STACK — FULL PRODUCT BLUEPRINT (MVP EDITION)

Overview:

Stack is a human■curated resource platform where users create Boards called "Stacks" and add resource Cards (links, videos, docs). Unlike Google (AI spam/SEO trash) or Pinterest (visual only), Stack organizes high■quality human-curated knowledge with collaboration, personalization, and real■time interaction.

Core Concepts:

- Stack = Board (collection of curated resources).

- Card = Resource (URL metadata, image/video/doc).

- Stacker = Creator (publishes public stacks).

- Real■time interactions: comments, notifications, upvotes, follows.

MVP Features:

1. Create/Edit Stacks (public/private/hidden) with tags & cover.

2. Add Cards by URL (auto OpenGraph metadata) or manual entry.

3. Feed (personalized) and Explore (trending, categories).

4. Profile (Created/Saved Stacks, basic analytics).

5. Upvote (quality-based, one per user).

6. Comments (threaded, real■time).

7. Notifications (real■time).

8. Clone Stack (private clone).

9. Browser Extension (quick save).

10. Basic Search (Postgres full-text).

11. Supabase Auth.

12. Monetization MVP: Promoted Stacks, Featured Stackers, Paid Hidden Stacks, Reserved usernames.

Tech Stack (recommended):

- Next.js + TypeScript

- Tailwind CSS

- Supabase (Auth, Postgres, Storage, Realtime)

- Upstash Redis (rate-limits, small queues)

- Plasmo/Vite (extension)

- Stripe (payments)

- Mixpanel (analytics)

- Sentry (error monitoring)

Backend May Be Replaced:

If partner wants custom backend:

- Use PostgreSQL or CockroachDB.

- For realtime: WebSockets layer (Socket.io or custom WS).

- For storage: S3 compatible.

- For auth: NextAuth, Firebase Auth, or custom JWT.

- For metadata fetch: Node workers with OG scraping.

- For rate-limits: Redis.

- For search: pg_trgm or Typesense.

Supabase can be replaced entirely with custom backend but RLS + realtime must be recreated manually.

Realtime Requirements:

- Comments update instantly.

- Notifications pushed instantly.

- Upvotes update instantly.

- Follow events update instantly.

Use Supabase Realtime or WebSocket server.

Loop■Hole Protection:

- Card spam: daily limit (20/day), Redis counters.

- Fake upvotes: unique constraint, account age > 48hrs, IP/device heuristics.

- Extensions spam: 10/min limit.

- Toxic comments: moderation API + auto-hide.

- Sockpuppets: fingerprint heuristics.

- Feed manipulation: exclude owner votes, weighted ranking.

- Duplicate URLs: canonical URL hashing.

UI/UX:

- Masonry layout (Pinterest-like).

- Theme: Jet (#111) + White (#FFF).

- Realtime optimistic UI.

- Card modal for details.

- Simple creation flows.

- Tailwind tokens: 24px padding, 16px gaps, 12px radius.

DB Schema (Core):

Users(id, email, username unique, created_at, quality_score)

Stacks(id, owner_id, title, desc, slug unique, is_public, is_hidden)

Cards(id, canonical_url unique, title, desc, thumb_url, domain)

Stack_Cards(stack_id, card_id unique pair)

Votes(user_id, target_type, target_id unique triple)

Comments(id, user_id, target_type, target_id, parent_id)

Notifications(id, user_id, type, data, read)

Clones(original_stack_id, new_stack_id, cloner_id)

Extension_Saves(id, user_id, url, status)

Reports(id, reporter_id, target_type, target_id)

Payments(id, stripe_payment_id, user_id, amount, type)

Workers:

- metadata-fetch: OG scraper

- link-check: periodic HEAD/GET

- explore-ranking: refresh materialized view

- fraud-detection: vote/clone anomalies

- payment-webhook handler

Marketing Quick Summary:

- Build Founding Stacker community BEFORE launch.

- Post teasers, behind■the■scenes, resource lists.

- Launch big on ProductHunt + TikTok/IG Reels + Reddit value posts.

- Extension listing gives FREE organic traffic.

- Weekly digest email + trending badges for retention.

Conclusion:

Stack is a resource curation network combining Pinterest UI + Reddit discussion + ProductHunt discovery + curated search. The MVP is lightweight but powerful, and the backend can be swapped out if needed while maintaining feature parity.