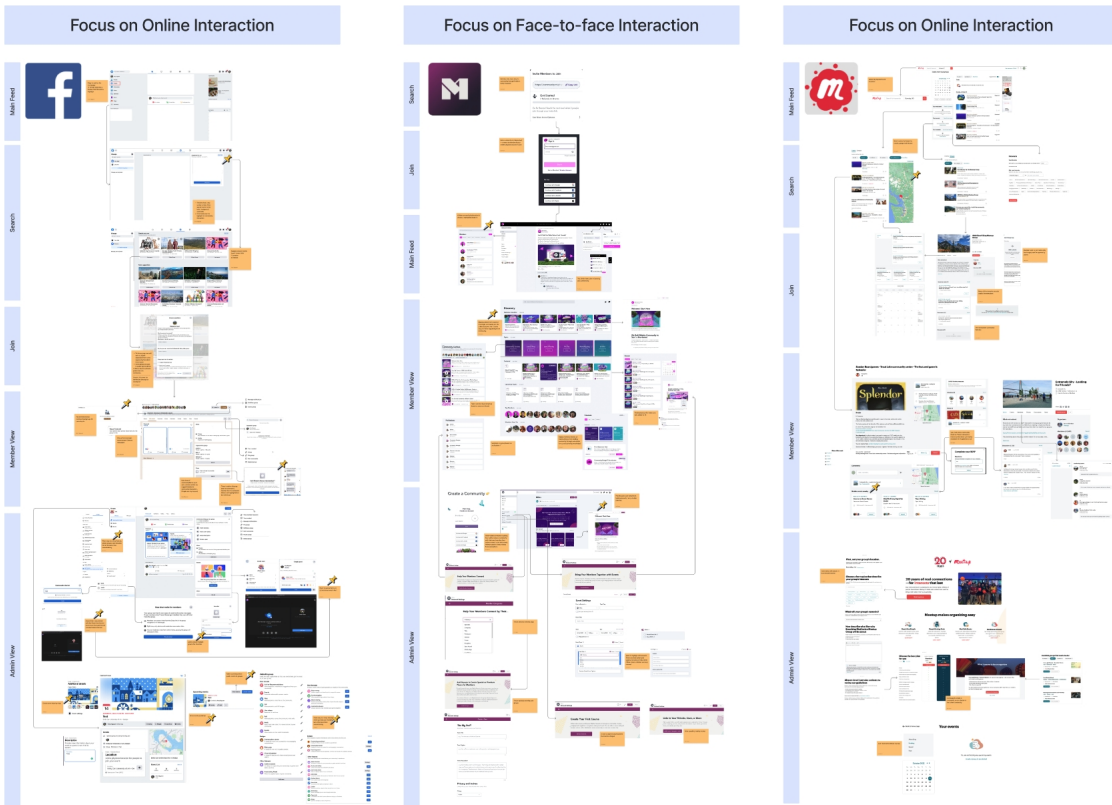

Fig 4. Competitive analysis

By comparing how the three platforms fulfill user needs differently, the research identified potential areas for designer intervention.

Feature Gap

While searching beyond these three precedents for other existing community platforms, the study recognized two types of solutions; one focuses on online mediated interaction and the other focuses on face-to-face interaction. Facebook Groups, Mighty Networks vs Meetup comparison is the representation of the current market trends that capitalize on the different targeted groups of audiences. Even though all three platforms accommodate both online and in-person interactions, they have different focuses.

The different priorities reflect how the product features are designed. Facebook Groups and Mighty Networks provide many features that support and promote online community interactions, such as hosting multiple community group chats, live-streaming events, creating audio channels and more. Meanwhile, the features that support face-to-face interaction are often minimal and hidden under layers of information.

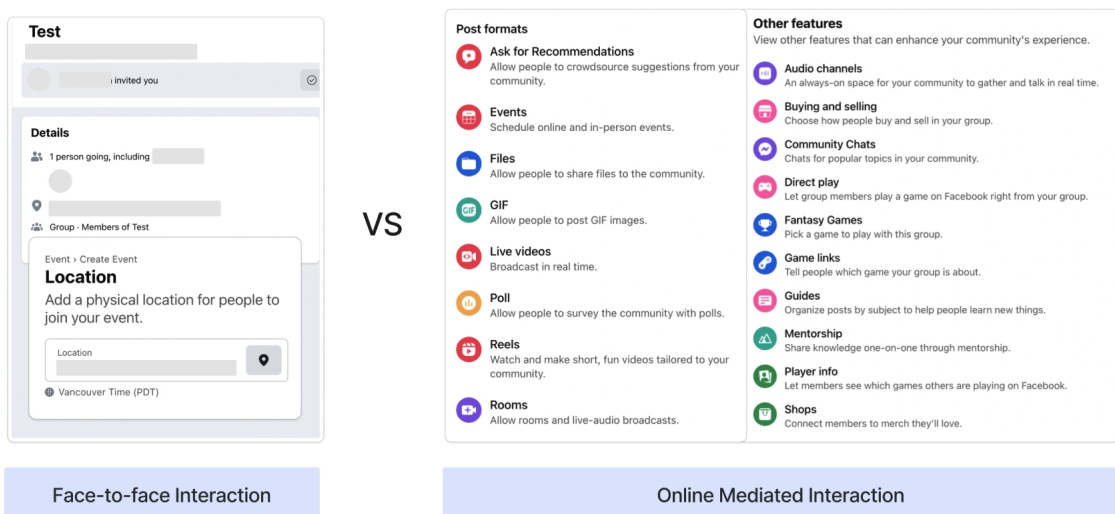

Fig 5. Face-to-face interaction and Online mediated Interaction comparison

On the other hand, Meetup focuses heavily on features that support organizing and hosting in-person events, such as event location map view, events calendar view, and purchase or sign-up for RSVP (event tickets). The online interaction between community members, however, is limited to only comments and group chats.

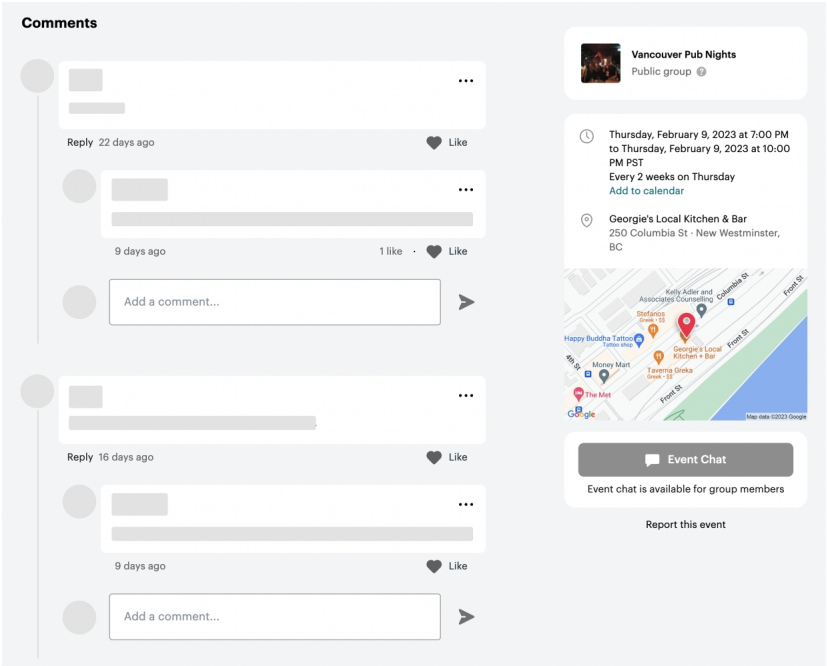

Fig 6. Face-to-face interaction and Online mediated Interaction comparison

Through comparison analysis, the study identified a feature gap between platforms that focus on online-mediated interaction and ones that focus on face-to-face interaction. Thus, there is an opportunity for a solution that incorporates a more balanced interaction of both.

Local Community and Face-to-Face Interaction Support are Overlooked

The study pointed out that there aren't many features that highlight local communities on Facebook Groups and Mighty Networks. In contrast to the automated and "shiny" features that help users build a global network, those for building local communities require more manual work. For example, to associate a community with a location, users need to manually search and link a location or include the location as part of the community's name.

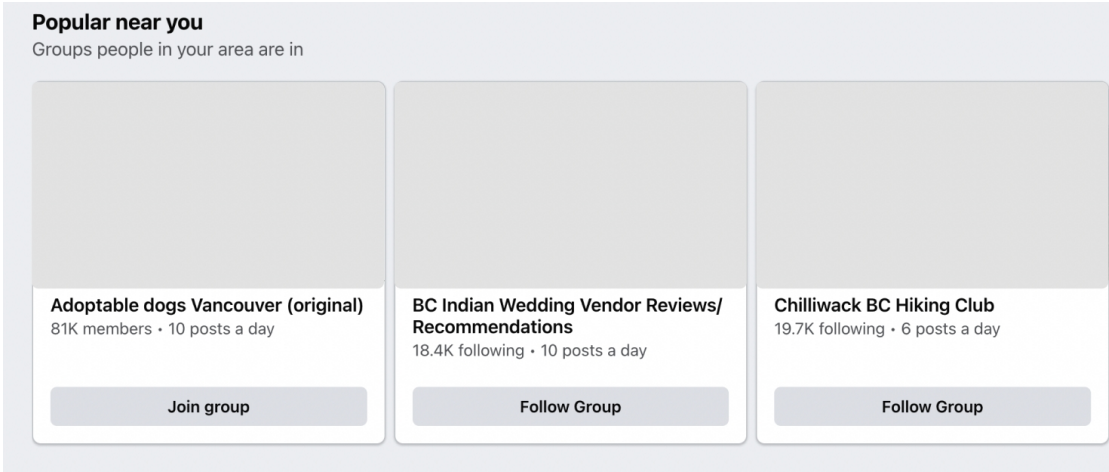

Fig 7. Local communities search functions analysis

Unlike Facebook Groups and Mighty Networks, Meetup highlights hosting in-person events and building local communities, yet the features they deliver are merely functional – with simple filters and a standard map view. Even though the interface is easy to navigate, the interaction is dull and unattractive, especially for digital natives, who enjoy robust experiences.

