

Product Name [TBD] — PRD v1.0 (updated with new decisions)

Updated with: passkeys later; note attachments $\leq 10\text{MB}$ total per note, public blog + gated comments/participant profiles, artist \rightarrow artist referrals with 1-mo credit, multi-region scope (Boston now; LA/NYC next), map toggle, defaults, and pricing tiers + matching rubric.

0) One-pager summary

- **Problem:** Artists and venues struggle to find each other; info is fragmented, stale, and calls are ephemeral.
 - **ICP:** Artists (student \rightarrow mid-career) in metro areas; venues incl. galleries, cafés, libraries, markets, art centers, online-only.
 - **Value:** Curated venue DB + fast search/filter; personal notes + color stickers; rich artist profiles; venue claim/edit; open-call broadcast; daily matching; public blog that builds community and funnels conversions.
 - **Markets:** **Boston (MVP, ~250 venues)** \rightarrow **LA (~500)** \rightarrow **NYC (~1000)**; region segregation at DB or hosting level.
 - **Why us:** Local depth (MBTA etc.), data freshness (nudges + allow-listed metadata scrape), transparent matching, credit incentives, community content.
 - **North-star:** Matches that lead to outreach; **2nd:** venue-claim rate; **3rd:** open-call apply-rate; **GTM:** referral-driven growth.
 - **Metrics:** D7 activation, WAU (artists/venues), venue-claim rate, matches/artist/week, open-call CTR/apply-rate, MRR & NRR.
-

1) Scope

In: Venue directory; search/filter/group/sort; bookmarks; notes with attachments ($\leq 10\text{MB}$ per note); stickers (10 colors, user-defined meanings); optional artist profiles (≤ 100 images + 1 \times 5-min video); venue claim/edit; open-call broadcast/feed; daily matching w/ 7-day cooldown; credits for data fixes; email nudges; public blog (posts + comments); referral program; admin console.

Out: Payments between artists/venues; contract workflows; full messaging; escrow/shipping/insurance; juried application tooling.

Non-goals: Guaranteeing acceptance; public ranking of artists.

2) Personas & JTBD

- **Artist:** Find suitable venues, track outreach, and act on open calls.
 - **Venue:** Maintain listing, broadcast calls, discover relevant artists.
 - **Admin:** Keep data clean, manage credits/claims, moderate content.
 - **Service:** Scheduled jobs (scrape/nudge/match).
-

3) Core flows (acceptance criteria)

3.1 Auth & onboarding

- Email-link or OAuth (Google/Meta) + **mandatory 2FA (TOTP)**. **Passkeys:** roadmap (M3).
- Venue claim via email loop, domain email verification or admin approval; 2FA enforced after claim.
- **Accept:** Artist signs up → views venues → adds note ≤ 2 min; Venue claims & edits ≤ 5 min.

3.2 Browse venues (Artist)

- Pagination (10/25/50); search, filter, group, sort by stickers/type/locality/distance (from Park St 42.3564 -71.0623)/MBTA/has-note/has-open-call; bookmarks; **Map toggle** (off by default).
- **Accept:** p95 search < 600 ms; zero-result guidance; saved views.

3.3 Notes & stickers

- Per-venue rich-text notes; **attachments allowed (images/pdf/doc), total ≤ 10 MB per note**; version history; export CSV.
- Stickers: 10 colors; per-artist meanings (label/emoji); multiple stickers per venue.

3.4 Artist profile (optional)

- Statement, works, links, availability/goals; media quotas: ≤ 100 images + 1×5-min video; import from site + scheduled refresh.
- Visibility: **none (default)** / venues / public.

3.5 Open calls

- Venues create/broadcast calls (title, summary, URL, deadline); Artists get feed, annotate ("applied YYYY-MM-DD"), pin to **To-Do Wall** (kanban + calendar). Auto-expire past deadlines; reminders T-7/T-1.

3.6 Venue claim & editing

- Edit listing fields (blurb, address, locality, transit, mediums, commission %, fees, insurance, submission policy, media incl. 1×5-min video). Browse/search artists; **intent-to-contact log** (no in-app messaging M0-M2).

3.7 Matching (Service)

- Nightly job surfaces artist↔venue candidates with `score` + short explanation; write `last_match_tried`; do **not** reconsider < 7 days; per-user opt-out and per-venue daily cap.

