

# PRODUCT REQUIREMENTS DOCUMENT

## Social Connection Platform

*Working Titles: The Garden | Vita | Anti | Verve | Common | NearBy*

*"The bridge from the screen to the scene."*

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# 1. Executive Summary

## 1.1 Vision Statement

The digital experiment of "social media" has paradoxically led to physical isolation. While meeting people online feels impossible due to algorithm-driven echo chambers, walking into a room of strangers remains daunting for most. This platform serves as the Social Butterfly—a digital wingman that bridges the gap between the ease of swiping and the reality of in-person connection.

## 1.2 Mission

To provide the "Social Shield" that introverts and high-quality connection seekers need to transform real-world "Third Places" (bars, parks, cafes, community spaces) into accessible, welcoming communities where meaningful relationships flourish.

## 1.3 Core Value Proposition

- Eliminate matching anxiety with transparent "Likes You" visibility
- Reduce cold-approach friction through AI-powered icebreakers and context
- Create accountability through the 45-Day engagement health system
- Enable spontaneous real-world meetups via live map and GPS verification
- Build trust through tiered verification and safety ratings

## 1.4 Key Differentiators

Feature	Differentiation
Transparent Matching	Unlike Tinder/Bumble, users see who likes them without premium paywall
Anti-Lurk Mechanism	45-day engagement rule keeps communities active, unlike dead Facebook Groups
Real-World First	GPS-verified check-ins ensure people actually meet, unlike Discord/Reddit
AI Wingman	Context-aware conversation starters and venue suggestions
Third Place Focus	Designed around physical venues, not endless scrolling

## 2. Problem Statement & Market Analysis

### 2.1 The Loneliness Epidemic

Despite unprecedented digital connectivity, loneliness has reached epidemic proportions. The U.S. Surgeon General declared loneliness a public health crisis, with studies showing that social isolation carries health risks equivalent to smoking 15 cigarettes daily. Young adults (18-35) report the highest rates of loneliness, paradoxically spending the most time on social media platforms.

### 2.2 The Third Place Crisis

Sociologist Ray Oldenburg coined "Third Places" to describe informal public gathering spots separate from home (first place) and work (second place). These spaces—cafes, pubs, parks, bookstores—have historically been the backbone of community formation. However, they've declined dramatically due to: suburban sprawl, remote work, smartphone distraction, economic pressures on small businesses, and the false promise that social media could replace in-person connection.

### 2.3 Current Solution Failures

Platform Type	What It Does	Why It Fails
Dating Apps	Match users based on photos/bios	Gamified dopamine loops; matches rarely lead to meetings
Meetup.com	Organize group events around interests	High commitment barrier; events feel formal/awkward
Facebook Groups	Create interest-based communities	Overrun by lurkers; rarely leads to IRL connection
Discord/Reddit	Host conversations in interest channels	Purely online; pseudonymous; gaming-focused culture
Bumble BFF	Dating app mechanics for friendships	Same matching anxiety; no structure for meeting up

### 2.4 Target Market Size

**Total Addressable Market (TAM): Global social/dating app market: \$12B+ annually**

**Serviceable Addressable Market (SAM): U.S. urban adults 21-45 seeking social connection: ~80M users**

**Serviceable Obtainable Market (SOM): Early adopters in 5 launch cities, Year 1: 500K users**

## 3. Target Users & Personas

### 3.1 Primary Persona: The Urban Transplant

Attribute	Details
Name	Maya Chen, 28
Occupation	Product Designer at a tech startup
Location	Recently moved to Austin from Seattle
Pain Points	Left her entire social network behind; finds it awkward to approach strangers; dating apps feel transactional; tried Meetup but events felt forced
Goals	Build a local friend group; find people who share her interests in climbing and vinyl records; meet someone romantically without the "app" stigma
Behavior	Checks phone frequently; prefers low-commitment first interactions; values authenticity over quantity

### 3.2 Secondary Persona: The Introverted Professional

Attribute	Details
Name	James Rodriguez, 34
Occupation	Remote software engineer
Location	Denver, lived there 5 years but works from home
Pain Points	Remote work eliminated organic workplace friendships; social battery drains quickly; finds bars/clubs overwhelming; wants meaningful conversation, not small talk
Goals	Find a regular board game group; meet 2-3 close friends rather than dozens of acquaintances; have "backup" for social situations
Behavior	Plans ahead; prefers knowing who'll be at an event before attending; values depth over breadth