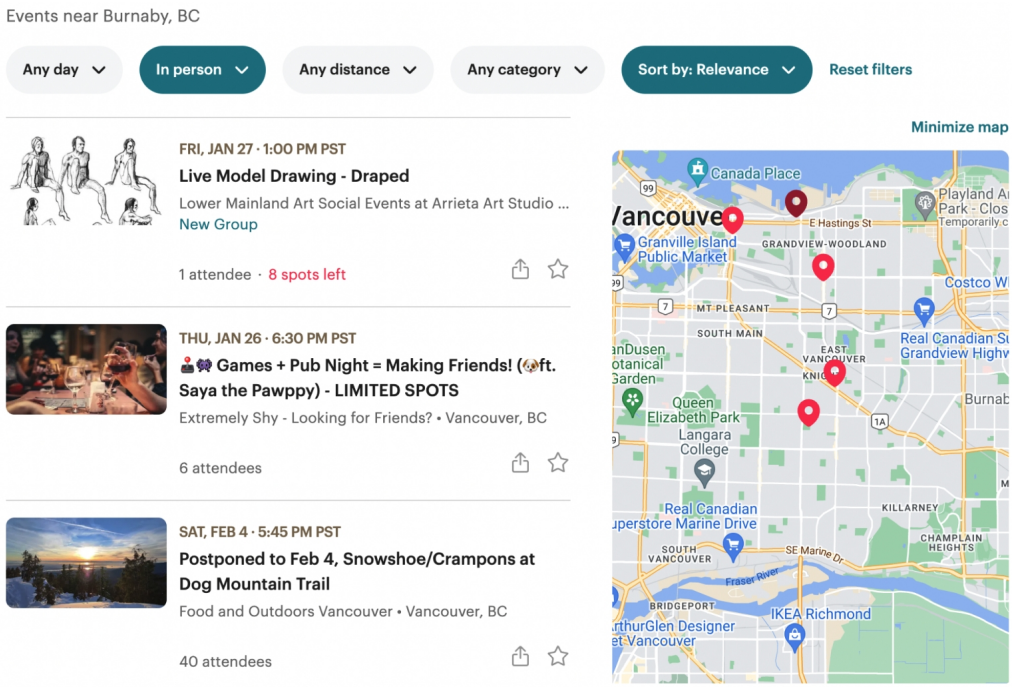

Fig 8. Local communities search functions analysis

All three platforms offer many great features that help build community, providing users with the tools to communicate and plan for meetings or events. However, once the planning concludes, there isn't any further support from the product's end. The transition from online interaction to face-to-face interaction is abrupt, which can be a barrier, especially for digital natives. To ease this transition, design can act as a mediator to better connect people with their communities by providing support and guidance through digital experiences. Design can help shape a more community-friendly space to encourage people to build new relationships with others not only online but also in person.

3. Primary Research

Secondary research has analyzed the current social scene and identified various opportunities for intervention. To further study the target audience, primary research was necessary to gather a deeper understanding of the users (the digital natives) and their needs through a series of interviews and focus group activities. The research methods are human-centred and collaborative.

3.1. Research Methods

Semi-structured Interview

A series of in-depth interviews were conducted with six participants, aged 18 to 32, who consider themselves digital natives. To better understand their experiences, the semi-structured approach allowed the interviews to become conversations, which helped participants feel more comfortable sharing personal stories and insights. During the interviews, participants were engaged through a series of questions that guided them to reflect on their relationship with community and talk about the unique challenges they face.

Focus Group Activity

Interview participants who signed up for further engagement were asked to participate in a focus group activity. Four participants, aged 20 to 32, were recruited. In this activity, participants were gathered together in a room where they worked collaboratively to create a journey map of finding and joining a community. A digital board and pens were provided for brainstorming and organizing information. This collaboration model encouraged participants to think and discuss openly.

3.2. Ethical Consideration

Young adults, who consider themselves digital natives, were invited to participate in the project via email. Due to the limited time and resources, invitations were only extended to participants based in Vancouver, Canada, where the project took place. The participants were male and female, 18 to 32 years old, who embrace technology and have an active online social presence. All research activities were held in person: the interviews were conducted one-to-one with each participant, and the focus group activity was a collaborative exercise with all participants in the same space.

Before conducting the research, consent forms were provided to all participants. The participants, who agreed to give consent, signed and kept one copy of the consent form. This project's documentation received full Research Ethics Approval from Emily Carr University Research Ethics Board. From an ethical standpoint, this documentation explained the research's intentions.

It was considered that there might be minimal risks associated with participating in the research activities. During the research, participants might be sharing personal information relating to past experiences which might lead to emotional responses, such as sadness and frustration. These feelings occur naturally when thinking about past events in everyday activities. All the information and data collected were confidential. Anonymity was maintained throughout all the participatory research sessions.

3.3. Analysis & Findings

The subsequent section reveals analysis and insights from the primary research and how this information contributes to the direction of the design solution.

3.3.1. Semi-structured Interviews

In the earlier section of this study, the digital natives' preferences, between online and face-to-face social interactions were discussed and made evident through statistics. To gain a better understanding, semi-structured interviews were conducted. The interview questions centred around the relationships and interactions between the participants and their communities, both online and in person.

New valuable insights were collected throughout the interviews. All six participants said their communities helped them get through difficult times. They often sought counsel and perspectives from community members who shared the same interests.

> *"It's nice to have older folks in the community, who share the same interests with me, to provide me mentorship." - Participant*

> *"I seek perspective from my community and learn from their experiences to make better decisions for myself." - Participant*

Five out of six participants thought technology brought them closer to their communities because it enables easier and faster ways of communicating and interacting, such as direct messaging, reacting to posts, and so on. They also appreciated social media for reconnecting them with old friends and distant relatives.

> *"I recently found my elementary school's Facebook page, where I reconnected with many old friends. "- Participant*

However, through the interview process, participants also realized that they had become disconnected from the people around them. They found approaching new people in person was more difficult than online, moreover, they were not motivated to step out of their comfort zones to connect with strangers.

> *"I've just realized that I've never talked to my neighbours. I don't even know who they are." - Participant*

> *"Well, I don't know if I want to get out of my way to get to know strangers, just because they live next door. " - Participant*

3.3.2. Focus Group Activity

From interviews it was evident that community plays an important role to digital natives, however, convenience is still the priority. To learn more about their mental model in finding and connecting with new communities, a focus group activity was conducted with four participants from previous interviews who signed up for further engagement.

The participants were asked to discuss and create a step-by-step journey of searching, joining and engaging with a community. The activity started with a group discussion, which helped participants question and reflect on how they have been interacting with their communities. Writing down the journey step-by-step allowed them to think more systematically about their decision-making processes.

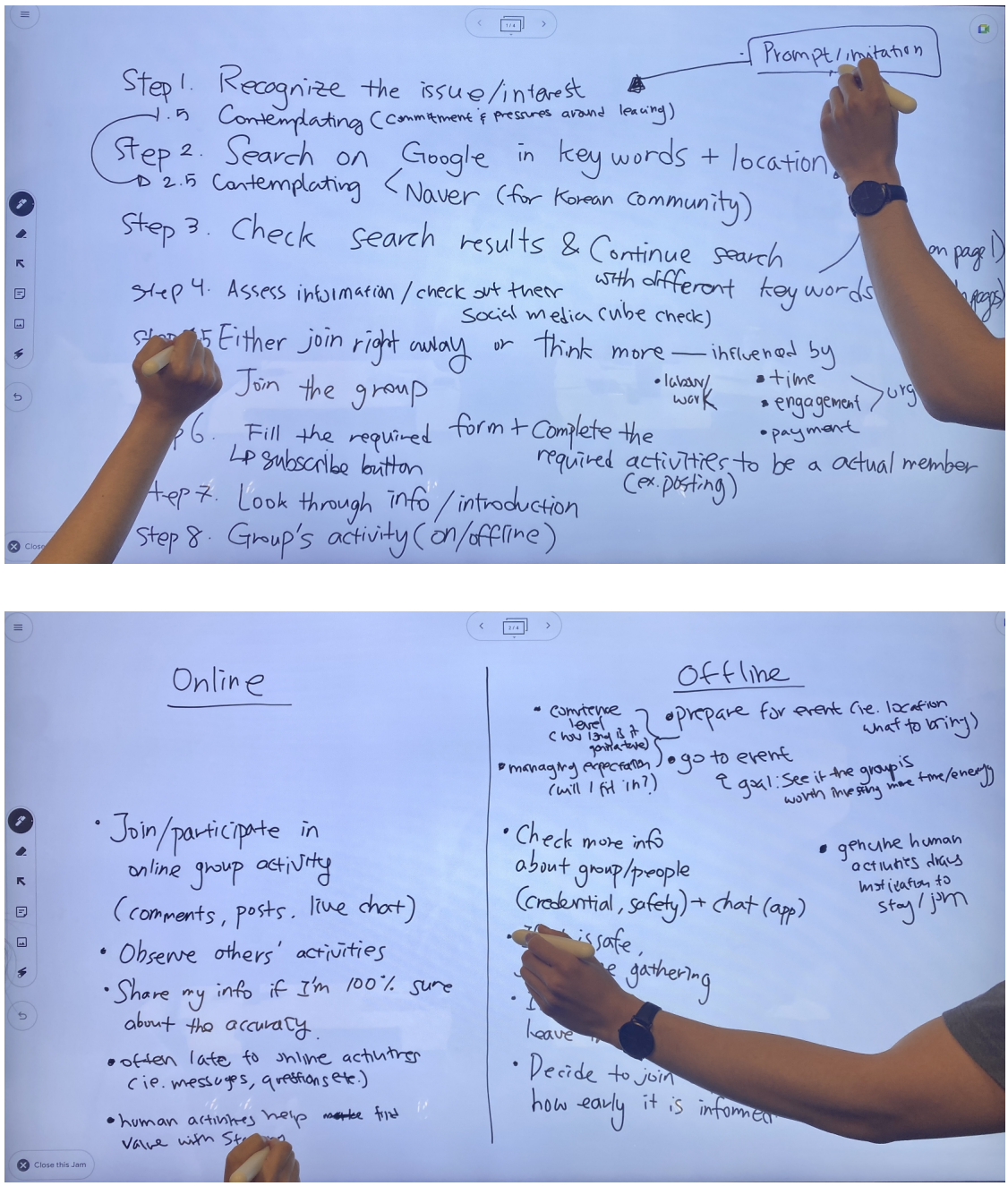

Fig 9. Focus group activity

Through teamwork and conversation, new insights emerged. First of all, the process of finding and deciding to join a community is more difficult than it appears. The participants shared the challenges they face searching for communities online, especially local communities. All four participants usually take more than one week to decide to join a community, because of the commitment and time it requires.

