

CASE STUDY · 2026



cup of sugar

Design research · Community resilience

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DESIGN RESEARCH · COMMUNITY INFRASTRUCTURE · 2020–PRESENT

Cup of Sugar

A mutual aid platform for small, trust-verified communities.

Format Solo design research · Ongoing

Methods Community-centered design · Participatory design · Autoethnography · Systems design · Interaction design

Status High-fidelity prototype complete (26 screens) · Community pilot planned

Context Maryville, Missouri · Peoria, Illinois · Portland, Oregon · Forest Grove, Oregon

Prior related work Pollock, M. (2021). The Impact of COVID-19 on Higher Education. Northcentral University. ·
Pollock, M. & Ford, H. (2021). Panacea: Resource and Tools for a Changing College Environment. Bradley University.

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The cup of sugar

In the spring of 2020, I was on Zoom with my students. They were frightened — about the pandemic, about their futures, about the isolation that had descended almost overnight. At the same time, I was reading story after story about elderly people with no one to run an errand, no one to check in. About neighbors who were willing to help and had no way to find each other. People were generous. The infrastructure was gone.

Cup of Sugar started not as a platform idea but as a recognition of absence. The COVID-19 pandemic exposed a structural issue that had been growing for years: the gradual breakdown of community infrastructure in modern civic and institutional life. Around the world, communities showed an innate tendency for mutual aid — through neighborhood spreadsheets, Buy Nothing groups, and spontaneous supply chains over text threads — but what was missing was the infrastructure needed to activate that instinct at a trust-enabled scale (Putnam, 2000). Lin and Gao (2020) describe communities as networks of diverse identities linked by common interests or shared circumstances; the pandemic revealed how much those networks had become thin.

This platform's name is literal; it reflects the design brief itself.

When I was young, my mother would send me next door to borrow a cup of sugar. I would knock on the neighbor's door, the door would open, and the cup would be filled. No transaction, no record kept, no application required. It was simply two households and an unspoken trust that what one had, the other could use. This kind of gesture — personal, local, tangible, and reciprocal — is what this platform aims to support and build upon. Unlike most civic technology that tends to expand outward, Cup of Sugar focuses inward, examining what design looks like when the goal isn't broad reach but depth — emphasizing neighbors over users, relationships over audiences, and trust over scale.

Scholarly foundation: community psychology research

The design of Cup of Sugar is heavily influenced by

community psychology research, especially studies on how a sense of community forms and the structural barriers that can prevent it. McMillan and Chavis (1986) established an influential theoretical framework that identifies four key aspects of a sense of community: membership, influence, integration and fulfillment of needs, and shared emotional connection. This model offers a foundational understanding of what community technology should facilitate to truly foster an authentic community rather than just mimic one.

Research during the COVID-19 pandemic highlighted the widespread collapse of community infrastructure. A fall 2020 survey by the Center for Collegiate Mental Health (CCMH) involving over 47,000 students revealed that 60% felt loneliness or isolation had negatively affected their mental health, ranking second after lack of motivation. Besser and colleagues (2020) observed that students reported substantially lower levels of belonging and mattering in the early months of the pandemic. A survey from April to May 2020 showed that fewer than 40% of students felt connected to their peers (Frederick & Wolff-Eisenberg, 2020). These findings, detailed in a prior scholarly article (Pollock, 2021), form the empirical foundation for the platform's core design: the desire for community exists, but the means to foster it are lacking.

Cheng (2011) described the campus community as an environment that entails more than obtaining an education, built around teaching and learning through collaboration among all members. Significantly, research indicates that smaller communities — those with fewer than 9,000 members — demonstrate higher levels of sense of community than larger ones (Cope et al., 2021). This finding is directly encoded in Cup of Sugar's design. Communities are intentionally limited to fifteen to forty members, precisely because trust and belonging develop through repeated interaction at the human scale, not through exposure to a large audience.

From research to designed intervention: Panacea

The scholarly inquiry into community breakdown during COVID-19 resulted in both academic documentation and

a practical design solution. In August 2021, I collaborated with MFA student Heather Ford at Bradley University to create *Panacea: Resource and Tools for a Changing College Environment*. At that time, I was serving as the Assistant Professor of Art in Residence in the Graphic Design program. The zine was distributed to students, faculty, staff, and administration as the campus prepared to resume in-person classes after eighteen months of pandemic-related disruptions.