### 3.3 Tertiary Persona: The Community Builder

Attribute	Details
Name	Aisha Thompson, 31
Occupation	Marketing manager and part-time DJ
Location	Brooklyn, NY
Pain Points	Already runs an informal jazz night but struggles to get consistent attendance; Instagram followers don't translate to IRL turnout; wants to grow her scene organically
Goals	Build a reliable community around her events; connect with venue owners; find collaborators; monetize eventually
Behavior	High social energy; creates content; acts as connector for others

## 4. Goals & Success Metrics

### 4.1 Business Objectives

Timeline	Objective	Target
Year 1	Establish product-market fit in 5 launch cities	500K registered users
Year 1	Achieve sustainable engagement metrics	40% MAU/DAU ratio
Year 2	Expand to 25 cities; launch B2B revenue stream	\$2M ARR
Year 3	Achieve profitability; international expansion	5M users; \$15M ARR

### 4.2 Key Performance Indicators (KPIs)

#### 4.2.1 Acquisition Metrics

- Cost Per Acquisition (CPA): Target <\$5 via organic/referral growth
- Signup Completion Rate: Target >70% of users who start signup
- Verification Rate: Target >60% achieve at least Green (photo) verification
- Week 1 Retention: Target >50% return within 7 days of signup

#### 4.2.2 Engagement Metrics

- Daily Active Users / Monthly Active Users (DAU/MAU): Target >40%
- Average Session Duration: Target >8 minutes
- Swipes per Session: Target 15-25 (enough for discovery, not endless)
- Match-to-Message Rate: Target >60% of matches result in conversation
- Message-to-Meetup Rate: Target >15% of conversations discuss meeting

#### 4.2.3 Core Value Metrics (The "Bridge" Metrics)

- GPS Check-ins per User per Month: Target >2
- Handshake Connections (post-event friend requests): Target >50% participation
- Group 45-Day Health Rate: Target >75% of members maintain health
- Repeat Attendance Rate: Target >40% attend 2+ events from same group

#### 4.2.4 Safety & Trust Metrics

- Post-Event Safety Rating: Target >4.5/5 average
- Report Rate: Target <0.5% of interactions result in reports
- False Verification Rate: Target <1% of verified accounts flagged

#### 4.2.5 Revenue Metrics

- Gold Subscription Conversion: Target 5% of active users
- Average Revenue Per User (ARPU): Target \$2.50/month (blended)
- B2B Partner Venues: Target 500 in Year 1
- Monthly Recurring Revenue (MRR) Growth: Target 15% month-over-month

## 5. Core Features & Functional Requirements

### 5.1 User Onboarding & Authentication

#### 5.1.1 Signup Flow

Step	Screen	Requirements	Priority
1	Phone Entry	Input phone number with country code selector; display privacy assurance	P0
2	SMS Verification	6-digit OTP; 60-second resend cooldown; 3 attempt limit	P0
3	Basic Profile	First name (required); birthdate (required, 18+ validation); gender (optional)	P0
4	Photo Upload	Minimum 1 photo; maximum 6; file size <10MB each; face detection validation	P0
5	Photo Verification	Live selfie capture with random pose prompt; ML comparison to uploaded photos	P0
6	Location Permission	Request location access; explain value prop; allow skip (limited functionality)	P0
7	Interest Selection	Select 3-10 interests from categorized list; affects discovery algorithm	P1
8	Notification Permission	Request push notification permission; explain use cases	P1

#### 5.1.2 Authentication Requirements

- Session Management: JWT tokens with 7-day expiry; refresh token rotation
- Re-authentication: Required for sensitive actions (account deletion, phone change)
- Device Trust: Remember device for 30 days; new device triggers verification
- Account Recovery: Phone-based only in MVP; email backup in v1.1

### 5.2 Discovery & Matching (The "Bridge")

#### 5.2.1 Swipe Deck

##### Card Display Elements:

- Primary photo (full-bleed, tap to view gallery)
- Name, age, distance ("2 miles away")
- Group badges (up to 3 visible, tap to expand)
- Shared interests indicator ("3 interests in common")
- Bio snippet (first 100 characters)

- Verification badge (Green/Blue/Gold)

**Swipe Actions:**

- Left swipe: Pass (hidden for 30 days)
- Right swipe: Like (notification sent if mutual)
- Up swipe: Super Like (limited, priority notification)
- Tap: Expand full profile

### 5.2.2 "Likes You" Tab (Transparent Matching)

This is a KEY DIFFERENTIATOR from competitors. Unlike Tinder/Bumble where "Likes You" is paywalled, all users see who liked them.