> *"I often procrastinate making decisions because I keep thinking about the time and energy I will have to invest." - Participant*

> *" There is too much commitment, I can't just leave whenever I want. It's not like hitting the 'unfollow' button, on social media." - Participant*

Moreover, after joining a community, they prefer to interact with other members online for security reasons. They often avoid or hesitate to attend community offline events. Overall, there are more pain points than rewards in the journey of connecting with a new community.

3.4. Design Direction

Many valuable insights were shared through interviews and the focus group activity. To start brainstorming on a design direction that not only solves the user's pain points but also meets the user's needs, it was important to analyze the user's mental model.

3.4.1. User's Mental Model

Building a user mental model helps synthesize and analyze the collected qualitative data. A user's mental model is an internal explanation that the user has built about how a particular system works. As Don Norman says (1990), it is a natural human response to an unfamiliar situation to begin building an explanatory model a piece at a time.

The user's mental model was built based on the user's journey of connecting with a new community. Each step of the journey is made up of multiple mental stages, which present the user's thought process.

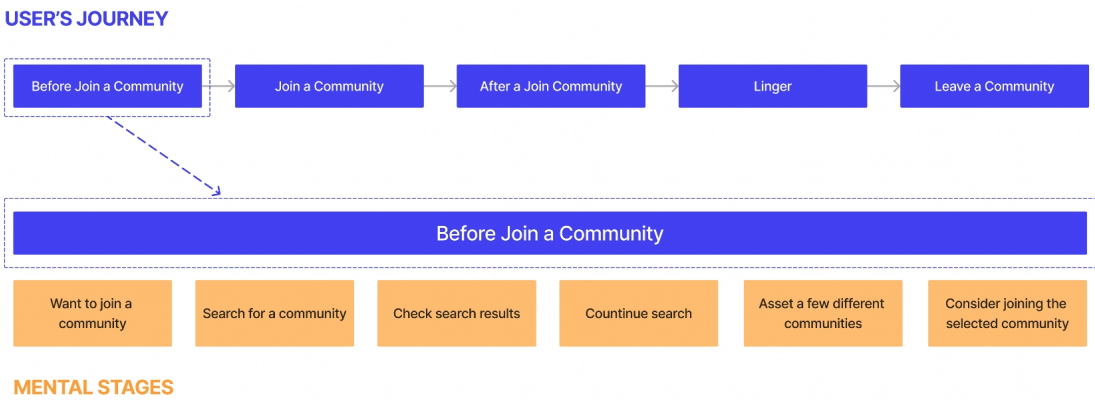

Fig 10. Components of the user's mental model

Under each mental stage, the user engages with pieces of thought or action. The study thoroughly analyzed each part of the mental model to identify pain points and design opportunities.

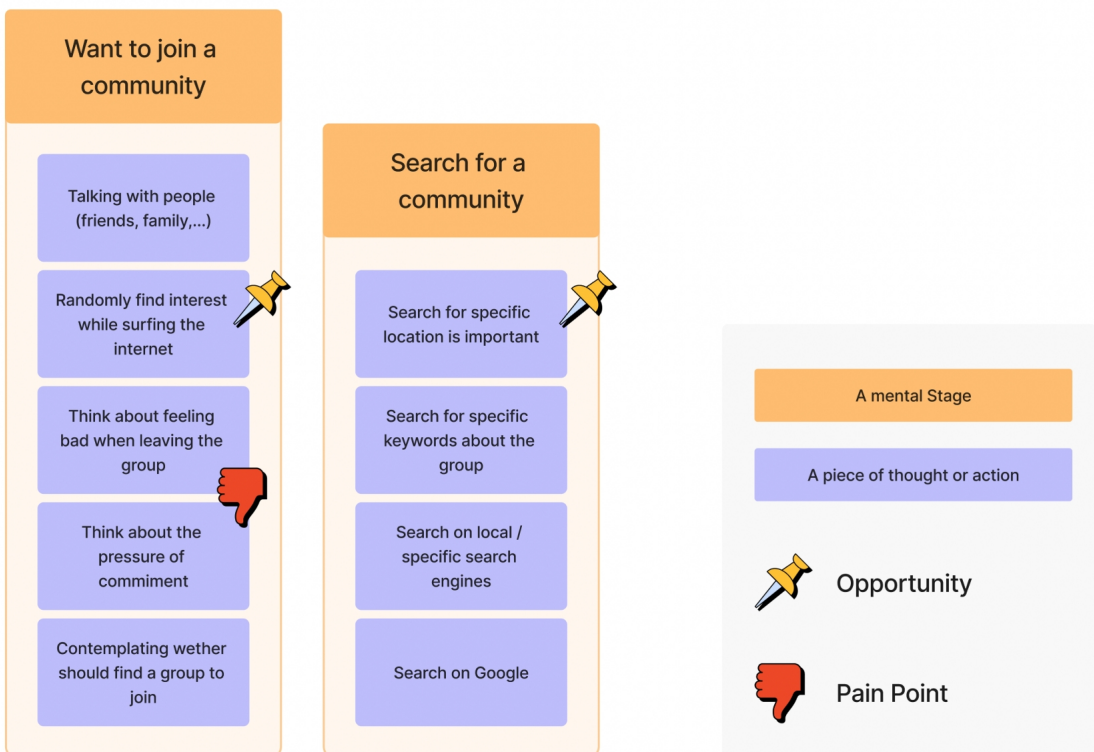

Fig 11. Components of the user's mental model

The completed user's mental model includes 5 steps: before joining a community, joining a community, after joining a community, lingering, and leaving a community. Visualizing the mental model helps recognize design opportunities. For instance, at a glance, some steps appear to be longer than others, which means the user spends more thought and energy during these parts of the journey. That is where design can help improve the user experience.

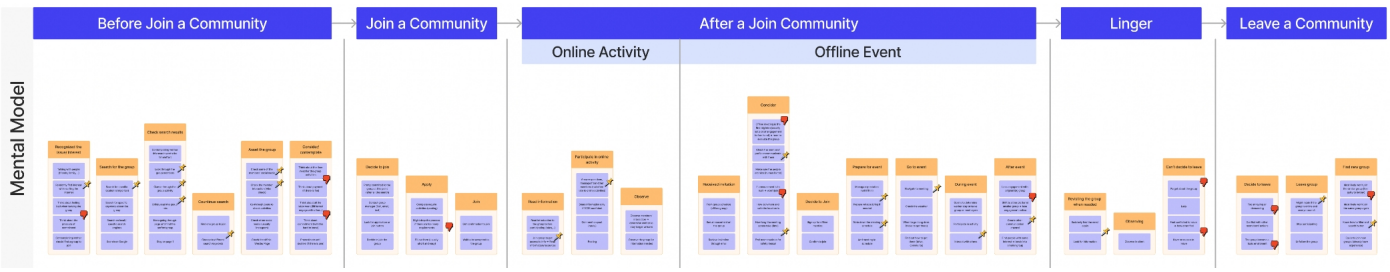

Fig 12. User Metal Model

On a more granular level, the study pinpoints numerous opportunities for further explorations. Some of the highlights are

1. The search process is time-consuming
2. Attending in-person gatherings is inconvenient
3. The pressure of committing to a community is a barrier
4. There are safety and privacy concerns when joining a public community
5. The user doesn't feel motivated to build in-person connections

3.4.2. User Persona

The construction of the persona allowed for a deeper understanding and empathy for the user. The persona was created based on research findings. The user profile represents young digital natives, 18-34 years old. They are in the process of becoming independent, as they break away from their family's shelter. During this transition, they might be moving to new places to pursue higher education or to start building their careers, which means they need to build new relationships and connect with new communities. However, this process can be challenging, especially for digital natives. Since they are more comfortable and familiar with virtual human interaction via digital means, in-person interaction can be intimidating. They are torn between what they need and what they want.

Jessica Sander

Age: 22 years old

Occupation: marketing agent

Location: Vancouver

Education: University

Status: Single

Bio

Jessica has just graduated from University and moved out of her family home, on Victoria Island. She recently moved into her 1 bedroom rental apartment, in central Vancouver. Jessica is living by herself. She started her first job, as a social content and marketing agent when she moved to Vancouver. Jessica is tech-savvy. And, because of her job, she spends a lot of time on social media. As a gen Z, she is also very active on social media herself.

Moving into a new neighbourhood, Jessica hasn't gotten a chance to get acquainted with her neighbours yet. She also doesn't have many friends in the city besides her co-workers. So, she often finds herself doing chores and hanging out alone. Jessica lives a busy life and doesn't have much time to socialize. But, she is looking to meet new people and build her own community in a new city.

Needs & Expectations

- Find her community, in the new city
- Hang out with new people safely
- Doesn't always have to do everything alone

Pain Points

- Doesn't have much time
- Meeting new people is intimidating and uncomfortable
- Pressure of commitment
- Everyone already has their own circle => hard to meet new people

Motivations

- Feeling included and being a part of the local community
- Convenient: she doesn't have to go out of her way (time and location)
- Having control over the experience: whenever, wherever and however she feels like it

4. Design Outcome

Through various research activities, the study defined the targeted users and identified their needs. The next phase of the project was exploring different directions to scope a design solution that would fulfill the user's needs and expectations. The design outcome aimed to assist users in building relationships with their communities, using technology as a tool to support community interaction.

4.1. Scope Design Solution

The user's mental model has pointed out the challenges users faced through their journey of finding and connecting to a new community. To start scoping the design outcome, a brainstorming session on potential solutions was carried out, based on insights from the user's mental model. The brainstorming continued to expand from solution ideas to technical features, which could be incorporated into the design outcome.