Panacea directly tackled the issues outlined in the 2021 paper: social isolation, loss of community ties, anxiety about belonging, and the difficulty of navigating a college environment that had changed dramatically. Its content included prompts for self-reflection, practical tips for fostering community on campus, guidance on identifying three meaningful places, and encouragement to practice patience and engagement. These elements were rooted in the understanding that returning to campus was not just about logistics but about rebuilding a community that needed deliberate support. The zine's introduction plainly declared: "Together we are stronger."

Panacea was a deliberately crafted artifact that employed the visual language of zine culture—such as mixed typography, torn paper collage, bold colors, and quotations from figures like Frida Kahlo, Juno Dawson, and Maya Angelou—to evoke a sense of urgency, personal connection, and community focus rather than institutional formality. It was not a brochure but a visual assertion that the pursuit of belonging is valuable and that the college community can be restored collectively.

Cup of Sugar serves as, in part, the digital extension of that argument. Whereas *Panacea* provided resources and encouragement, Cup of Sugar supplies infrastructure. While the zine focused on a campus community during a crisis, the platform supports neighborhood and small communities over the long run. The core idea stays consistent: the conditions for belonging should be intentionally created, not taken for granted.

The EDIA fellowship — a third vantage point

During my second year teaching at Pacific University, I served as an Equity, Diversity, Inclusion, and Accessibility

fellow. This role offered a clear view of the institution's efforts to foster a more equitable community—and highlighted the challenges when the necessary structural conditions are missing. Through the fellowship and discussions with colleagues and students, I realized that the lack of community wasn't due to individual effort or goodwill. Instead, it was a structural issue—there were no shared spaces, common times, or informal structures allowing people to simply be together long enough to build trust.

The conditions that foster a sense of community—such as daily proximity, small repeated interactions, and the familiarity that develops over time—have been quietly removed from the environments where people spend most of their days. This aligns with Putnam's (2000) findings on the decline of social capital in American civic life, and with Costanza-Chock's (2020) view that design either perpetuates or challenges existing power structures and social connections. The campus, like the neighborhood, wasn't failing at building community; it was attempting to do so without the necessary elements.

The coordinated effort to oppose DEI initiatives at both federal and state levels from 2023 to 2026 added a new perspective to this analysis. Efforts and positions aimed at promoting equity and belonging were either dismantled or faced cuts, further weakening the already fragile institutional support for community. It became evident that fostering community couldn't rely solely on institutional programs; instead, it had to be woven into daily life — through the tools people use, small acts of kindness and exchange among neighbors, and design choices that make asking for help feel safe rather than vulnerable. Cup of Sugar is not a DEI initiative or an institutional program. Instead, it aims to create the conditions for community at a manageable scale—small, trust-based, governed by those within it—since larger structures have proved inadequate. The cup of sugar, pandemic research, *Panacea* zine, and EDIA fellowship all lead to the same insight: community needs proper infrastructure. Without it, the natural urge to connect has nowhere to go. This platform seeks to provide a place for those connections to take root.

Listening before designing

Methodology

Prior to designing any interface or interaction model, informal research discussions took place with over a dozen individuals from communities the designer belongs to—such as a gym community, a neighborhood, and a professional workplace community including faculty, staff, and students. These talks were spontaneous rather than structured interviews, often occurring naturally during conversations about community and connection—particularly when the designer mentioned exploring ways for communities to better support each other.

The methodology aligns with autoethnographic design, viewing the designer’s embedded position in communities as a valid data source (Ellis et al., 2011). Sanders and Stappers (2008) suggest that participatory design is most effective when rooted in real relationships rather than formal procedures. The informal conversation style used here is a deliberate methodological choice, based on the understanding that community needs are most genuinely expressed within established trust.

Importantly, similar themes appeared across all three community settings, despite the diverse lives and circumstances of the people involved. This consistent pattern across different environments points to a structural issue rather than a situational one. The research supports existing studies: the lack of community infrastructure isn’t specific to certain neighborhoods or institutions. As Putnam (2000) extensively noted, it is a widespread feature of modern civic life.

Missing connection

The common theme that emerged quietly and often in the research discussions was loss. Participants didn’t mention conflict or hostility but rather the lack of familiarity — the sense that neighbors or colleagues no longer truly know each other. One participant summarized this well:

“I miss knowing my neighbors.”

