

Pocket Souls — Telegram-Only PRD

Version: 0.1 • **Owner:** Product • **Status:** Draft for review

This is a **Telegram-only** PRD for **Pocket Souls**. It centers the Angel–Nova mentorship, cozy tone, and **once-per-day Diary**. **No Mini App** in this scope; all flows run in chat via commands and inline keyboards. Pocket Souls uses **Diamonds** (💎) and **Energy** (⚡). “Premium” is the **Guardian Pass**.

1) Vision

Build an end-to-end **Telegram companion** where players (Angels) mentor **Nova** (or another Soul), choose a **Situation** (supportive scenario), chat rapidly, and optionally generate **cozy art** (images or 4s clips) that illustrates the moment. Nova posts **one Diary entry per day** (summary + gentle reflection) in chat.

2) Goals and Non-Goals

Goals

- Smooth onboarding: Soul → Situation → first reply **≤2s P50**.
- Clear economy: **Energy** gating for messages, **Diamonds** spending for media; **Guardian Pass** perks.
- One-tap media generation in chat; media is stored and can be re-used as story context.
- Localization framework with **English at launch** (others "Coming soon").
- All commerce via **Telegram Stars** invoices surfaced from chat.

Non-Goals

- **No Mini App** for Alpha; no external web app screens.
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3) Personas (Telegram)

- **New Angel (Explorer):** Tries Nova, wants fast comfort + a pretty “cozy postcard.” Spend \$0–\$5 first week. Sessions: 3–8 msgs; 1 image.
 - **Chat-First Regular:** Returns daily; values new Situations. Spend \$5–\$25/mo. Sessions: 10–30 msgs; 1–3 images/day.
 - **Collector/Spender:** Buys Diamonds, cosmetics (future), upgrades to Guardian Pass. Spend \$25–\$150+/mo. Sessions: 30–100 msgs; frequent media.
 - **Premium Power Angel:** Guardian Pass for “unlimited” feel; expects instant replies + monthly Diamonds stipend. Long sessions, multiple per day.
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4) Core User Stories (Chat-only)

Onboarding

- As a new user, I pick a **Soul** (Nova default) with a 1–2 line bio and see **Energy/Diamonds** counters at top of the welcome card.
- After choosing a **Situation**, I see a **visual intro card** and Nova’s first line within 2s P50.
- Future: Matching algorithm that offers a best-matched Soul.

Chat

- I can chat in my language (EN at launch); Nova replies quickly and stays in cozy mentor persona.
- I can tap 🎨 **Cozy Art** or 🎬 **Short Clip** under Nova’s message to visualize the moment; it spends Diamonds and returns media inline.

Economy



- Messages consume **Energy** (⚡); Energy regenerates over time, or I refill with Diamonds.

- I can buy **Diamonds** with **Telegram Stars**; balances update instantly.
- I can upgrade to **Guardian Pass** for effectively unlimited Energy (UI shows ∞/∞) + monthly Diamonds stipend.

Retention













- I periodically receive **Situations** (affirmations, problems from Nova to resolve, micro-reflections).
 - **Diary**: once per day, Nova posts a single **daily Diary entry** in chat (see §8 Acceptance Criteria).
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5) End-to-End Flow (Telegram)

1. **/start** → Soul list → pick Soul (Nova default) → Situation list → **intro image + first reply**.
 2. **Chat loop (Energy gated)**: Each user msg decrements Energy; if 0 → CTA: [Refill 10 ] [Wait X min] [Upgrade].
 3. **Media**: Deduct Diamonds → call provider → return image/clip inline → store → show receipt line (- ) and new balance.
 4. **Payments**: Inline button → open Stars invoice → on success, credit Diamonds and show toast.
 5. **Diary**: Scheduled once per day → Nova posts “Today’s Reflection” entry in chat.
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6) Economy & Plans







- **Energy (Free)**: MAX 50; +1 / 5 min; -1 per message.
- **Energy (Guardian Pass)**: MAX 100, **UI shows** ∞/∞ ; regen +1 / 10s.