3.8 Data fixes & credits

- Reports for missing/incorrect info → Admin review → **1-month credit** applied on approval; audit trail.

3.9 Blog & comments

- Public blog posts (by team); comments from **subscribers only**.
- **Gating**: readers can view posts; subscribers can comment and **see participant profiles** (artist/venue) on each post; non-subs see counts only.
- Moderation (spam/abuse), rate limits, notifications.

3.10 Referrals

- Artist invites via unique link. If invitee subscribes, **sender receives 1-month credit**. Sender may invite **unlimited** people. Fraud checks (no self-referrals, cooling-off before credit).

3.11 Admin controls

- Full edit, block/unblock users/venues, broadcast email to Artists/Venues, approve credits, override claims, moderation queue, audit log.

4) Functional requirements (FR-XX)

Auth & RBAC - FR-01: OAuth/email-link + 2FA (TOTP). Passkeys deferred to M3. - FR-02: Roles: Admin, Artist, Venue, Service; server-side checks. - FR-03: Venue claim workflow with domain verification or admin approval.

Directory & Search - FR-10: Venue fields include `region_code` (BOS/LA/NYC), `type`, `locality`, `coords`, `MBTA` (BOS), `distance_km`, `commission %`, `fees`, `insurance`, `mediums[]`, `submission policy`, `website/social`, `claimed`. - FR-11: Full-text search (blurbs + notes + profiles) + filters; saved views. - FR-12: Map toggle on venue list (clustered markers, bbox filter).

Notes, Stickers, Bookmarks - FR-20: Notes with attachments ($\leq 10\text{MB}$ total per note), versioning, export. - FR-21: Sticker meanings per artist; assignments per venue; multiple stickers. - FR-22: Bookmark venues/artists; lists.

Profiles & Media - FR-30: Artist profiles with visibility controls; media processing; quotas. - FR-31: Scheduled profile refresh from external website.

Open Calls - FR-40: Venue-authored calls; artist feed; To-Do Wall; reminders; expiry. - FR-41: **Unclaimed venues ingestion via allow-listed, metadata-only scrape** (respect robots.txt; store minimal text/preview; takedowns honored).

Matching - FR-50: Nightly match job; record score + explanation + last_match_tried; 7-day cooldown; opt-out & per-venue daily cap.

Credits & Reports - FR-60: Data-fix credits (1 month each) with ledger; referral credits upon conversion; separate credit types and caps.

Blog & Comments - FR-70: Blog posts (markdown/RTE), tags, SEO meta; comments from subscribers; participant profile visibility gated to subscribers; moderation tools.

Referrals - FR-80: Unique links/codes; track invites → conversion; apply 1-mo credit to referrer; unlimited invites; fraud checks.

Comms - FR-90: Transactional emails (claims, credits, open-call reminders), weekly/monthly nudges to claimed venues; blog/comment notifications.

Admin - FR-95: Moderation queue; broadcasts; audit log; claim overrides; blocks.

5) Non-functional requirements (NFRs)

- **Availability:** 99.9%/mo; **DR:** RPO ≤ 15 min, RTO ≤ 1 h.
- **Performance:** p50 200 ms / p95 600 ms for list/search; uploads backgrounded.
- **Security:** HTTPS/HSTS, CSP, CSRF; 2FA mandatory; secrets in KMS; basic media moderation.
- **Privacy:** GDPR/CCPA; export/delete ≤ 30 days; blog comment IP/user agent logged for abuse.
- **Accessibility:** WCAG 2.2 AA.
- **Cost guardrails:** media quotas; per-tenant rate limits; fair-use on blog comments.