This statement isn’t about a specific failure or incident. Instead, it highlights a structural issue—the decline of bonding social capital, as Putnam (2000) describes, which consists of close-knit, reciprocal relationships that allow people to seek help, offer aid, and expect support. This view matches the findings of Frederick and Wolff-Eisenberg (2020), who observed that less than 40% of students felt connected to their peers during the pandemic. It also echoes Cheng’s (2011) point that community isn’t just about shared geography; it requires ongoing interactions and mutual recognition over time.

Cup of Sugar isn’t meant to create community from the ground up. Instead, it aims to restore the conditions that enable community to flourish — rebuilding the neighborhood infrastructure that fosters the natural care instincts most people possess.

The burden of asymmetrical helping

A second key theme arose during a discussion about providing continuous aid to neighbors. One participant, who frequently helps neighbors with mechanical repairs, highlighted a flaw that the current literature on mutual aid recognizes as a structural issue inherent in charity models.

“I like to work on cars and to help my neighbors. I wish they didn’t think that it was taking up my time.”

This observation points to a problem not based on individual psychology but on a lack of a reciprocal exchange system. When aid moves in only one direction without a way for lateral reciprocity, it results in what Spade (2020) calls the charity dynamic: a top-down relationship where one side is the benefactor and the other the recipient. Even if unintended, this dynamic causes discomfort for both—helpers find it hard to show sincere

willingness, and those receiving help feel burdened by obligation.

Cup of Sugar's time bank feature directly tackles this issue. When help is recorded as a time exchange—an hour given, an hour received—the transaction remains lateral rather than hierarchical. Aligning with the mutual aid tradition highlighted by Spade (2020) and exemplified by the Black Panther Party's community programs, no one is seen as a benefactor or a charity case. The person with mechanical skills is viewed as a contributor within a network of contributors. Over time, the community enhances its capabilities because the exchanges are mutual, visible, and reciprocal.

Safety and verified information

A third theme arose from discussions about civic conditions in the Portland, Oregon area during a time of increased ICE enforcement activity. One participant highlighted a particular and urgent need:

"I'd love to have safety alerts, especially with increased ICE presence."

This comment clarified a key design principle that was implicit in the platform's framework but needed clear expression: the alert system is not just a convenience. It represents an ethical obligation with tangible impacts. For communities facing enforcement pressure, misinformation isn't just an inconvenience — it's harmful. A false report about a checkpoint can cause people to stay home from work, prevent children from attending school, and delay medical treatment. Conversely, a verified, calmly delivered, and accurate report helps individuals make informed decisions to protect themselves and their families.

The three-tier alert system — Reported, Verified, and Expired — was created based on this understanding. As noted in the 2021 community psychology paper (Pollock, 2021), misinformation during crises causes measurable

harm. Son and colleagues (2020) identified confusion about pandemic information as a key stressor for college students. The system's focus on source citation, moderator verification, and automatic expiration is a response to this evidence. New submissions start as Reported. Verification involves a designated moderator citing a source. The visual style remains calm, avoiding red, alarm signs, or urgent visuals.

Care woven into daily life

A fourth theme, likely the most practically productive, arose from a discussion about the daily patterns of neighborhood life. One participant shared a simple yet insightful wish:

"It would be so nice if someone could grab something for me at the store, if they are already going."

The importance of this comment lies in its framing. The participant was not asking for a special errand service or burdening someone else's time. With rising gasoline prices following the attack on Iran, conserving fuel is increasingly important; reducing gas usage can be vital now. The phrase 'already going' highlights that care is viewed not as a separate task but as a slight extension of what is already happening. This aligns with Norman (2013) in human-centered design, which starts with real human behavior instead of idealized ones, and creates systems that support existing behaviors rather than forcing change. This observation led to the creation of the Along the Way feature. Its name clearly reflects its purpose. A person heading to a store shares a trip, including details like destination, departure time, and capacity. Neighbors can add items to the list. The driver collects these items during their usual route. No extra trips are needed. The act of helping occurs naturally alongside everyday routines, rather than requiring separate efforts.