- Grid view showing blurred-then-revealed cards
- Tap to view full profile and decide to match
- Badge on tab icon showing count of unreviewed likes
- Sort options: Newest, Closest, Most Mutual Interests

### 5.2.3 Discovery Algorithm

**Ranking Factors (weighted):**

- Distance: 30% weight (closer = higher rank)
- Shared Groups: 25% weight (same groups = higher rank)
- Interest Overlap: 20% weight
- Activity Recency: 15% weight (active in last 24h boosted)
- Verification Level: 10% weight (verified users boosted)

## 5.3 AI Wingman Integration

### 5.3.1 Icebreaker Prompts

Upon matching, the AI generates 3 conversation starters based on:

- Shared groups ("You're both in Austin Climbers! Ever been to ABP?")
- Overlapping interests ("Noticed you both love vinyl. What's your latest find?")
- Recent activity ("They just checked in at The Driskill. Great jazz spot!")

#### Technical Requirements:

- LLM integration (GPT-4 or Claude) with custom prompt engineering
- Response generation <2 seconds
- Fallback to template-based prompts if API fails
- Content filtering to prevent inappropriate suggestions

### 5.3.2 Meeting Suggestions

AI suggests specific venues and events:

- Nearby Third Places matching shared interests
- Upcoming Spontaneous Events from mutual groups
- Partner venue promotions (B2B integration)

## 5.4 Messaging System

### 5.4.1 Chat Features

- Text messages with emoji support
- Image sharing (with content moderation)
- Voice messages (up to 60 seconds)
- Location sharing (single share, not live tracking)
- Event/Group card sharing
- Read receipts (optional, user-controlled)
- Typing indicators

### 5.4.2 Safety Features

- Report conversation (categories: spam, harassment, fake profile, other)
- Block user (immediate, no notification to blocked user)
- Unmatch (removes conversation history from both sides)
- Screenshot detection warning (optional)

## 5.5 Group Dynamics (The "Third Place")

### 5.5.1 Group Types & Privacy Tiers

Tier	Visibility	Join Method	Use Case
Public	Searchable by all users	Open join or request approval	Discovery funnel for new users
Private (Vouched)	Visible but content hidden	Requires 1 mutual friend inside	Quality control via social graph
Secret	Invisible in search	Direct invite link only	Exclusive communities, clubs

### 5.5.2 The 45-Day "Anti-Lurk" Rule

This mechanism ensures groups remain active communities, not dead repositories.

#### Qualifying Activities (any one resets the 45-day timer):

- Post content (text, photo, poll)
- Comment on another member's post
- Check in to a group event via GPS
- RSVP "Going" to an upcoming event
- Invite a new member who joins

#### Health Bar UI:

- Visual ring around group icon: Full (green) → 3/4 (yellow) → 1/2 (orange) → 1/4 (red) → Empty (gray)
- Tooltip on hover/tap: "15 days until removal"
- Push notification at Day 38: "Your membership in [Group] expires in 7 days"
- Push notification at Day 44: "Last chance! Check in or post to stay in [Group]"

#### Removal Process:

- Day 46: User automatically removed from group
- Grace period: 7 days to rejoin without re-vouch (if Private)
- After grace period: Must re-request/re-vouch to join

### 5.5.3 Group Features

- Feed: Posts, photos, polls from members (reverse-chronological)
- Events: Group-specific spontaneous events and recurring meetups
- Members: Member list with roles (Admin, Moderator, Member)
- Chat: Optional group chat (disabled by default, admin-enabled)
- Settings: Group rules, notification preferences

## 5.6 Live Map & Spontaneous Events

### 5.6.1 Map Interface

The map is the central feature for translating digital connections into real-world meetings.