6) Data model (high-level)

- **User** {id, email, name, role, 2fa_enabled, status}
- **ArtistProfile** {user_id, statement, goals, visibility, site_url, region_home?}
- **ArtistMedia** {id, artist_user_id, type(image|video), url, meta, moderation}
- **Venue** {id, region_code(BOS|LA|NYC), name, type, locality, coords, mbta_access?, distance_km, commission_pct, fees, insurance_req, mediums[], website, social[], claimed_by_user_id?, claim_status}
- **VenueOpenCall** {id, venue_id, title, summary, url, deadline, status}
- **VenueClaim** {id, venue_id, user_id, method(domain|admin), approved_at}
- **Note** {id, artist_user_id, venue_id, body, attachments_meta(total_bytes≤10MB), created_at, updated_at}
- **StickerMeaning** {artist_user_id, color, label}

- **StickerAssignment** {artist_user_id, venue_id, color}
- **Bookmark** {user_id, target_type, target_id}
- **Match** {id, artist_user_id, venue_id, score, explanation, last_match_tried, surfaced_at}
- **Report** {id, reporter_user_id, type(missing|incorrect), target, details, status}
- **Credit** {id, user_id, months, reason(data_fix|referral), cap_policy, applied_subscription_id?, created_at}
- **Subscription** {id, user_id, plan, status, current_period_end, stripe_customer_id}
- **BlogPost** {id, slug, title, body, tags[], author_user_id, published_at}
- **Comment** {id, post_id, user_id, body, status, created_at}
- **Referral** {id, referrer_user_id, code, invitee_user_id?, status(sent|converted|rejected), credited_at?}
- **AuditLog** {id, actor_user_id, action, target_type, target_id, meta, at}

7) API surface (REST)

Auth: POST /auth/signup, /auth/login, /auth/2fa/verify, /auth/logout

Venues: GET /venues (filters, paging, bbox), GET /venues/:id, PATCH /venues/:id (Venue/Admin), POST /venues/:id/claim, POST /venues/:id/claim/verify, GET/POST /venues/:id/open-calls

Artists: GET/PATCH /me/profile, POST/DELETE /me/media, CRUD /me/notes, POST /me/stickers/meanings, POST /me/stickers/assign, POST/DELETE /me/bookmarks, GET /me/matches

Search: POST /search (text), POST /search/images (image/text)

Blog: GET /blog, GET /blog/:slug, POST /blog (Admin), POST /blog/:slug/comments (subs only), GET /blog/:slug/comments

Referrals: POST /referrals (create link), GET /referrals, POST /referrals/:code/accept

Admin: GET /admin/reports, POST /admin/reports/:id/approve, POST /admin/credits, POST /admin/broadcasts, POST /admin/block/:id, POST /admin/unblock/:id, GET /admin/moderation

Idempotency: header on POSTs. **Rate limits:** 60 req/min IP; 600 req/min user; stricter on comments.

8) UI map

- **Dashboard:** Saved views, recent matches, open-call highlights, referral link card.
- **Venues:** Faceted list + **map toggle**; grouping by locality/type/sticker.
- **Venue detail:** Blurb, transit, commission/fees, submission policy, media, open calls, my notes & stickers.
- **Open calls:** Feed + calendar; To-Do Wall; reminders.
- **Artists (for Venues):** Directory with filters; profile pages.
- **Blog:** Post index/detail; comments (subs only); participant list (subs only).
- **Referrals:** Invite link, status of invites, credits earned.

- **My Profile:** Editor, media manager, visibility.
 - **Admin:** Reports, credits, broadcasts, moderation, claims, audit log.
-

9) Integrations & Services

- **Stripe:** subscriptions, invoices, credits as coupons or billing adjustments.
 - **Email:** Postmark/SES (transactional, broadcasts, comment notifications).
 - **Storage:** S3/GCS (signed URLs); image/video processing.
 - **Search:** Postgres FTS + trigram; optional vector index for image search.
 - **Scheduler/Queue:** cron + workers for scrape/match/nudge.
 - **Scrape policy:** allow-list + metadata-only; robots-aware; takedown flow.
-

10) Matching rubric (signals + weights)

Score = $100 \times \sigma(\sum w_i \cdot f_i)$ where σ is logistic; show top 3 factors in UI. - **Medium fit (w=0.30):** cosine similarity between artist media tags/embeddings and venue accepted mediums. - **Location fit (w=0.20):** proximity to venue locality/region; decay over distance; MBTA access bonus for BOS. - **Profile freshness (w=0.10):** penalty if artist profile >90 days since update. - **Submission policy fit (w=0.10):** open-call presence or rolling submissions. - **Commission/fees tolerance (w=0.10):** align venue commission/fees vs artist-set preferences. - **Past outcomes (w=0.10):** de-prioritize venues previously rejected by artist; prioritize bookmarked venues. - **Open-call timing (w=0.05):** deadline within 30 days gets boost. - **Availability/goals fit (w=0.05):** overlap of artist goals with venue positioning.