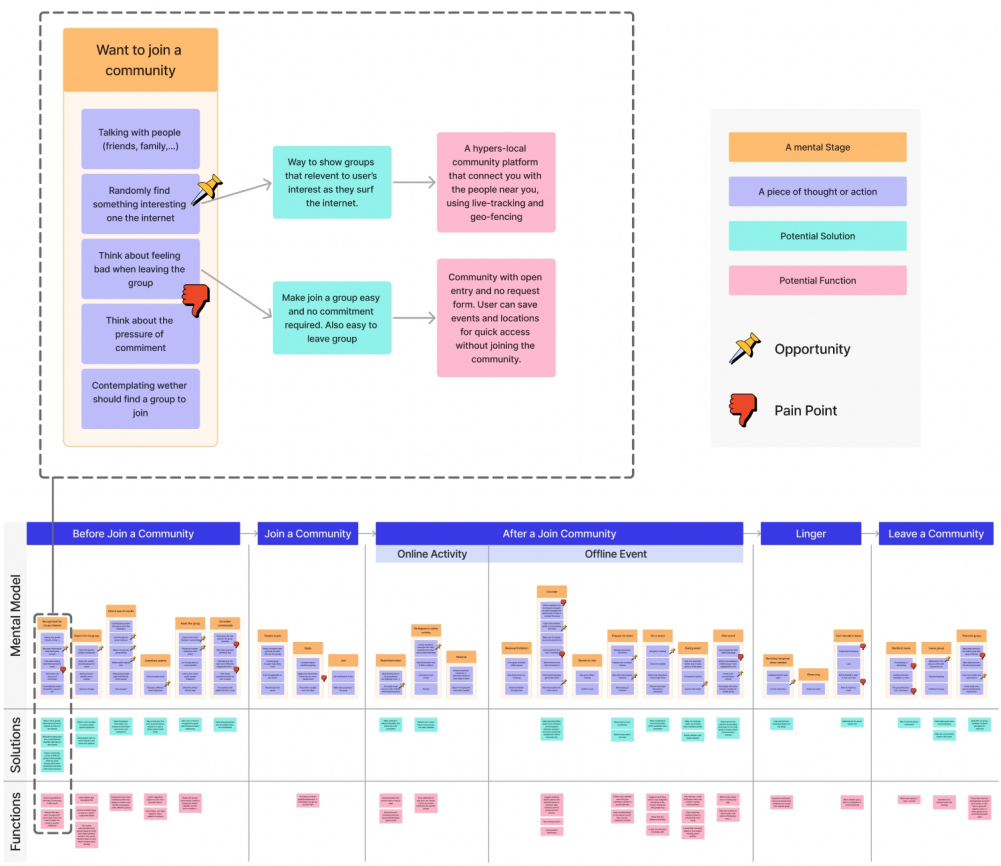

Fig 13. User's mental model and functions & Solution brainstorming

This exercise stimulated the design process, which resulted in creative and unexpected ideas. After brainstorming, all potential design ideas were evaluated, based on the user persona and the collected insights from previous research activities. In conclusion, a set of criteria were developed to ensure that the design outcome will fulfill the user's needs and accommodate the user's journey.

1. Mobile and accessible
2. Convenient and efficient
3. Secure and private
4. Shallow learning curve
5. Customized user experience
6. Support in-app communication
7. Reduce the stress of face-to-face social interactions
8. Mitigate the pressure of commitment
9. Motivate community interactions
10. Promote local communities

4.2. Design Concept

The design concept was created by considering the insights gathered from the user research. Initially, it was developed to help users overcome the pressure of face-to-face interaction through a hybrid social experience. In this experience, mediated interaction was integrated into the physical space, which allowed users to build in-person connections within their comfort zone. From here, the concept continued to expand, based on the criteria defined previously (section 4.1). During the ideation process, there were also other considerations besides the user's needs, involving numerous opportunities for improving the current online social space, which were identified through secondary research (section 2.2). The design solution aims to reinvigorate the current social scene and promote a balanced social life for the digital natives. There are five key aspects to the design concept

1. Native Mobile App

The solution is a digital product, in the form of a native mobile application (app). Since the target users are tech-savvy young adults, who prioritize convenience and efficiency, a mobile app is the most suitable form for an everyday digital tool. Moreover, having access to the device's native functionalities, such as camera, live location, text and more, enables unique features on the app.

2. Hyperlocal Community Platform

The app is a hyperlocal community platform that connects users with the communities around them, based on location and shared interests. The app provides users with a map view of community activities nearby, which are hosted by other members or local businesses. In the context of this project, community includes, not only the people but also the local businesses, such as mom-and-pop shops, restaurants and bars. This aspect is further explained below (5. Promote Local Communities).

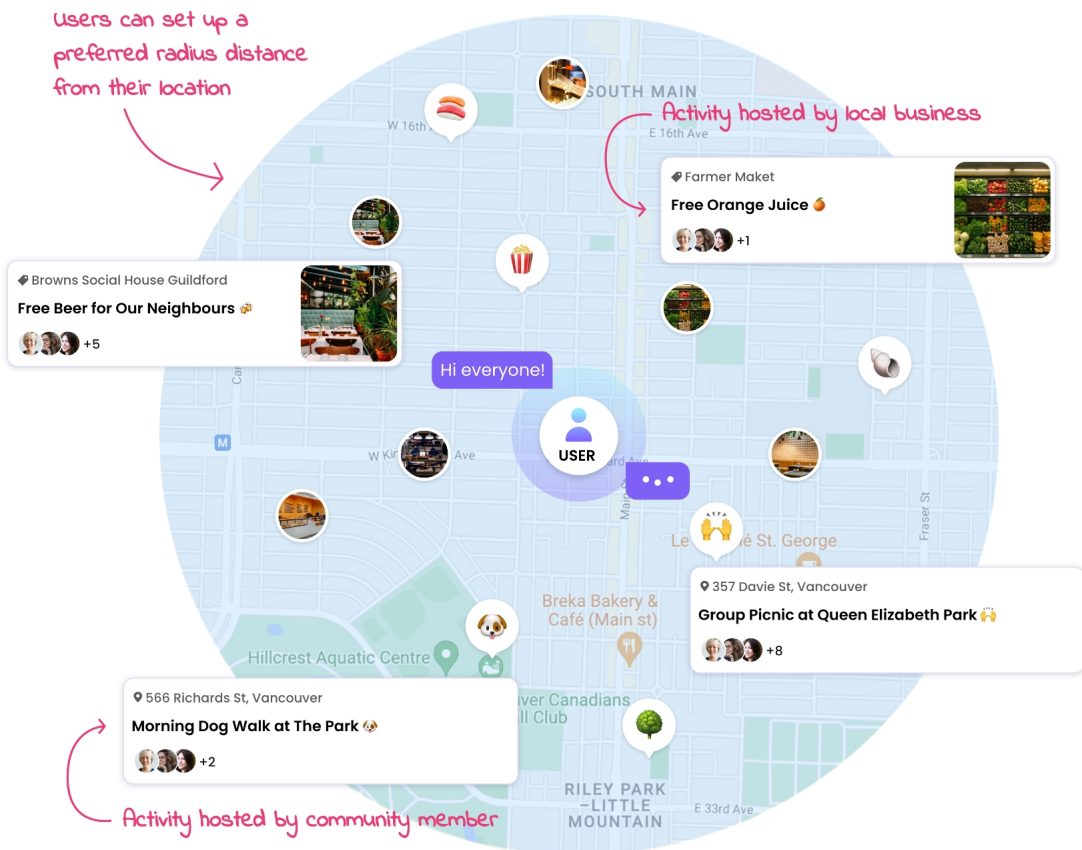

Fig 14. Design concept

Besides in-person activities, the app also connects people through online discussion topics, where members share interests and start conversations. The topics are attached to specific areas or locations, which are defined by the creators. Only users who are in the areas can view and join discussions. This feature highlights the tight-knit local community aspect of this platform.

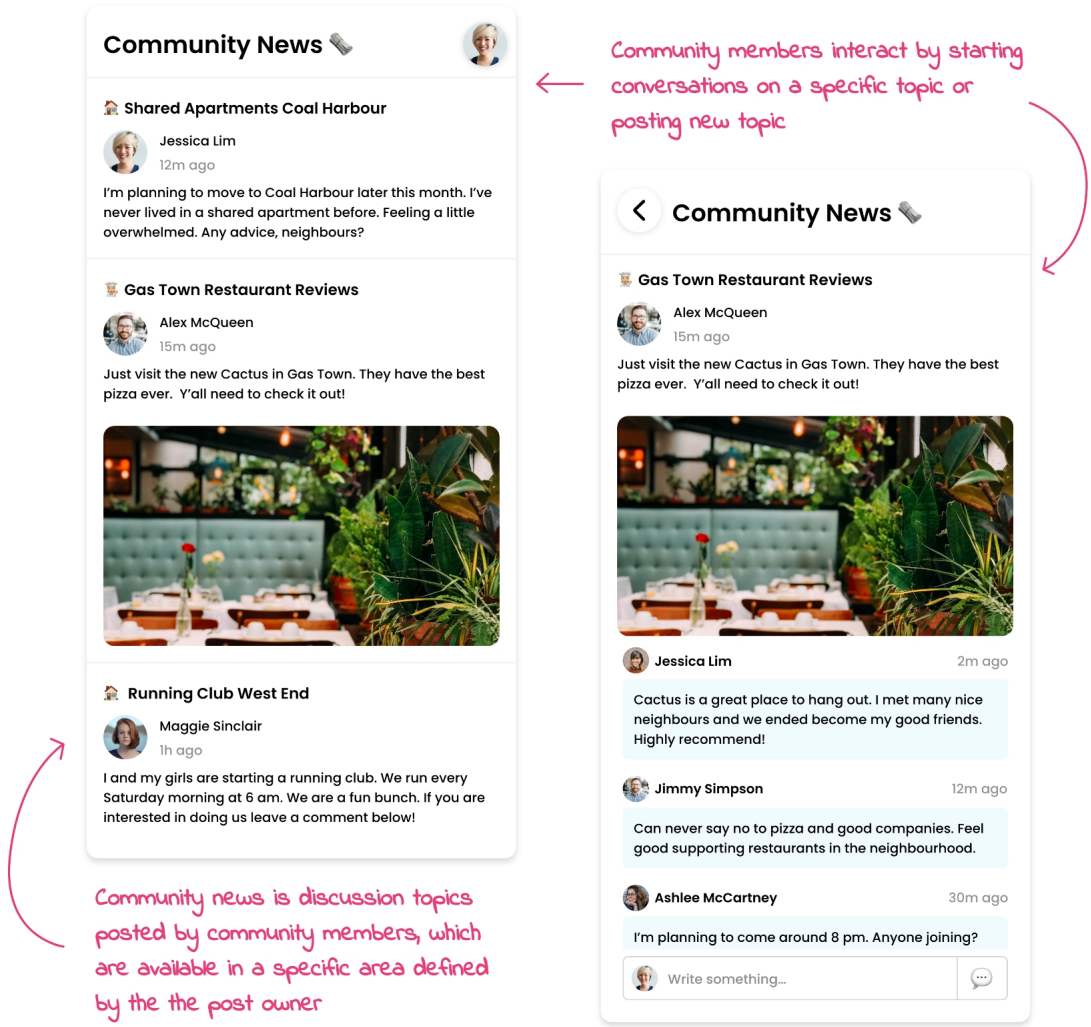

Fig 15. Design concept

3. Hybrid Social Experience

The core value proposition of this app is the hybrid social experience it provides to users, by blending mediated interactions into the physical space. When users attend an event or activity, they can get to know others through group messaging, sharing images and more, before initiating in-person interaction. This experience acts as a middle layer between the virtual and physical worlds to help ease the transition. To ensure privacy, the hybrid experience is limited to members, who previously signup for the specific activity and are present at the location.