#### Map Layers:

- Spontaneous Event Pins (user-created, time-limited)
- Third Place Markers (partner venues, cafes, parks)
- Friend Activity (opt-in: show friends' recent check-ins)
- Group Event Clusters (multiple events in same area)

#### Map Controls:

- Zoom: 1-mile to 50-mile radius
- Filter: By group, by time (now, today, this week), by type
- Recenter: Return to user's current location
- List View Toggle: Switch between map and scrollable list

### 5.6.2 Spontaneous Event Creation

Field	Requirements	Validation
Title	Free text, 5-50 characters (e.g., "Drinks at The Fox")	Required
Location	Pin drop on map OR select from nearby places	Required; not in residential zone
Duration	Slider: 1-4 hours (default: 2 hours)	Required
Visibility	Public (anyone) / Group-only / Friends-only	Required; default: Friends-only
Description	Optional details, up to 500 characters	Optional
Capacity	Optional max attendees (2-50)	Optional

### 5.6.3 GPS Check-In System

#### Check-In Requirements:

- User must be within 1-mile radius of event pin (configurable by event creator)
- GPS accuracy threshold: <100 meters
- Check-in window: Event start time until event end time
- Verification: GPS coordinates validated server-side

#### Anti-Spoofing Measures:

- Detect mock location apps on Android
- Cross-reference with Wi-Fi/cell tower triangulation
- Rate limiting: Max 10 check-ins per day
- Machine learning anomaly detection for impossible travel speeds

### 5.6.4 The Handshake (Post-Event Connection)

After an event expires, verified attendees receive a notification:

*"You were just at [Event Name] with these 4 people. Send a friend request?"*

#### UI Elements:

- Card carousel showing other attendees' photos and names
- "Add Friend" button per person
- "Add All" shortcut
- "Skip" option (no action taken)
- Expires after 48 hours

## 5.7 Icebreaker Mini-Games

When 2+ users are checked into the same event, they unlock interactive games to facilitate conversation:

Game	Description	Mechanics
Digital Coaster	Trivia questions displayed on phone as conversation starter	Random questions; tap to reveal answer; share screen to discuss
Two Truths & A Lie	Classic game digitized for easy setup	Each player submits 3 statements; others vote which is the lie
Would You Rather	Preference-based questions to spark debate	Swipe left/right to answer; see group results in real-time
Compatibility Quiz	Quick quiz to find surprising commonalities	5 questions; results show "78% match" with conversation hooks

## 5.8 Verification & Trust System

### 5.8.1 Tiered Verification Levels

Tier	Badge	Requirements	Benefits
None	No badge	Completed signup only	Basic access; limited visibility
Green	Green checkmark	Live selfie matches profile photos (ML confidence >90%)	Full discovery visibility; can join groups
Blue	Blue shield	Government ID verified (name + age + photo match)	Can host events; become group admin; priority support
Gold	Gold star	Blue verification + active Gold subscription	All Blue benefits + premium features

### 5.8.2 Safety Ratings

After spontaneous events expire, attendees receive an optional 3-question survey:

1. "Did the host show up?" (Yes / No / N/A)
2. "Was the location as described?" (Yes / No)
3. "Would you attend an event by this host again?" (Yes / Maybe / No)

Aggregate scores visible on host profiles after 5+ events.

### 5.8.3 Residential Guardrails

- System blocks event creation in zones coded as residential/private housing
- Uses GIS data from OpenStreetMap + local zoning APIs
- Manual override available for legitimate venues (requires Blue verification)
- Appeal process for false positives

## 6. Information Architecture

### 6.1 Navigation Structure

#### Primary Navigation (Bottom Tab Bar):

1. Discover - Swipe deck and Likes You tab
2. Map - Live map with spontaneous events
3. Groups - My groups and group discovery
4. Messages - Chat inbox
5. Profile - User profile and settings

### 6.2 Screen Inventory

Screen	Access Point	Key Actions
Swipe Deck	Discover tab default	Swipe, tap to expand profile
Likes You	Discover tab secondary	Review incoming likes, match
Profile Detail	Tap on any profile card	View photos, bio, groups; like/pass
Live Map	Map tab default	Pan, zoom, tap pins, create event
Event Detail	Tap map pin	RSVP, check in, view attendees
Create Event	Map FAB or Group event creation	Fill event form, publish
My Groups	Groups tab default	View joined groups, health bars
Group Discovery	Groups tab search	Search, filter, request to join
Group Detail	Tap on group card	View feed, events, members
Chat Inbox	Messages tab default	View conversations, search
Chat Thread	Tap on conversation	Send messages, share content
My Profile	Profile tab default	Edit profile, view stats
Settings	Profile > Settings	Account, privacy, notifications

## 7. Technical Architecture

### 7.1 System Architecture Overview

The platform follows a modern microservices architecture designed for scalability, reliability, and rapid feature development. The system is cloud-native, deployed on AWS/GCP with containerized services orchestrated via Kubernetes.