- **Image:** 20 /image (configurable).
 - **Video (4s@720p):** 200 /clip (configurable). Upsell after an image.
 - **Refill Energy (Free):** 10  to full.
 - **Diamond packs (via Stars):** 85 / 210 / 540 / 1360 / 2720 / 5000 for 500  / 1050  / 2250  / 4750  / 8000  / 11250 .
 - **Guardian Pass (via Stars):** 1-Month 700  • 3-Months 1380  • 1-Year 4140 .
Perks: “unlimited” Energy feel, 1000 monthly Diamonds, faster replies tiering.
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7) Content & Safety

- Rate limiting on media per user.
 - **Crisis protocol:** if user indicates self-harm or crisis, respond with de-escalation and regional resources; pause media prompts.
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8) Acceptance Criteria (Chat-only)

- **A1 First Reply Time:** From Situation select to first assistant token: **P50 ≤ 2s, P95 ≤ 5s.**
- **A2 Energy Gate:** When Energy==0, show CTA: **[Refill 10 ] [Wait X min] [Upgrade].**
Refill succeeds if ≥10  and restores to cap.
- **A3 Image Gen:** Tapping  **Cozy Art** deducts **20 ** **only after provider success;** image delivered **≤25s P95.** On provider error, deduct 0 and show **Retry** CTA.
- **A4 Video Gen:** Tapping  **Short Clip** deducts **200 ** **only after success;** returns a **4s 720p** clip. If an image was just made, show upsell within 1 message.
- **A5 Diamond Purchase:** Selecting any pack opens a **Stars invoice;** after success, balance updates within **3s** and a confirmation toast appears.

- **A6 Guardian Pass:** Upgrading changes Energy behavior immediately (UI shows ∞/∞). **1000**  **stipend** granted on start; scheduler credits every 30 days at 00:00 UTC.
- **A7 State Changes:** Switching Soul or equipping a simple cosmetic (future) via chat menu affects the **next reply** without restart.
- **A8 Situations Feed:** `/situations` returns ≤ 10 active cards, deduped by title, non-expired timestamps; `debug=false` strips internals.
- **A9 Localization:** EN shipped; other locales display “Coming soon.”
- ****A10 Daily Diary (One/Day):** Exactly **one Diary entry per user per calendar day** (user’s TZ).
 - **Window:** Default post time 21:00–22:00 local; if the user is idle, send at next resume.
 - **Idempotency:** Unique `(user_id, yyyy-mm-dd)` constraint; retries never duplicate.
 - **Content:** Title + 3–6 lines + 2 tags; posted inline with **[♥ Save]** [ **Reply**].
 - **Visibility:** `/diary` shows **today’s** entry (and yesterday’s if none today).

9) Functional Requirements

- **R1 Soul Catalog:** Inline keyboard to browse Souls (Nova default). Bios, lock status; selection applies immediately.
- **R2 Situations Catalog:** Four curated Situations per Soul + dynamic suggestions; selection posts intro image and first reply.
- **R3 Chat Engine:** Streaming replies (typing cues), persona guardrails, memory of last 12 turns + daily summary facts (compact).
- **R4 Media Gen:** Image and image→video endpoints; deduct Diamonds on success; robust retries and placeholders when provider down.
- **R5 Payments:** Stars invoices with idempotent processing; balance reflects in real-time.

- **R6 Economy Services:** Diamonds, Energy, transactions ledger with audit trail.
 - **R7 Localization:** Bot UI strings driven by i18n keys; EN active, others “Coming soon.”
 - **R8 Diary Daily:** Scheduler per-TZ; single daily entry per §8 A10 with idempotency.
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10) Non-Functional Requirements

- **Latency:** P50 first-token < 500ms; media ack < 300ms; media complete < 25s P95.
 - **Availability:** 99.5% chat; graceful degradation if media unavailable.
 - **Observability:** structured logs, `request_id`, media trace IDs.
 - **Data:** Postgres with indices; media persisted under `media/generated/` or remote store.
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11) Data Model (high-level)