03 · The problem

What existing platforms get wrong

Existing community platforms—such as Nextdoor, Facebook groups, and Buy Nothing exchanges—mainly serve as broadcast tools for audiences. They compile people from a geographic area into one feed, often curated by algorithms, focusing on content sharing rather than building relationships, and often allow anonymity. This setup tends to create specific social effects: greater awareness of neighbors without deeper understanding, and social environments where need and noise compete for attention (Putnam, 2000).

The result is platforms that are technically about neighbors but functionally focused on content. Someone needing help, like picking up a prescription, doesn't require hundreds of nearby people sharing a zip code. They need one trusted person nearby who recognizes them and agrees to help. Three main structural failures influenced the design of Cup of Sugar as a response to the current platform environment.

- Anonymity at scale makes trust impossible to establish and easy to exploit. Platforms that permit anonymous participation cannot build the conditions under which people feel safe making themselves vulnerable — which is what asking for help requires (Cheng, 2011; McMillan & Chavis, 1986).
- Broadcast architecture treats need as content. When a request for help competes in a feed with announcements, complaints, and algorithmically promoted posts, the social dynamics of public performance discourage the specific, personal vulnerability that genuine mutual aid requires (Spade, 2020).
- Absence of governance leaves platforms unaccountable to their communities. Without a charter, a code of conduct, a moderation process, and a structured appeals mechanism, community members have no recourse when platform dynamics cause harm (Costanza-Chock, 2020).

Cup of Sugar offers a structural solution to each of these failure modes. It replaces anonymous scale with small, trust-verified communities of fifteen to forty members. Mutual aid requests serve as a substitute for broadcast content. Governance tools—such as charters, codes of conduct, rotating leadership, moderation logs, and appeals processes—are integrated as a fundamental platform feature rather than an afterthought. The platform is built around the core transaction that existing platforms cannot support: the personal knock on the door.

Three interlocking claims

Scale is not neutral

Every design choice regarding scale is based on assumptions about what community means and what it needs. Platforms built for thousands of users often assume that large-scale connections lead to close, personal bonds. However, research does not support this. Cope et al. (2021) found that smaller communities—those with fewer than 9,000 members—experience significantly stronger senses of community than larger ones. Putnam’s (2000) distinction between bonding capital — the dense, reciprocal ties within close-knit groups — and bridging capital — the weaker, broader ties between groups — is relevant here. Most civic platforms facilitate bridging capital by increasing awareness of many people across a geographic area. Cup of Sugar enhances bonding capital by fostering specific, mutual, trust-based relationships—like knocking on a door and expecting it to open.

Communities in Cup of Sugar are intentionally limited to fifteen to forty members. This small group size is intentional, not a restriction on the platform’s ambitions. As McMillan and Chavis (1986) explained, trust builds over time within a close-knit group where members care about each other as their needs are fulfilled. This kind of trust does not expand in the same way as broader reach does.

Trust must precede technology

Membership in a Cup of Sugar community requires approval from a current member in person. There is no anonymous sign-up, automated onboarding, or verification badge that replaces human judgment. The platform’s digital layer is based on pre-existing relationships from the physical world. This intentional design limits how quickly the platform can grow.

This method aligns with Sanders and Stappers’ (2008) participatory design framework, where community members are seen as co-constructors of the system’s social norms rather than mere users being integrated into a pre-designed system. The need for in-person approval illustrates this clearly. Joining a Cup of Sugar community begins with a human gesture, not a digital process. The platform itself does not foster trust; instead, it facilitates and enhances the trust that is already in place.

Care is not a feature — it is the architecture

The platform’s information architecture is entirely focused on acts of care, including mutual aid requests, skill sharing, time banking, community alerts, shared errands, and material exchanges. Each feature is crafted with the idea that care is relational rather than transactional (Spade, 2020). This approach draws from the mutual aid tradition, particularly the community survival programs of the Black Panther Party—such as the Free Breakfast Program, community health clinics, and organized networks of material support. These initiatives operated not as charity but as expressions of collective self-determination.

The distinction between charity and mutual aid is crucial in the platform’s design. Charity moves from those with resources to those in need, viewing need as a shortfall and help as a gift from the fortunate to the less fortunate. Mutual aid operates laterally: everyone contributes based on capacity, and everyone receives according to need. It emphasizes the interconnectedness of giving and receiving (Spade, 2020). Cup of Sugar’s time bank, skill exchange, and Cupboard are set up to reflect this philosophy. Needs are not moralized, and help does not depend on proving worthiness.