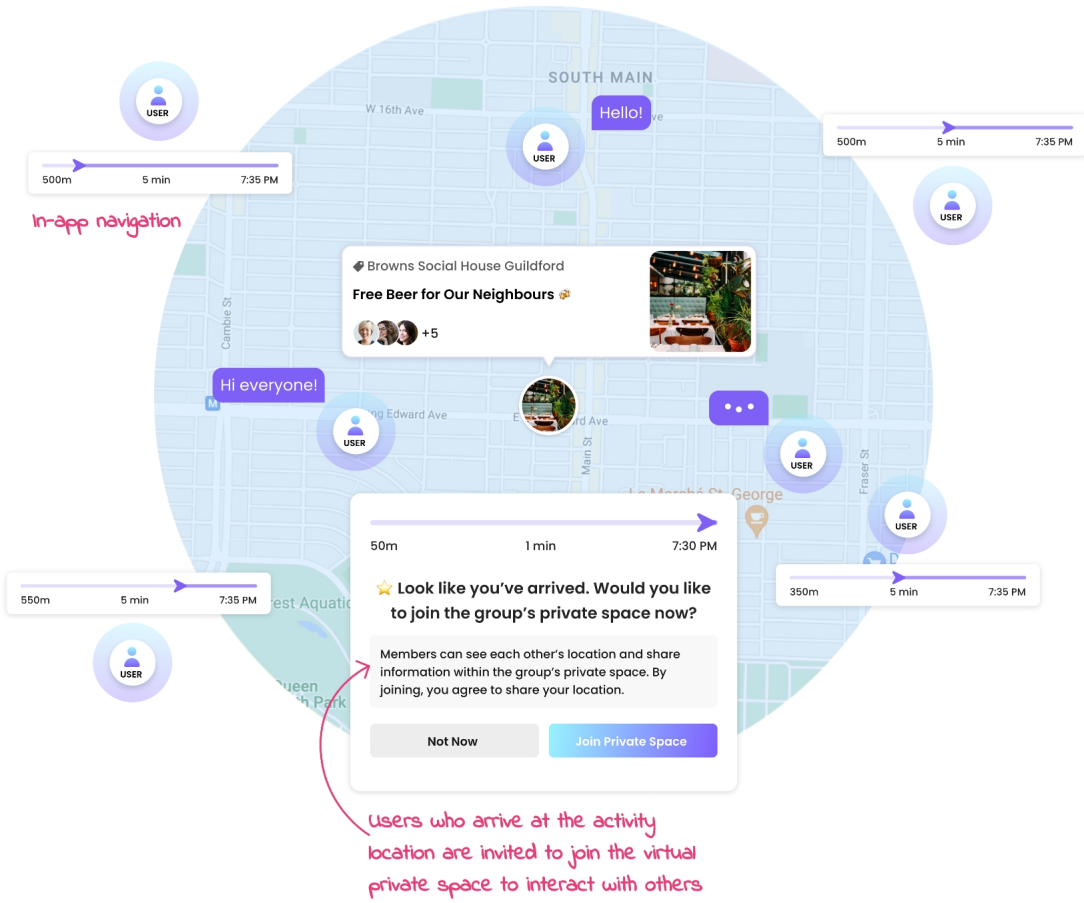

Fig 16. Design concept

4. Customized User Experience

During account onboarding, users are asked if they want to allow the system to access their locations and collect users' data while using the app. Based on the data that users agree to share, the system will generate customized content for each user. For example, the app suggests activities that users might be interested in based on users' past data or nearby activities based on users' location.

Customized content is a common product strategy, especially amongst social media platforms. Many businesses are capitalizing on private data to generate revenue from advertisements, and often time users are not aware of how their data are being used. To ensure data transparency, the app prompts access requests, every time users log in. Moreover, users can stop data sharing at any time, under the privacy settings.

Fig 17. Design concept

5. Promote Local Communities

During interviews (section 3.3.1), users mentioned that they feel disconnected from the physical community – many of them don't know their neighbours. The platform hopes to connect the users with the people around them by promoting local communities. As mentioned previously, the design solution aims to support not only the users but the community as a whole, which includes local businesses. The platform allows these businesses to offer special deals and discounts, which are available for community members in the area. This feature motivates users to visit local businesses, where they might meet other people, so both members and businesses can participate in building the local community.

Fig 18. Design concept

4.3. Design Prototype

The design concept (section 4.2) was developed into a detailed prototype that highlights the different features and what they offer to users. The prototype brought the design concept to life and put the product solution into perspective.

STAY CONNECTED

Find your community wherever you are 👋

A hyperlocal experience that connects you with the community around you based on shared interests and location.

Design Criteria & User Needs
- Convenient and efficient
- Shallow learning curve
- Customized user experience
- Motivate community interactions
- Promote local communities

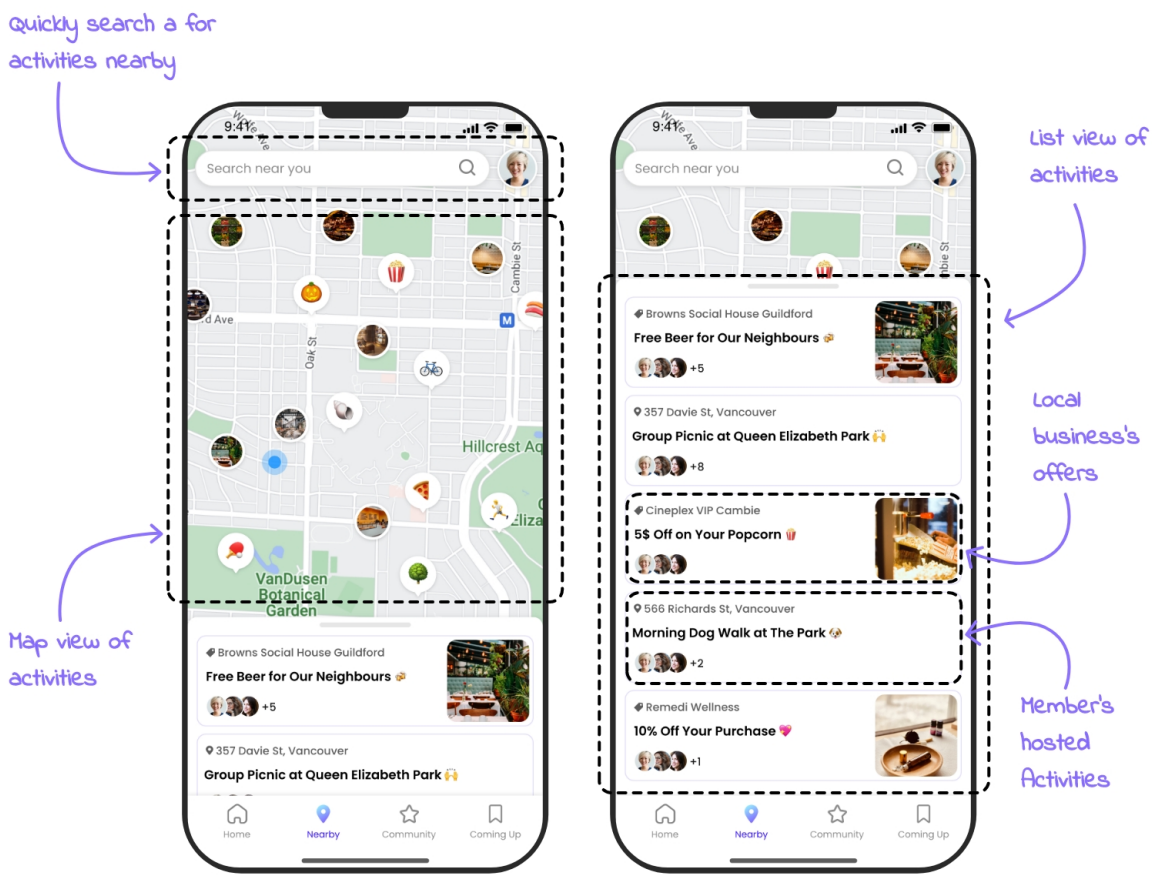

Fig 19. Design prototype

STAY IN THE LOOP

Never miss out on what's going on around you

Engage with your community by joining activities and discussions hosted by community members.