- **User**(telegram_id, diamonds, energy, guardian_pass, language, tz)
- **Transaction**(user_id, type, amount, description, reference_id, created_at)
- **ImageGeneration**(user_id, soul_id, prompt, provider_id, image_url, credits_used, created_at)
- **VideoGeneration**(user_id, source_image_id|null, prompt, provider_id, video_url, credits_used, created_at)
- **Conversation**(user_id, soul_id, messages[], context)
- **DiaryDaily**(user_id, date, title, body, tags[], created_at) **UNIQUE (user_id, date)**
- **Subscription**(user_id, plan, status, start_at, next_stipend_at, last_stipend_granted_at)

Derived/Computed

- Energy regen and caps by `guardian_pass`.
 - Monthly stipend job: add 1000💎 each cycle; record as `subscription_bonus`.
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12) APIs & Commands (chat-only)

Public Commands

- `/start` • `/help` • `/souls` • `/situations` • `/balance` • `/refill` • `/upgrade` • `/shop` • `/language` • `/diary` • `/privacy` • `/delete`

Inline Buttons on assistant replies

- 🎨 Cozy Art — Create a scene • 20💎
- 🎬 Short Clip — Make a 4s clip • 200💎
- Suggestions badge: **Try one of these** (chips)
- Upsell: **Want a 4s clip from this scene? 200💎**

Errors/Toasts

- Success: **Added {amount}💎 — New balance {balance}💎**
 - Payment canceled • Provider unavailable • Try again shortly
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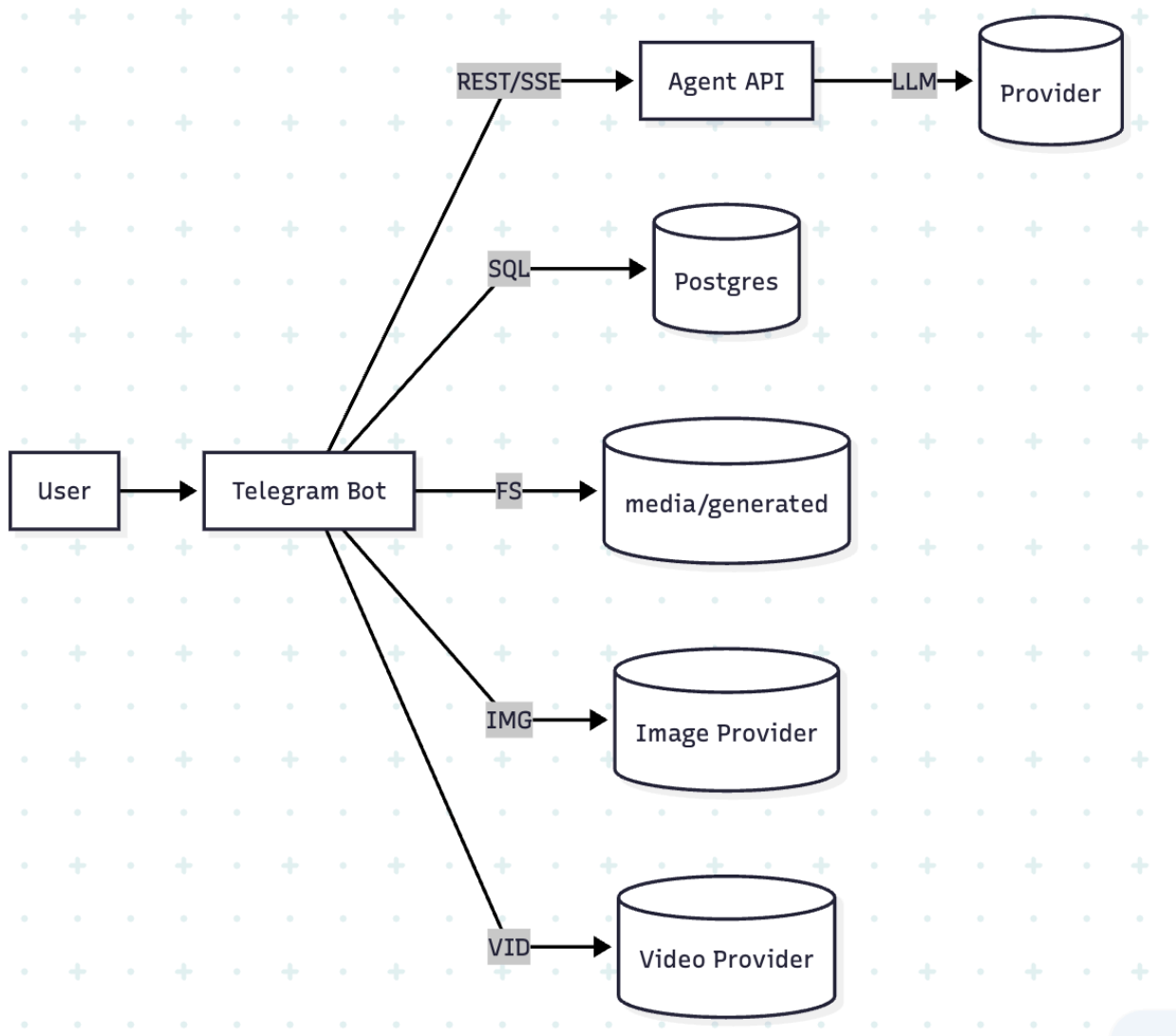
13) Situations & Diary Cadence