Load-bearing commitments

The Principles and Ethics Statement establishes seven core commitments that function as design constraints rather than mere aspirational values. These commitments are fundamental to the platform's design: they influence why certain decisions were made and others rejected. Each one is based on a specific insight from research, a particular condition observed in the communities served, or a known failure mode of existing platforms.

Dignity — the platform is designed for the person, not the data point. Consistent with Norman's (2013) human-centered design framework, every interaction is designed to minimize friction in meeting needs and to support the dignity of asking for help.

Mutual aid — lateral reciprocity, not vertical charity. Consistent with Spade (2020) and the mutual aid tradition, the platform's exchange mechanisms are designed to make reciprocity visible and to prevent the emergence of fixed helper and helped roles.

Autonomy — members control their visibility and participation. Privacy defaults are calibrated for those who cannot afford exposure, consistent with Costanza-Chock's (2020) design justice principle of designing for those most harmed by design failure.

Non-carceral orientation — no feature, policy, or design pattern may serve as a surveillance or enforcement vector. This commitment emerged directly from the civic conditions in Portland, Oregon, during 2023–2026, including heightened ICE enforcement activity and the specific vulnerabilities of immigrant community members.

Data minimization — the platform collects only what is required to function. No data is collected beyond what is operationally necessary. Consistent with privacy-by-design principles, data minimization is architectural rather than optional.

Consent — opt-in rather than opt-out throughout. Privacy is by default, not by request. The Privacy defaults screen, designed as the ethical centerpiece of the onboarding flow, visually encodes this commitment: two toggles default to ON, three to OFF.

Information integrity — the alert system reflects a structural commitment to verified, time-bounded, source-cited community information. Consistent with the findings of Son and colleagues (2020) on the harm caused by pandemic misinformation and with the specific needs of communities navigating enforcement pressure, the platform refuses to distribute unverified alerts.

These commitments were shaped by the specific civic conditions in Portland, Oregon, from 2023 to 2026, and by the broader context of civic stress in which community resilience platforms operate. Costanza-Chock's (2020) design justice framework asks who is most harmed when a design fails. This question shaped every significant design decision in Cup of Sugar. The platform is calibrated for the person with the most at stake — the community member who cannot afford a breach of privacy, must make high-stakes decisions based on community information, and depends on the platform's social architecture to keep them safe.

A complete design system

Cup of Sugar is a mutual aid platform serving multiple verified communities at once. Members can belong to different groups such as neighborhood, faith, school, or interest groups—all without data sharing across these contexts. Each community operates independently, with its own rules, leadership, and moderation policies. The prototype, finished in Spring 2026, features twenty-two interactive screens connected in a seamless flow, supported by a comprehensive design system that includes a component library, typography, color schemes, corner radii, and voice and tone guidelines.

Mutual aid requests

Members post and reply to help requests across six categories: food, childcare, repairs, rides, skills, and supplies. Each request includes an urgency level, an approximate pickup area rather than a precise address, and a privacy setting. The platform aims to reduce social friction around asking for help—the barrier that often discourages people from requesting assistance they are willing to give. Category filters, urgency chips, and zone tags help members quickly scan and respond with precision.

Along the Way

This feature lets users coordinate shared errands and rides by posting trips with details such as destination, departure time, and available seats. It has two modes: The items mode for shared errands and the Passengers mode for community ride-sharing. Pickup zones are approximate until both parties confirm, protecting the privacy of members attending sensitive appointments, such as medical visits, court dates, or immigration appointments. The platform's name reflects its core value: caring for community members as part of everyday life, not as a separate service.

Time bank

An hour-for-hour exchange system assigns equal value to all time, embodying the mutual aid principle that a lawyer's hour of legal advice is as valuable as a neighbor's hour of childcare (Spade, 2020). Transactions such as repairs, skill exchanges, and errands are recorded in a time bank, with both parties confirming before balances are updated. The time bank and skills directory are linked: when a skill is exchanged, a teaching record is created. This platform aims to develop community knowledge over time, beyond just coordinating individual exchanges.