Design Criteria & User needs
- Convenient and efficient
- Support in-app communication
- Mitigate the pressure of commitment
- Motivate community interactions

Fig 20. Design prototype

STAY IN YOUR ZONE

Interact & connect with your community in your own way 🤝

Nervous to meet your community members in person? Join the virtual private space to break the ice

Design Criteria & User Needs
- Secure and private
- Support in-app communication
- Reduce the stress of in-person social interactions
- Motivate community interactions

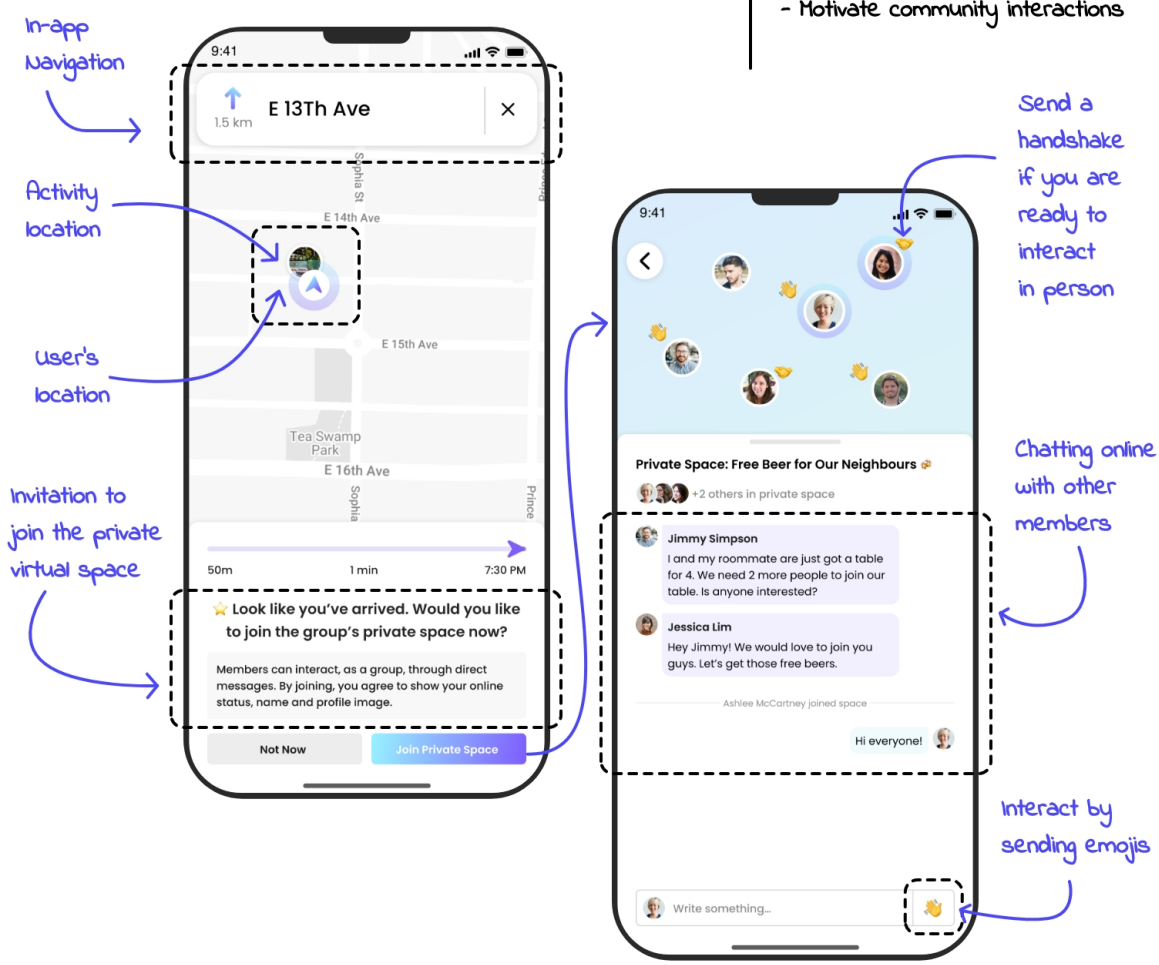

Fig 21. Design prototype

STAY UP-TO-DATE

Keep track of your activities & keep on exploring 🎯

Stay on top of your scheduled activities and never run out of new activities to explore with your community.

Design Criteria & User Needs
- Convenient and efficient
- Customized user experience
- Motivate community interactions
- Promote local communities

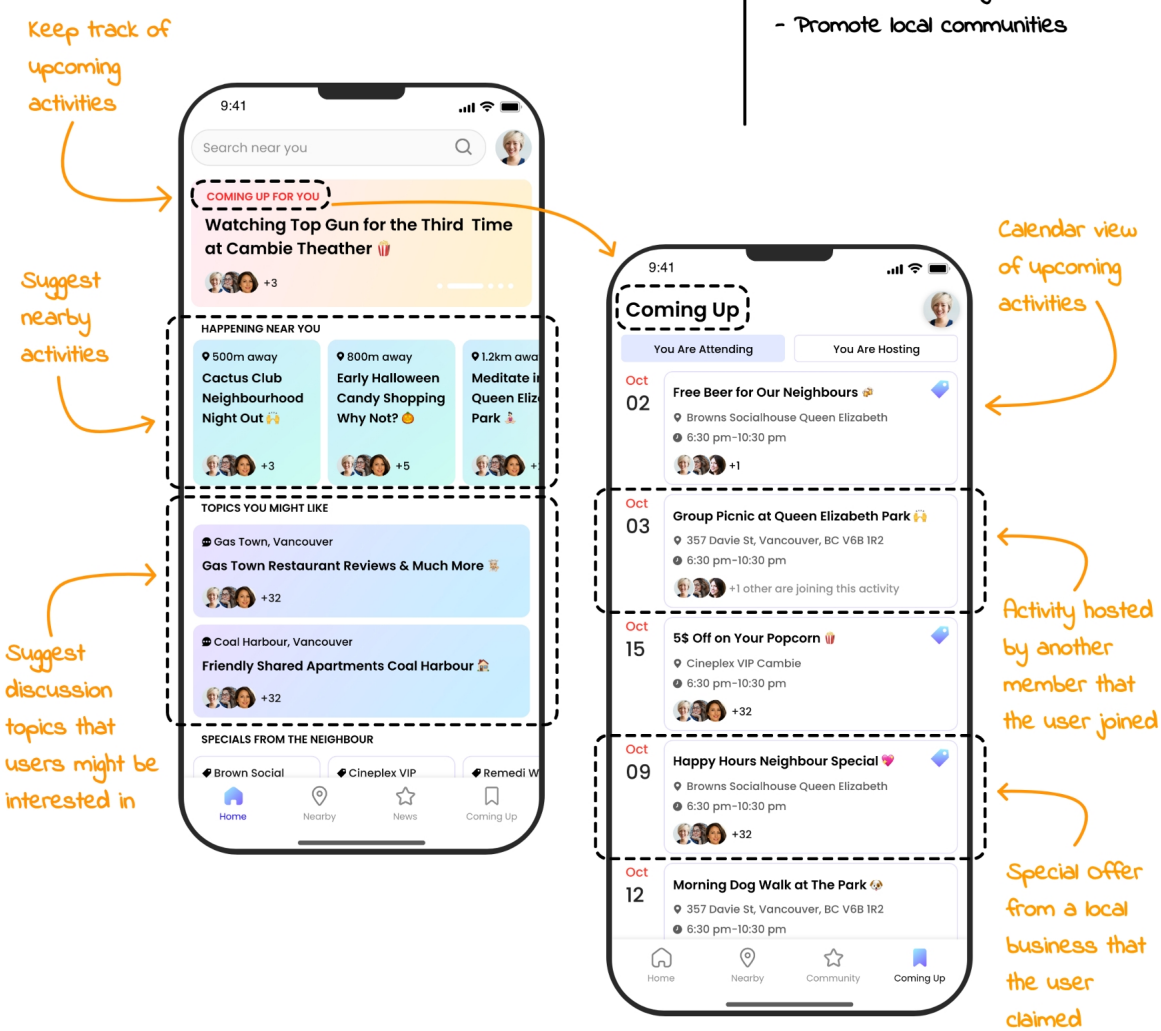

Fig 22. Design prototype

STAY SUPPORTIVE

Support local businesses & build community 🙌

Contribute to your community by supporting the local businesses while enjoying the special neighbourhood offers

Design Criteria & User Needs
- Secure and private
- Customized user experience
- Support in-app communication
- Motivate community interactions
- Promote local communities

Fig 23. Design prototype

5. Reflection & Future Direction

5.1. Insights & Learning

The research started with the question, “how can design assist community interaction in the digital age?”

Design Solution

The solution was designed for young digital natives, to enhance their journey of connecting with others in person. The project chooses to focus on this user group because, based on statistics and existing studies (section 1), they are the most active on social media yet struggle with in-person social interaction. Young adults, in this age group, are often torn between their needs and wants. They embrace and rely on technology for everyday social interaction. However, as they are starting to navigate life as independent individuals, they need to build new connections in the physical world. The design solution facilitates and encourages community interaction via digital technology. Through this medium, the service can reach the target audience and fit into their daily digital activities.

Even though the initial target audience is young adults, aged 18-34 years old, the design solution can be beneficial to a broader group of audiences. Because of the limited scope, the project needed to start with a narrower group of users to ensure that the design outcome is able to cover the users’ specific needs. However, the user’s mental model (section 3.4.1) is also true for people beyond the age range of 18-34 years old; it represents anyone who relies on digital media and loses their connection with others in the physical world. The design solution is meant to support those, who are looking for a suitable channel to build connections, by providing them with the tool and guidance to create a more balanced social life. Therefore, it has the potential to serve a larger group of users.

User-centred Research

Having potential users participate in the research process contributed tremendously to the design outcome. Working collaboratively with participants brought out unexpected insights, which helped reevaluate earlier assumptions. During interviews, they shared personal experiences and opened up about their struggles. This added another dimension to the research that couldn’t be achieved through secondary research. The participants’ stories inspired the vision for the design project, which was to remove the pressure of face-to-face interaction and

reconnect people with the local community. The vision became the anchor of the project, as it expanded. The final design outcome meets the user's needs and wants by keeping users at the center of the experience.

5.2. Barriers & Limitations

Due to the limited time, primary research was conducted with only a small group of participants living in the city of Vancouver. Thus the research results and design solution might not be able to cover all use cases. The proposed solution includes features that are creative and unconventional, which requires technical feasibility evaluation. However, that was difficult to achieve with the available resources for this project.

5.3. Future Directions

Immediate Next Steps

The proposed solution facilitates human-to-human interactions, not only virtually but also in person. Thus, safety and privacy are considered the top priorities. The current design incorporates specific flows to make sure users are always informed about how their information is shared and used in the app. For example, the system can only detect users' locations if users allow the app to access this information. Or, when inviting users to join a virtual private group, the app clearly states which personal information will be shared with other group members and asks for consent. However, these only cover simple use cases. Therefore, the most immediate next step is to ensure security for users by improving the current flow and providing additional features if needed.

Another important step to move the project forward is to collect users' feedback. Through participatory activities, the project was able to build relationships with potential users. At the end of the research activities, many of the participants signed up for further engagement. Moreover, the design prototype needs to be refined before testing. The current prototype is static, which can't accommodate all of the different user flows. To receive comprehensive feedback from users, an interactive prototype is needed.