Cooldown: do not re-surface same pair within 7 days. Per-venue daily cap to avoid feed spam. A/B test weights; store `explanation` text.

11) Pricing & packaging (tailored)

Artist - Browse (Free): view venues (limited filters), read blog; cannot add notes/stickers; cannot comment; profiles hidden. - **Pro (\$12/mo):** full filters, notes + stickers, bookmarks, open-call feed + To-Do, profile (100 imgs + 1 video), blog comments + see participant profiles, 10 matches/week. - **Studio (\$24/mo):** everything in Pro + 30 matches/week, saved views, export notes CSV, image search, referral bonus multiplier [TBD].

Venue - Basic (\$19/mo): claim + edit listing, open-call broadcast (1 active), artist directory browse, intent-to-contact log. - **Pro (\$49/mo):** 5 active calls, boosted placement in artist browse, analytics (views/clicks), venue video, team seats (3). - **Business (\$99/mo):** unlimited calls, SSO, audit export, priority support.

Credits - Data-fix credits: 1 month each, **max 3 months stacked.** - **Referral credits:** 1 month per converted invitee, **no cap;** apply after cooling-off (e.g., 14 days paid).

All prices placeholders; finalize after smoke tests.

12) Events/Webhooks/Analytics

Events: user.signup, venue.claimed, note.created, note.attachment_added, sticker.assigned, open_call.created, open_call.clicked, open_call.applied, match surfaced, blog.post_published, blog.comment.created, referral.invite.sent, referral.converted, credit.applied. - **Webhooks:** HMAC signatures; retries with backoff. - **Product analytics:** activation funnels, search usage, notes/stickers adoption, map toggle usage, open-call CTR/apply, match→outreach, blog engagement, referral k-factor.

13) Security, privacy, abuse prevention

- 2FA mandatory; session/device mgmt; audit log.
 - Rate limits + anomaly detection; anti-scrape controls (pagination caps, watermarking, honey tokens, ToS).
 - Blog/comment moderation, spam filtering, report abuse; block users/venues.
 - Data export + deletion; DPA + takedown process for scraped metadata.
-

14) Reliability & ops

- Envs: dev/stage/prod; blue/green deploys; observability (logs, metrics, traces); status page.
 - Backups nightly + 15-min WAL; quarterly restore drills.
 - Region segregation: **Option A** single cluster with `region_code`; **Option B** per-region deploys (BOS/LA/NYC) with separate DBs; feature flags for rollout.
-

15) Roadmap & milestones

- **M0 (2–3 wks):** Auth + 2FA, venue list + search, notes + stickers (attachments $\leq 10\text{MB}$ per note), basic profiles, seed 250 venues, Free/Pro pricing for Artists, Basic for Venues.
 - **M1 (3–5 wks):** Venue claim/edit, open-calls (manual), To-Do Wall, bookmarks, saved views, Stripe, blog (read) + Pro comments + participant gating, referral links MVP, admin console.
 - **M2 (3–5 wks):** Matching with explanations + cooldown, allow-listed metadata scrape for unclaimed, credits (data-fix + referral), image search MVP, analytics dashboards, map toggle, moderation tools.
 - **M3 (GA):** Passkeys, per-region deploys (LA, NYC), anti-scrape hardening, enterprise venue plan, SOC2 pre-work.
-

16) Test plan

- Unit/integration; E2E for signup/claim/search/notes/attachments/stickers/matching/open-call pinning/blog comments/referrals.
 - Security (SAST/DAST), dependency scans; job resilience; rate-limit & moderation tests.
-

17) Risks & open questions

- [RISK] Scraping legality; mitigation: allow-list + metadata-only + takedowns.
 - [RISK] Storage costs; mitigation: quotas/compression.
 - [RISK] Comment spam; mitigation: moderation, rate limits, 2FA.
 - [OPEN] Exact prices; [OPEN] referral cooling-off length; [OPEN] Studio entitlements; [OPEN] venue analytics depth.
-

18) Raw spec dump (verbatim)

(Unchanged; see previous section for your original text pasted in full.)