Skills directory and teaching layer

Members list skills they are willing to share, not just as services but as teaching opportunities. The platform differentiates between completing a task for a neighbor and enabling a neighbor to do it themselves. This approach is based on the mutual aid principle that emphasizes building community capacity rather than fostering individual reliance. The educational aspect seeks to enhance community resilience over time by spreading knowledge throughout the network, thereby decreasing dependence on individual members and boosting collective ability.

Community alerts

A three-tier verification system includes Reported (unverified, community submitted), Verified (confirmed by a designated moderator with a cited source), and Expired (automatically sunset after a set period). No alert can be auto-verified. The design emphasizes calmness: avoiding panic aesthetics, anonymous urgent broadcasts, or visual cues that heighten alarm rather than support informed decisions. The Submit alert form requires a source before submission and clearly states the system's logic at the top:

“All reports start as Reported — not verified.” This focus on information integrity is incorporated into the interaction itself, rather than being added as a separate policy.

The Cupboard

A material exchange feature offers four modes, chosen by the community member listing the item: Borrow (with a return expected), Swap (for something of similar value), Give (no return expected — like the ‘cup of sugar’ model), and Wanted (someone is searching for a specific item). The Cupboard section includes a clothing category sorted by size and occasion, a tools and equipment library with a checkout calendar, and a repair flow that links items needing repair directly to the Skills directory, filtered by tags such as sewing, mending, darning, and alteration. Repairs are logged as time bank transactions once completed. The name was intentionally chosen: one only opens a neighbor’s cupboard because they know them. The intimacy of this gesture is reflected in the name.

The Cupboard

Stone Soup is a feature of food sharing and collective-making feature grounded in the mutual aid, which emphasizes that need and abundance are not mutually exclusive. Its name is inspired by the folktale where a stranger comes with just a pot and a stone, and neighbors contribute what they can until a nourishing meal is created for all. In this process, no one is marked as the generous person or the needy individual. The act of working together in creating dissolves these distinctions.

The feature has three modes. Collective making includes community meals, preservation days, bread baking, and workshops—events led by one member and supported by many. Feeding neighbors manages surplus food, garden excess, and meals for neighbors in need. Teaching involves sharing food skills like canning, fermentation, herbal medicine, and bread baking. These are linked to the Skills directory and recorded as time bank transactions. Community meals, such as a pot of soup, do not have transactions,

reflecting a deliberate value choice about which acts of care are recorded in a ledger and which are considered community involvement.

Stone Soup appears on the Home feed as a labeled card section alongside Along the Way and The Cupboard, with no new navigation tab added. The five-tab navigation bar remains unchanged. The microcopy of the feature follows a tone called zucchini stories — inspired by the late-summer abundance of produce, bags left on porches, and neighbors fleeing when approached with a basket. This tone prevents the feature from sounding like charity. Members are sharing zucchini stories, not donating. Although subtle, this difference is important in the design.

Governance

Each community maintains a public charter, a code of conduct, a decisions archive, and a rotating leadership structure. Moderation actions are documented, and appeals are possible. Permanent exclusions are subject to documented review. Governance is considered a fundamental platform feature rather than an administrative afterthought, aligning with research showing that communities need explicit accountability mechanisms to operate fairly over time (Costanza-Chock, 2020).

Design decisions made visible

Visual design — the aesthetic argument

The Cup of Sugar design system was developed with as much intentionality as its feature architecture. Its aesthetic — described as a blend of farmer's market and independent press — embodies specific values. The farmer's market motif signifies scale, transparency, and clear origin, emphasizing that you know who made what and that transactions are personal because they foster relationships. The independent press influence highlights restraint and deliberate design, akin to a curated literary journal that expects readers to slow down and prioritize clarity over visual clutter.

These references establish a visual language that is warm without being rustic, clean without being corporate, and calm without being cold. Key decisions include: a parchment ground (#F5F0E8) instead of clinical white; forest green (#1A5C35) as the single strong accent, carrying all primary actions and verified states; 0.5px hairline borders rather than heavy rules; corner radii fixed by element type (100px pills, 14px cards, 10px inputs); sentence case throughout; and amber (#FDF3D6) used exclusively for urgency and caution signals. The full visual identity system is documented in a companion Visual Identity Guide created in InDesign.

Designing from within

These four screens highlight the most conceptually distinctive moments in the prototype. Each one presents a design argument that the previous prose can describe but not fully demonstrate. These screens reveal where the ethical commitments are expressed through interaction choices.