### 7.2 Technology Stack

Layer	Technology	Rationale
Mobile Apps	React Native	Cross-platform; large talent pool; rapid iteration
API Gateway	Kong / AWS API Gateway	Rate limiting, authentication, routing
Backend Services	Node.js (TypeScript)	Real-time capabilities; shared language with frontend
Real-time	Socket.io / WebSockets	Chat, live map updates, notifications
Primary Database	PostgreSQL	ACID compliance; PostGIS for geospatial
Cache Layer	Redis	Session management; rate limiting; leaderboards
Search	Elasticsearch	Full-text search for groups, users, events
Message Queue	RabbitMQ / AWS SQS	Async processing; event-driven architecture
Object Storage	AWS S3 / CloudFlare R2	Photos, media files
CDN	CloudFlare	Global edge caching; DDoS protection
AI/ML	OpenAI API / AWS Rekognition	Icebreakers (GPT-4); Photo verification (facial matching)
Maps	Mapbox	Custom styling; geocoding; routing
Push Notifications	Firebase Cloud Messaging	Cross-platform; reliable delivery
Analytics	Mixpanel / Amplitude	Product analytics; funnel tracking
Error Tracking	Sentry	Real-time error monitoring; crash reporting

### 7.3 Microservices Breakdown

- User Service: Authentication, profiles, verification, settings
- Discovery Service: Matching algorithm, swipe deck, likes management
- Messaging Service: Real-time chat, message history, media handling
- Group Service: Group CRUD, membership, 45-day health tracking
- Event Service: Spontaneous events, check-ins, GPS verification
- Map Service: Geospatial queries, venue data, residential zone detection
- Notification Service: Push notifications, email, in-app alerts
- AI Service: Icebreaker generation, content moderation, recommendations
- Payment Service: Subscriptions, B2B billing (Stripe integration)
- Admin Service: Moderation tools, analytics dashboard, support

## 8. Data Models & Database Schema

### 8.1 Core Entities

#### 8.1.1 User

```
CREATE TABLE users (
    id UUID PRIMARY KEY,
    phone_number VARCHAR(20) UNIQUE NOT NULL,
    first_name VARCHAR(50) NOT NULL,
    birthdate DATE NOT NULL,
    gender VARCHAR(20),
    bio TEXT,
    verification_level ENUM('none', 'green', 'blue', 'gold'),
    location GEOGRAPHY(POINT),
    last_active_at TIMESTAMP,
    created_at TIMESTAMP DEFAULT NOW(),
    subscription_tier ENUM('free', 'gold') DEFAULT 'free'
);
```

#### 8.1.2 Group

```
CREATE TABLE groups (
    id UUID PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    description TEXT,
    privacy_tier ENUM('public', 'private', 'secret'),
    cover_image_url VARCHAR(500),
    member_count INT DEFAULT 0,
    location GEOGRAPHY(POINT),
    created_by UUID REFERENCES users(id),
    created_at TIMESTAMP DEFAULT NOW()
);
```

#### 8.1.3 Group Membership (with 45-Day Health)

```
CREATE TABLE group_memberships (
    id UUID PRIMARY KEY,
    user_id UUID REFERENCES users(id),
    group_id UUID REFERENCES groups(id),
    role ENUM('member', 'moderator', 'admin'),
    health_reset_at TIMESTAMP NOT NULL, -- 45-day timer
    joined_at TIMESTAMP DEFAULT NOW(),
    vouched_by UUID REFERENCES users(id), -- For private groups
    UNIQUE(user_id, group_id)
);
```

#### 8.1.4 Spontaneous Event

```
CREATE TABLE events (
    id UUID PRIMARY KEY,
    title VARCHAR(100) NOT NULL,
    description TEXT,
    location GEOGRAPHY(POINT) NOT NULL,
    location_name VARCHAR(200),
    starts_at TIMESTAMP NOT NULL,
    ends_at TIMESTAMP NOT NULL,
    visibility ENUM('public', 'group', 'friends'),
    max_capacity INT,
```

```
check_in_radius_miles DECIMAL(3,1) DEFAULT 1.0,  
host_id UUID REFERENCES users(id),  
group_id UUID REFERENCES groups(id), -- Optional  
created_at TIMESTAMP DEFAULT NOW()  
);
```