Long-Term Direction

As mentioned previously, the design solution has the potential to serve a wider group of audience, adults over 35 years old and teenagers under 18 years old. To provide service for the new users, the product needs to be adjusted accordingly. The long-term direction is to further develop the product to assist different groups of users appropriately and efficiently.

First of all, further user research is necessary to understand the unique characteristics and needs of the new users in comparison to the current users. The new users can be categorized into two groups, adults and minors. While research on adults can be carried out similarly to previous research activities, research on minors will need more considerations. Since they are under the age of 18, the research methods will have to reflect this factor. It's important to include parents in the research because considering the nature of the service, parental supervision is needed for security reasons. Moreover, understanding how parents and children interact with digital tools can be beneficial for the future iterations of the product. Secondly, to reduce the development effort, it's ideal to have an interface that can accommodate all users. To achieve this goal, the new user flows and features, need to be mapped out on top of the current interface, so the design can be modified effectively.

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7. Appendix

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Fig 6. Face-to-face interaction and Online mediated Interaction comparison

Fig 7. Local communities search functions analysis

Fig 8. Local communities search functions analysis

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Fig 10. Components of the user's mental model

Fig 11. Components of the user's mental model

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Fig 18. Design concept

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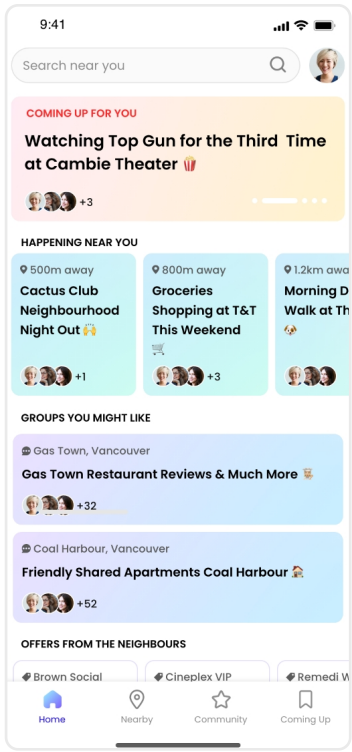
Fig 20. Design prototype

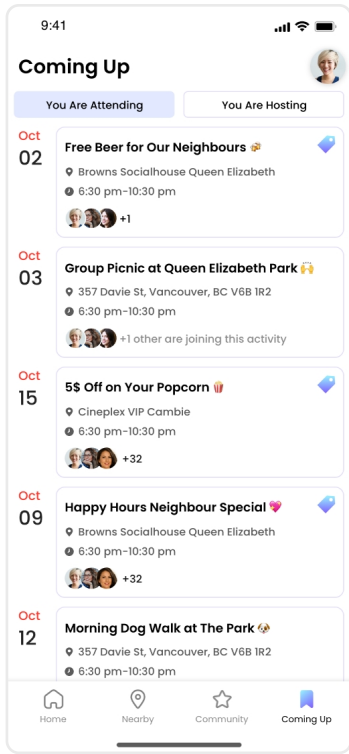
Fig 21. Design prototype

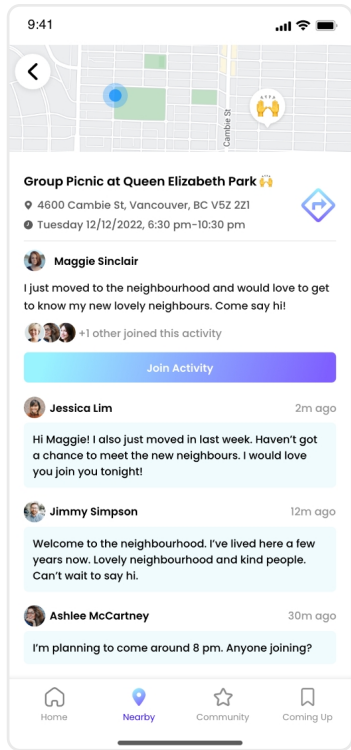
Fig 22. Design prototype

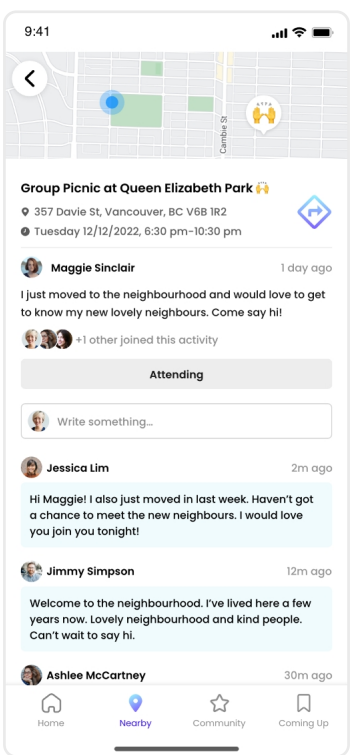
Fig 23. Design prototype

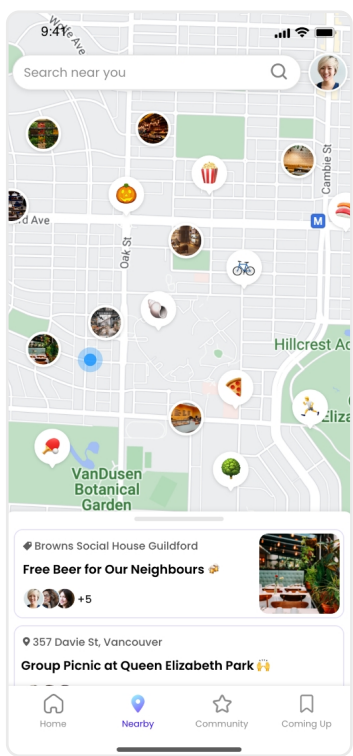
7.2. App Screens

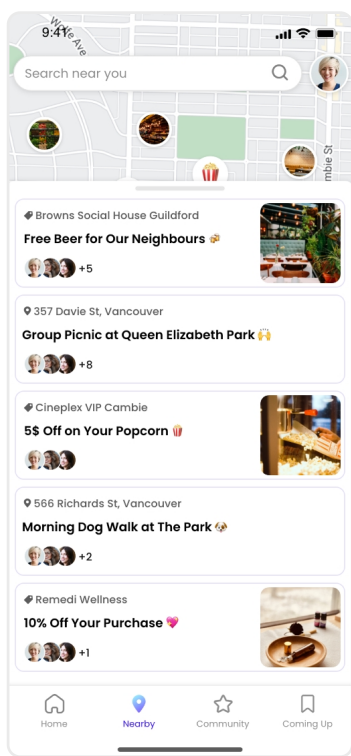


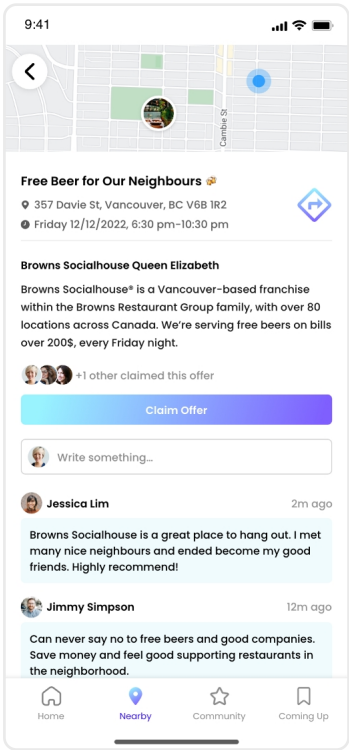


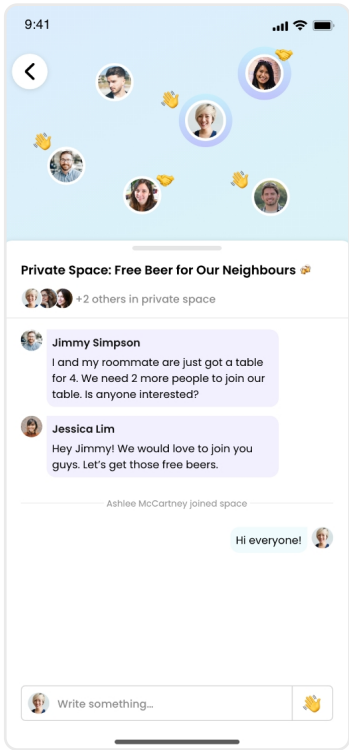


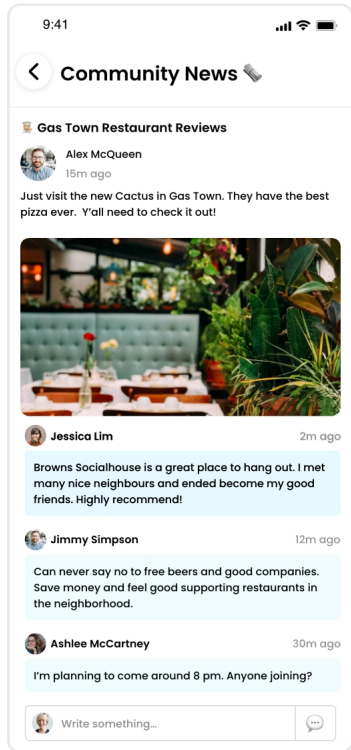







9:41
Cambie St
Free Beer for Our Neighbours
357 Davie St, Vancouver, BC V6B 1R2
Friday 12/12/2022, 6:30 pm-10:30 pm
Browns Socialhouse Queen Elizabeth
Browns Socialhouse® is a Vancouver-based franchise within the Browns Restaurant Group family, with over 80 locations across Canada. We're serving free beers on bills over 200$, every Friday night.
+1 other claimed this offer
Claim Offer
Write something...
Jessica Lim
2m ago
Browns Socialhouse is a great place to hang out. I met many nice neighbours and ended become my good friends. Highly recommend!
Jimmy Simpson
12m ago
Can never say no to free beers and good companies. Save money and feel good supporting restaurants in the neighborhood.
Home
Nearby
Community
Coming Up


9:41
Private Space: Free Beer for Our Neighbours
+2 others in private space
Jimmy Simpson
I and my roommate are just got a table for 4. We need 2 more people to join our table. Is anyone interested?
Jessica Lim
Hey Jimmy! We would love to join you guys. Let's get those free beers.
Ashlee McCartney joined space
Hi everyone!
Write something...