- **Situations:** time-based windows (AM/PM) and context-based triggers; max 2 proactive cards/day; Snooze 15–45m.
 - **Diary:** once/day per §8 A10; auto-post in evening or upon next user return.
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14) System Architecture (modular, no Mini App)

Components

- **Telegram Bot:** routing, keyboards, formatting.
- **Agent API:** LLM adapter (Groq/OpenAI) behind `LLMClient`.
- **Services:** energy, payments, diamonds, media (image/video), subscriptions, profiles, diary scheduler.
- **Data:** Postgres; storage `media/generated/` (R2/S3 pluggable).
- **Providers:** Image (Sinkin or alt), Video (image→video), Payments (Telegram Stars).



Interfaces

- `LLMClient.stream(messages, tools?)`
- `Media.generate_image(prompt, style, ctx) → {url, meta}`
- `Media.generate_video(image_url|prompt, seconds=4, res=1280x720) → {url, meta}`
- `Payments.create_invoice(sku) • Payments.process_success(charge)`

- `DiaryScheduler.run(now)` idempotent by `(user_id, date)`
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15) Telemetry & Alerts

- `/metrics` exports: media success rate, P50/P95 reply latency, daily spend, live spend, purchase conversion.
 - Alerts: failure spikes (>10% in 5m), queue timeouts.
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16) Copy Deck (SFW, cozy)

- **Welcome:** “I’m Nova—your pocket guardian. Want to pick a tiny scene to start?”
 - **Energy Empty:** “You’re out of **Energy**. Messages use 1 ⚡. It refills over time.”
 - **Refill CTA:** Refill 10 💎 • Wait {minutes} min • Upgrade
 - **Art Button:** 🎨 Cozy Art — Create a scene • 20 💎
 - **Clip Button:** 🎬 Short Clip — 4s • 200 💎
 - **Diary Header:** “Today’s Reflection”
 - **Diary Footer:** [♥ Save] [↩ Reply]
 - **Upgrade:** “Guardian Pass — Unlimited Energy feel, 1000 💎 monthly, faster replies.”
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17) Testing Strategy

- Unit: energy, payments, image builder, pricing math.

- Component: agent streaming, situations feed, payment mocks, media stubs, diary idempotency.
 - Preflight: env validation for providers; graceful skips if optional providers missing.
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18) Phase Breakdown (each standalone; no Mini App)

- **Phase 1:** Chat Media MVP (images/short clips, charging, Energy gating) — **/start** → **Souls** → **Situations** → **Chat**.
- **Phase 2:** Energy & Guardian Pass — commands expose upgrade/refill; stipend scheduler.
- **Phase 3:** Payments & Shop — Stars SKUs; chat menus only.
- **Phase 4:** Situations polish — retention cadence.
- *(Future)* Mini App phases remain out-of-scope here.