### 8.1.5 Check-In

```
CREATE TABLE check_ins (  
    id UUID PRIMARY KEY,  
    event_id UUID REFERENCES events(id),  
    user_id UUID REFERENCES users(id),  
    location GEOGRAPHY(POINT) NOT NULL,  
    verified BOOLEAN DEFAULT FALSE,  
    checked_in_at TIMESTAMP DEFAULT NOW(),  
    UNIQUE(event_id, user_id)  
);
```

## 9. API Specifications

### 9.1 API Design Principles

- RESTful design with JSON payloads
- Versioned endpoints (e.g., /api/v1/)
- JWT authentication with Bearer tokens
- Rate limiting: 100 requests/minute for authenticated users
- Pagination: Cursor-based for infinite scroll endpoints
- Error responses follow RFC 7807 Problem Details format

### 9.2 Core Endpoints

#### 9.2.1 Authentication

Method	Endpoint	Description
POST	/auth/request-otp	Send OTP to phone number
POST	/auth/verify-otp	Verify OTP and return JWT tokens
POST	/auth/refresh	Refresh access token using refresh token
POST	/auth/logout	Invalidate refresh token

#### 9.2.2 Discovery

Method	Endpoint	Description
GET	/discovery/deck	Get next batch of profile cards (10 at a time)
POST	/discovery/swipe	Record swipe action (like/pass/super-like)
GET	/discovery/likes	Get users who have liked current user
GET	/discovery/matches	Get mutual matches
POST	/discovery/icebreakers	Generate AI icebreakers for a match

#### 9.2.3 Events

Method	Endpoint	Description
GET	/events/nearby	Get events within radius (query: lat, lng, radius)
POST	/events	Create new spontaneous event
GET	/events/:id	Get event details
POST	/events/:id/check-in	GPS-verified check-in to event
GET	/events/:id/attendees	Get verified attendees (post-event handshake)
POST	/events/:id/rating	Submit post-event safety rating

#### 9.2.4 Groups

Method	Endpoint	Description
GET	/groups/search	Search public groups (query: q, lat, lng)
GET	/groups/my	Get current user's groups with health status
POST	/groups	Create new group

POST	/groups/:id/join	Request to join / join public group
POST	/groups/:id/vouch	Vouch for a user to join private group
GET	/groups/:id/feed	Get group feed (posts)
POST	/groups/:id/posts	Create post (resets 45-day health)

# 10. UI/UX Requirements

## 10.1 Design System

### 10.1.1 Visual Style

The design follows Swiss-design principles: minimalist, high-contrast, typographically focused, with purposeful use of whitespace.

#### Core Principles:

- Clarity over decoration: Every element serves a purpose
- Generous whitespace: Let content breathe
- Strong typography hierarchy: Size and weight create structure
- Purposeful color: Used for status, actions, and emphasis—not decoration

### 10.1.2 Color Palette

Color	Hex	Usage
Primary	#1A365D	Headers, primary buttons, navigation
Secondary	#4A90A4	Links, secondary actions, accents
Success (Green)	#38A169	Green verification badge, success states, healthy status
Warning (Yellow)	#D69E2E	Health bar warning, caution states
Danger (Red)	#E53E3E	Errors, critical health, destructive actions
Blue Badge	#3182CE	Blue (ID verified) badge
Gold Badge	#D4AF37	Gold (premium) badge
Background (Light)	#FFFFFF	Primary background in light mode
Background (Dark)	#1A202C	Primary background in dark mode
Surface (Light)	#F7FAFC	Cards, elevated surfaces in light mode
Surface (Dark)	#2D3748	Cards, elevated surfaces in dark mode
Text Primary	#1A202C / #F7FAFC	Main body text (light/dark mode)
Text Secondary	#718096	Captions, metadata, secondary info

### 10.1.3 Typography

Style	Font	Size	Weight
H1 / Title	Inter / SF Pro	32px	Bold (700)
H2 / Section	Inter / SF Pro	24px	Semibold (600)
H3 / Subsection	Inter / SF Pro	20px	Semibold (600)
Body	Inter / SF Pro	16px	Regular (400)
Caption	Inter / SF Pro	14px	Regular (400)
Button	Inter / SF Pro	16px	Medium (500)

## 10.2 Component Library

### 10.2.1 Core Components

- Buttons: Primary, Secondary, Ghost, Danger variants; Small, Medium, Large sizes
- Cards: Profile Card, Group Card, Event Card, Message Preview
- Inputs: Text, Phone, OTP, Search, Textarea
- Navigation: Bottom Tab Bar, Top App Bar, Back Button