9:41
Community News
Gas Town Restaurant Reviews
Alex McQueen
15m ago
Just visit the new Cactus in Gas Town. They have the best pizza ever. Y'all need to check it out!
Jessica Lim
2m ago
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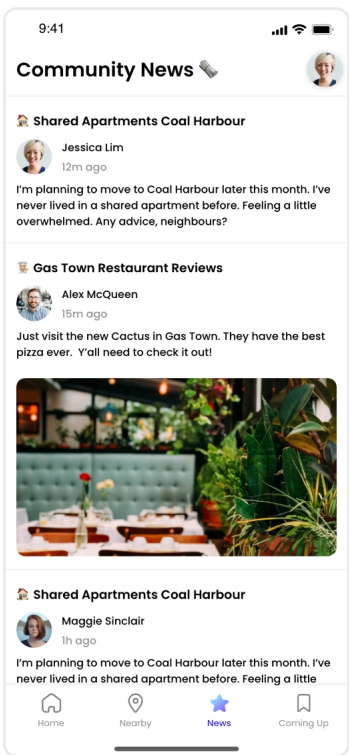
Jimmy Simpson
12m ago
Can never say no to free beers and good companies. Save money and feel good supporting restaurants in the neighborhood.
Ashlee McCartney
30m ago
I'm planning to come around 8 pm. Anyone joining?
Write something...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Community News
Shared Apartments Coal Harbour
Jessica Lim
12m ago
I'm planning to move to Coal Harbour later this month. I've never lived in a shared apartment before. Feeling a little overwhelmed. Any advice, neighbours?
Gas Town Restaurant Reviews
Alex McQueen
15m ago
Just visit the new Cactus in Gas Town. They have the best pizza ever. Y'all need to check it out!
Shared Apartments Coal Harbour
Maggie Sinclair
1h ago
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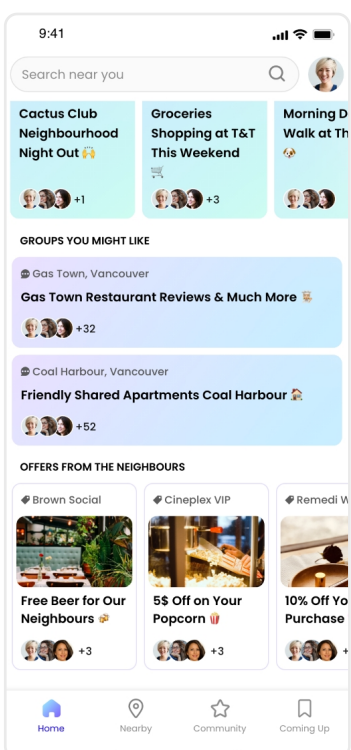
Nearby
News
Coming Up


9:41
Search near you
Cactus Club Neighbourhood Night Out
+1
Groceries Shopping at T&T This Weekend
+3
GROUPS YOU MIGHT LIKE
Gas Town, Vancouver
Gas Town Restaurant Reviews & Much More
+32
Coal Harbour, Vancouver
Friendly Shared Apartments Coal Harbour
+52
OFFERS FROM THE NEIGHBOURS
Brown Social
Free Beer for Our Neighbours
+3
Cineplex VIP
5$ Off on Your Popcorn
+3
Home
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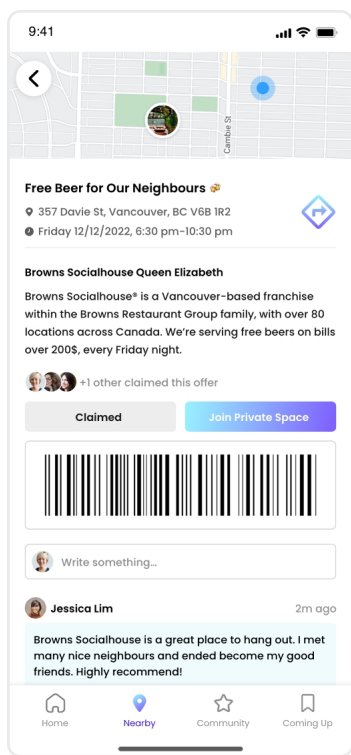
Community
Coming Up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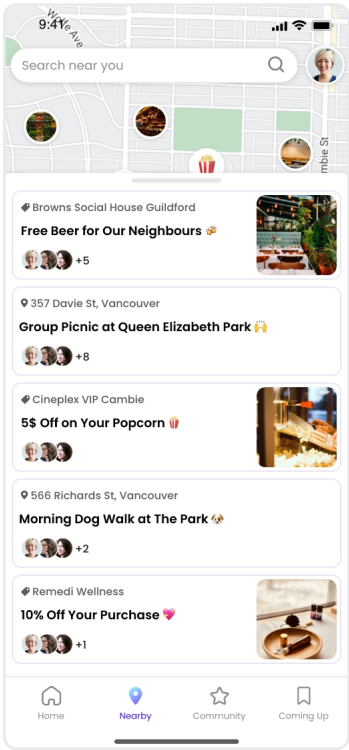
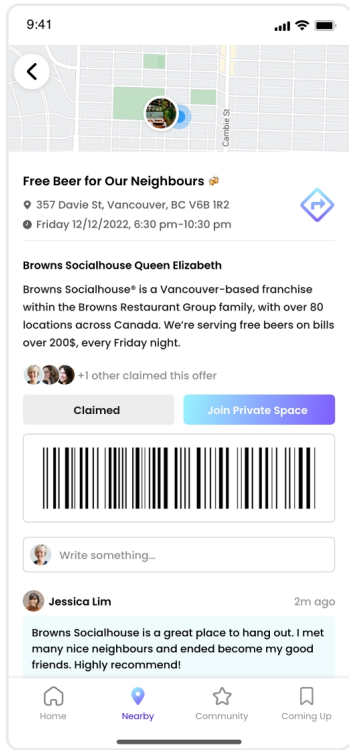
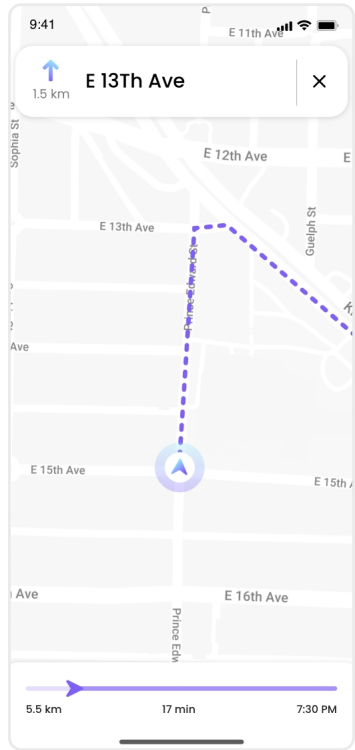
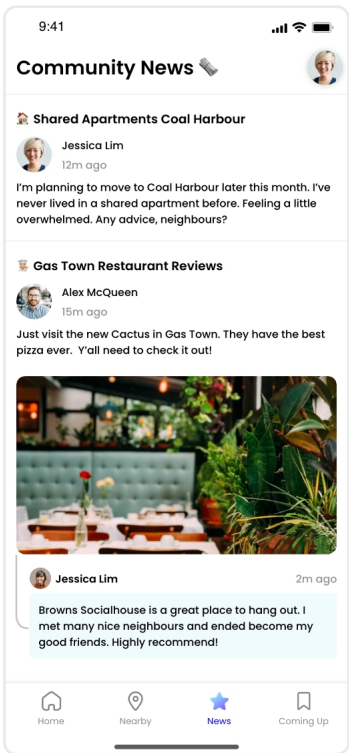

9:41
Search near you
Browns Social House Guildford
Free Beer for Our Neighbours
+5
357 Davie St, Vancouver
Group Picnic at Queen Elizabeth Park
+8
Cineplex VIP Cambie
5$ Off on Your Popcorn
566 Richards St, Vancouver
Morning Dog Walk at The Park
+2
Remedi Wellness
10% Off Your Purchase
+1
Home
Nearby
Community
Coming Up


9:41
Free Beer for Our Neighbours
357 Davie St, Vancouver, BC V6B 1R2
Friday 12/12/2022, 6:30 pm-10:30 pm
Browns Socialhouse Queen Elizabeth
Browns Socialhouse® is a Vancouver-based franchise within the Browns Restaurant Group family, with over 80 locations across Canada. We're serving free beers on bills over 200$, every Friday night.
+1 other claimed this offer
Claimed
Join Private Space
Write something...
Jessica Lim
2m ago
Browns Socialhouse is a great place to hang out. I met many nice neighbours and ended become my good friends. Highly recommend!
Home
Nearby
Community
Coming Up


9:41
1.5 km
E 13Th Ave
E 12th Ave
E 13th Ave
E 15th Ave
E 16th Ave
5.5 km
17 min
7:30 PM


9:41
Community News
Shared Apartments Coal Harbour
Jessica Lim
12m ago
I'm planning to move to Coal Harbour later this month. I've never lived in a shared apartment before. Feeling a little overwhelmed. Any advice, neighbours?
Gas Town Restaurant Reviews
Alex McQueen
15m ago
Just visit the new Cactus in Gas Town. They have the best pizza ever. Y'all need to check it out!
Jessica Lim
2m ago
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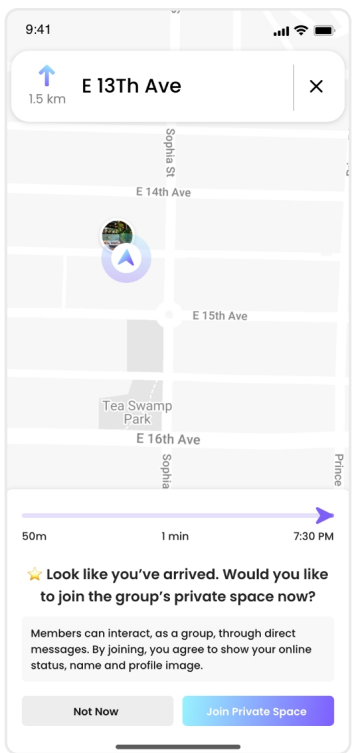
9:41
1.5 km
E 13Th Ave
Sophia St
E 14th Ave
E 15th Ave
Tea Swamp Park
E 16th Ave
50m
1 min
7:30 PM
Look like you've arrived. Would you like to join the group's private space now?
Members can interact, as a group, through direct messages. By joining, you agree to show your online status, name and profile image.
Not Now
Join Private Space