Screen 1 • Privacy defaults

The onboarding screen at which users establish their visibility preferences before entering the app. Five toggle rows. Name and neighborhood zone are set to ON by default — the minimum required for the platform to function. Skills, time bank balance, and direct messages are set to OFF by default. The user opts in rather than out. This is privacy by design rather than privacy by request, consistent with the platform's data minimization commitment.

The screen's visual hierarchy communicates the philosophy before the user reads a single line of explanatory text. Two green toggles sit above three muted ones. The state of the interface is the argument. Helper text beneath each toggle states the platform's commitment plainly and specifically at the point of collection: "Community members can see your name in posts and requests." "Approximate area only — never your exact address." These are not legal disclaimers. They are promises, stated where promises belong.

Screen 2 • Community alerts

The screen at which community alerts are displayed, filtered, and submitted.

Three alert states: Verified (source cited, expiry shown, green dot), Reported (community submission, unverified, amber dot, moderation actions visible on the card), and **Expired (automatically sunset, visually muted)**. No alert can be auto-verified. All new submissions default to **Reported**. The design is deliberately calm: no red, no alarm iconography, no urgency theater.

This is a design decision with real consequences. In communities facing enforcement pressure or civic stress, the visual language of an alert system determines whether information helps people make safe decisions or triggers panic that causes harm. The Submit alert form requires a source before submission and clearly states the system's logic. Information integrity is structural, not aspirational.

Screen 3 • The Cupboard • Item detail

The detail view for a single item listed in the community material exchange.

The item detail screen contains the most conceptually dense cross-feature connection in the prototype. At the bottom of every item card is a repair flag: "This item could use some love — find a neighbor who can help." Tapping it routes directly to the Skills directory, filtered for sewing, mending, darning, and alteration tags. The repair is coordinated through the skill request flow. When complete, both parties confirm, and the time bank logs the exchange. This connection — Cupboard to Skills to Time Bank — forms the complete care loop: goods circulate, skills enable repair, reciprocity is tracked, and the community grows more capable over time. The repaired garment returns to The Cupboard in better condition than when it arrived. No money changes hands. No external service is required. The connection is grounded in the designer's embodied knowledge of sewing, mending, and repair — an instance of the autoethnographic method in operation.

Screen 4 • Stone Soup

The feature screen for food sharing and collective making. Three modes — collective making, feeding neighbors, and teaching — share a single screen because the same neighbor may post a zucchini surplus on Tuesday and show up hungry on Sunday. Color alone carries the mode distinction: amber for collective making, green for feeding neighbors, white for teaching. The mode names are descriptive rather than branded. They say plainly what will happen.

The button hierarchy encodes the commitment level of each action. "Join" — filled, primary weight — signals that attending a community meal is a deliberate act. "I'll take some" — outlined, lighter — signals that taking surplus food requires no ceremony. "Reserve a spot" — filled, applied to teaching posts — introduces capacity language appropriate to a workshop context.

Community meals do not log to the time bank. Teaching workshops do. This distinction is not a technical limitation. It is a values decision about what kinds of care are tracked in a ledger and what kinds are regarded as community involvement.

09 · Relationship to teaching practice

The studio as research site

I have been thinking about this platform for years. The logo was the first element to take shape — the two overlapping house outlines, the measuring cup at the intersection, and the color system from mint to forest green. The visual identity preceded the prototype because the idea preceded both. This is not unusual in design practice, but it is worth noting that the concept was formed before the formal design process began, which itself is evidence of the work's autoethnographic orientation.

I approach this project from a specific position. As a baker — owner of a microbakery and former pastry chef — I also owned a farm where I grew and preserved nearly all my food for several years. I have studied herbal medicine and have made soap. I sew and I have spun wool. These are not incidental biographical details. They are, as Ellis and colleagues (2011) describe in the autoethnographic framework, embodied knowledge that constitutes research data. Designing from within a community of practice yields different, and sometimes better, insight than designing at a distance.

The features of Cup of Sugar that address food sovereignty, skill sharing, preservation, repair, and material exchange are not based solely on secondary research. They emerge from knowledge held in the body and the hands. I understand what it takes to teach safe canning techniques. I know the difference between a bread workshop that develops capable bakers and one that produces a single demonstration loaf. I know what it means to darn a sock and why repair matters beyond the object repaired. This embodied knowledge is present in every design decision

across the platform's teaching layer, its material exchange feature, and its understanding of what community self-sufficiency actually looks like in practice.