- Overlays: Modal, Bottom Sheet, Toast, Alert Dialog
- Indicators: Loading Spinner, Skeleton Screens, Progress Bar, Health Ring
- Badges: Verification Badge, Notification Badge, Group Badge

### 10.2.2 The Health Ring Component

A custom circular progress indicator showing 45-day membership health:

- Full circle (days 1-30): Green (#38A169)
- 3/4 circle (days 31-37): Yellow (#D69E2E)
- 1/2 circle (days 38-42): Orange (#DD6B20)
- 1/4 circle (days 43-45): Red (#E53E3E)
- Empty (day 46+): Gray (#A0AEC0) with "Expired" label

## 10.3 Accessibility Requirements

- WCAG 2.1 AA compliance minimum
- Color contrast ratio: 4.5:1 for normal text, 3:1 for large text
- Touch targets: Minimum 44x44 points
- Screen reader support: All interactive elements labeled
- Reduce motion option: Respect system preference
- Font scaling: Support up to 200% system font size

# 11. Security & Privacy

## 11.1 Data Protection

### 11.1.1 Data Classification

Classification	Examples	Handling
Public	Username, profile photos, public groups	Visible to other users; cached at CDN
Internal	Match history, swipe data, interests	Encrypted at rest; access logged
Confidential	Messages, location history, phone number	End-to-end encryption where possible; strict access controls
Restricted	Government ID (for Blue verification), payment info	Processed by certified third parties; not stored after verification

### 11.1.2 Encryption Standards

- Data at rest: AES-256 encryption
- Data in transit: TLS 1.3 minimum
- Database: Column-level encryption for PII
- Messages: End-to-end encryption with Signal Protocol (v1.1 roadmap)
- Backups: Encrypted and stored in separate geographic region

## 11.2 Compliance Requirements

- GDPR: Full compliance required for EU users (data portability, right to deletion, consent management)
- CCPA: California privacy rights compliance
- COPPA: No users under 18; age verification at signup
- SOC 2 Type II: Target certification by Year 2

## 11.3 Security Measures

### 11.3.1 Application Security

- Input validation and sanitization on all endpoints
- SQL injection prevention via parameterized queries
- XSS prevention via output encoding
- CSRF tokens for state-changing operations
- Rate limiting to prevent abuse
- Security headers (CSP, HSTS, X-Frame-Options)

### 11.3.2 Infrastructure Security

- VPC isolation with private subnets for databases
- WAF (Web Application Firewall) at edge
- DDoS protection via CloudFlare

- Regular security audits and penetration testing
- Automated vulnerability scanning in CI/CD pipeline
- Secrets management via HashiCorp Vault or AWS Secrets Manager

## 11.4 Privacy Controls

### 11.4.1 User-Controlled Settings

- Discovery visibility: Show me to / Don't show me to
- Location precision: Exact / Approximate / Hidden
- Online status: Show / Hide
- Read receipts: On / Off
- Profile visibility: Public / Friends only / Hidden
- Data download: Export all personal data
- Account deletion: Full data erasure within 30 days

## 12. Release Roadmap

### 12.1 Phase Overview

Phase	Timeline	Focus	Key Deliverables
Alpha	Months 1-3	Core functionality	Auth, profiles, discovery, basic messaging
Beta	Months 4-6	Community features	Groups, events, map, check-ins, 45-day health
v1.0	Months 7-9	Launch readiness	AI wingman, verification tiers, safety features
v1.1	Months 10-12	Monetization & scale	Gold subscription, B2B partnerships, mini-games

### 12.2 Detailed Sprint Breakdown

#### 12.2.1 Alpha Phase (Months 1-3)

##### Sprint 1-2: Foundation

- Project setup (monorepo, CI/CD, environments)
- Database schema design and migrations
- Authentication service (OTP, JWT)
- Basic user profile CRUD

##### Sprint 3-4: Discovery

- Photo upload and storage
- Discovery algorithm v1
- Swipe deck UI
- Like/Pass/Match logic
- Likes You tab

##### Sprint 5-6: Messaging

- Real-time messaging infrastructure
- Chat UI
- Push notifications setup
- Alpha testing with internal team

#### 12.2.2 Beta Phase (Months 4-6)

##### Sprint 7-8: Groups

- Group creation and management
- Privacy tiers (Public/Private/Secret)
- Group feed and posts
- 45-day health system and UI

##### Sprint 9-10: Map & Events

- Map integration (Mapbox)
- Spontaneous event creation

- GPS check-in system
- The Handshake post-event flow

#### **Sprint 11-12: Beta Launch**

- Residential zone blocking
- Beta tester onboarding (1,000 users)
- Feedback collection and iteration
- Performance optimization

#### **12.2.3 v1.0 Phase (Months 7-9)**

#### **Sprint 13-14: Trust & Safety**

- Photo verification (Green badge)
- ID verification integration (Blue badge)
- Safety rating system
- Report/block functionality

#### **Sprint 15-16: AI Integration**

- AI icebreaker generation
- Meeting suggestions
- Content moderation ML

#### **Sprint 17-18: Launch Prep**

- App Store / Play Store submissions
- Marketing website
- Launch city selection (5 cities)
- v1.0 public launch

# 13. Risks & Mitigation

## 13.1 Risk Matrix

Risk	Likelihood	Impact	Mitigation Strategy
Low initial user density (chicken-egg problem)	High	High	Launch in dense urban neighborhoods; seed with community organizers; create official events
Safety incident at meetup	Medium	Critical	Tiered verification; safety ratings; residential guardrails; incident response team; insurance
GPS spoofing abuse	Medium	Medium	Multi-factor location verification; ML anomaly detection; rate limiting; account suspension
45-day rule churn	Medium	Medium	Progressive nudges; easy check-in options; win-back campaigns for expired members
Competitor feature copy	High	Low	Focus on network effects; community-first culture; rapid iteration; unique value props
Regulatory changes (privacy laws)	Low	High	Privacy-by-design; GDPR compliance from day 1; legal counsel; data minimization
AI-generated content misuse	Medium	Medium	Content filtering; human review for edge cases; user reporting; iterative prompt engineering
Third-party API dependency	Medium	Medium	Multi-provider strategy (e.g., Mapbox + Google Maps fallback); SLA monitoring; caching

## 13.2 Contingency Plans

### 13.2.1 Cold Start Strategy

If user density is too low in launch cities:

1. Partner with 10 established community organizers per city to seed groups
2. Host official "Welcome to [City]" events weekly for first 3 months
3. Offer incentives for early adopters who invite friends
4. Focus on neighborhood-level density before city-wide expansion

### 13.2.2 Safety Incident Response

If a serious safety incident occurs:

1. Immediate account suspension for reported user
2. Dedicated trust & safety team contact within 2 hours
3. Cooperation with law enforcement as required
4. Internal review of safety features and potential improvements
5. Transparent communication with community (as appropriate)

## 14. Appendices

### 14.1 Glossary

Term	Definition
Third Place	A social environment separate from home (first place) and work (second place), such as cafes, bars, parks, and community centers
Spontaneous Event	A time-limited (1-4 hour) gathering created by users, pinned to a specific location on the map
The Handshake	The post-event flow where verified attendees are prompted to connect with each other
45-Day Health	The engagement requirement for group membership; users must participate (post, comment, check-in, or RSVP) within 45 days or be automatically removed
Health Bar	Visual indicator (ring around group icon) showing days remaining until membership expiration
Vouch	The action of an existing member endorsing a new user's membership request for a Private (Vouched) group
AI Wingman	The AI-powered feature that generates conversation starters and meeting suggestions based on shared context
Check-In	GPS-verified confirmation that a user is physically present at an event location
Residential Guardrail	System restriction preventing event creation in areas zoned as private residential property
Super-Vouch	Premium feature allowing Gold subscribers to join Private groups without an existing mutual friend

### 14.2 User Flow Diagrams

Detailed user flow diagrams to be provided in supplementary design documentation, including: Onboarding Flow, Discovery-to-Match Flow, Group Join Flow, Event Creation and Check-In Flow, 45-Day Health Cycle Flow.

### 14.3 Wireframes

Low-fidelity wireframes to be provided in supplementary design documentation for all screens listed in Section 6.2 (Screen Inventory).

### 14.4 Competitive Analysis

Detailed competitive analysis available in supplementary market research documentation, including feature comparisons with: Tinder, Bumble BFF, Meetup, Facebook Groups, Discord, Hinge, Eventbrite.

### 14.5 Document History

Version	Date	Author	Changes
1.0	Jan 2, 2026	[Product Team]	Initial PRD creation

— End of Document —