This is a methodological claim, not a personal disclosure. In design practice, autoethnography treats the designer's situated knowledge as a legitimate form of data — arguing that designing from within a community of practice yields insights that cannot be obtained from the outside (Ellis et al., 2011). Cup of Sugar is a sustained attempt to test that claim in the context of civic technology design.

What I am certain of is that the communities this platform aims to serve are real, with authentic needs. The political circumstances creating the urgency for this work are also real. I am not working on a hypothetical concept but developing something for the people in my city I truly want to support. The cup of sugar was never just a metaphor; it was a direct design brief: to create conditions where someone feels comfortable enough to knock on a neighbor's door. Everything else stems from that core principle.

The work as of Spring 2026

In Spring 2026, students enrolled in Pacific University's Interaction Design course completed Project 3: Design for Community Resilience. This five-week assignment involved identifying a community need, conducting both primary and secondary research, developing and testing a prototype with community members, and presenting a case study. The project brief was developed with full awareness of Cup of Sugar, began as a concept in a similar course during initial COVID lockdown

The theoretical frameworks underpinning the student project—Norman's (2013) human-centered design, Sanders and Stappers' (2008) participatory design, Putnam's (2000) social capital, and Buchanan's (1992) wicked problems—are also the foundation of the designer's approach. Emphasizing solutions for individuals under high stress and limited margin for error reflects a design ethic developed through years of focused work on the issues Cup of Sugar tackles.

Watching students face these design challenges without ongoing engagement has been highly instructive. Their preference for broadcasting over building relationships, perceiving privacy as an optional feature instead of a fundamental value, and viewing governance as an afterthought rather than a central element—these are precisely where Cup of Sugar's design choices are most deliberate. The students' efforts have also helped illuminate the designer's thought process by showing what that reasoning opposes. Their difficulties demonstrate that making these design choices demands continuous involvement with the problem.

Research shows that smaller campus communities foster a stronger sense of community and higher student engagement (Cope et al., 2021; Boyd et al., 2020). This principle also applies in a studio setting: consistent engagement with a shared problem within a close-knit community of practice promotes deeper learning compared to a broad, diverse curriculum. The studio serves as a space for both community-building and knowledge development. The connection between this research project and the teaching practice is intentional. It supports the idea that design research and design education are most effective when they engage in meaningful dialogue, tackling the same issues at different levels of complexity simultaneously.

Complete

Visual identity and logo system: full mark, wordmark, icon-only, and contained versions; usage rules; CMYK and hex values

Visual Identity Guide: full InDesign document covering brand philosophy, logo system, color palette, typography,

component library, voice and tone, spacing and radius system

Principles and Ethics Statement

Governance Framework and Appendix: roles, rotation requirements, conflict resolution, appeals process, audit trails

Information architecture and interactive HTML site map: site map, screen inventory, user flows, feature connections

Navigation model and complete design system:

component library, typographic scale, color tokens, corner radius system

26-screen high-fidelity Figma prototype with full prototype connections, including:

Onboarding (Splash, Welcome, Create account, Privacy defaults); Core navigation (Home feed, Requests, Alerts, Events, Inbox); Feature screens (Along the Way, Time bank, Skills, Profile); Action forms (Create request, Offer a skill, Submit alert, Create a trip, Suggest an event); Confirmation screens (Trip added, Trip posted); The Cupboard (Browse, Item detail, Add to the Cupboard, Tools and equipment); Stone Soup (Main screen, Post to Stone Soup, Post confirmation, Post detail)

Project history document

Case study (this document)

Planned

Backend developer engagement following prototype completion

Community pilot with a small verified group in the Portland, Oregon area

Documentation of pilot as design research

Publication of Principles and Ethics Statement and Governance Framework as a standalone contribution to the civic technology literature

This project will continue beyond the tenure review period, with the documentation reflecting work as of Spring 2026. The work is intentionally incomplete, emphasizing that civic infrastructure is an ongoing practice rather than a final product.

Cup of Sugar is designed as a supportive tool, not a movement. Its purpose is to assist individuals engaged in care, solidarity, and resilience efforts in a discreet and responsible way, while carefully considering the real risks faced by communities.

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