



WHITEPAPER · V3.4 · SEPTEMBER 2026

Stonkling

A companion that lives inside real tokenized stocks
on Robinhood Chain.

Status: live prototype. A token is planned for launch on Robinhood Chain; none exists at the time of writing.

Live site: <https://stonkling.51.254.221.170.sslip.io>

Not affiliated with Robinhood Markets, Chainlink Labs or any listed company. Not financial advice.

01 · ABSTRACT

Your portfolio, alive.

Stonkling is a character whose mood, looks and life stage are computed from public market data on Robinhood Chain: live prices of all 195 tokenized stocks and ETFs, Chainlink oracles, each token's on-chain corporate-action multiplier (ERC-8056) and the New York trading clock. Pick a free username, put \$1,000 of demo money into any of the 195 stocks (no wallet needed), and a Stonkling hatches: it feels the day's move, eats when a stock it holds reinvests a dividend, sleeps when Wall Street closes and evolves the longer it is held. Anyone who already holds tokenized stocks on Robinhood Chain can read their own wallet instead.

Behind the character sits a real tool: a portfolio check-up anyone can read in five seconds, a 30-day diary rebuilt from the chain, a live radar of every dividend and split, a public lobby where every registered Stonkling wanders the same plaza and can be challenged to a duel, and a smart contract that can draw the same creature on-chain.

Status. Working prototype, live on the web. A token is planned for launch on Robinhood Chain; none exists today, this is not an offer to buy or sell anything, and anything claiming to be the Stonkling token before an official announcement on the site is not ours.

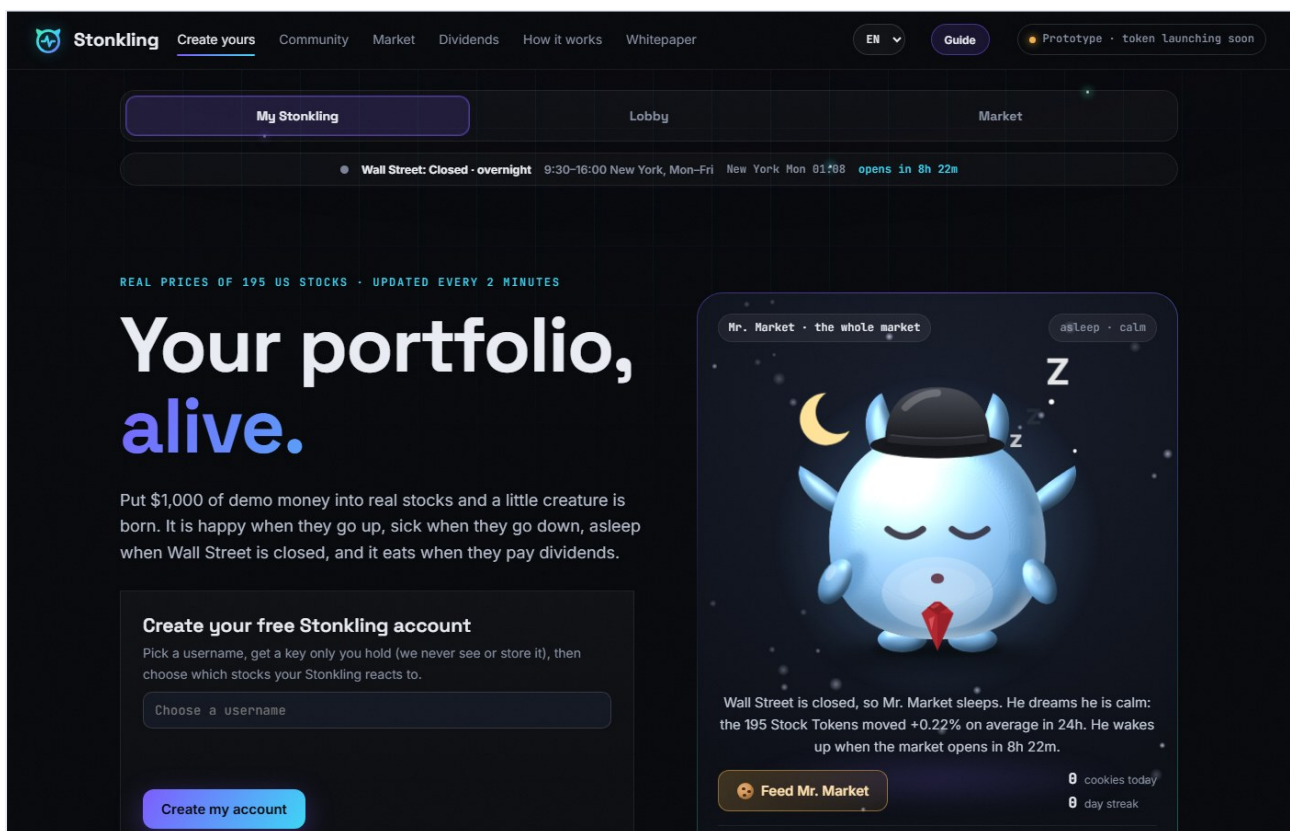


Figure 1. The live site: the Wall Street clock, the app's three sections (My Stonkling, Lobby, Market), Mr. Market (the public Stonkling driven by the whole market) and the free demo account.

02 · WHY NOW

Real companies, living on-chain

Robinhood Chain (Arbitrum Orbit L2, chain ID 4663, public since 1 July 2026) is the first network where real equities are ordinary ERC-20 tokens. Three data sources make Stonkling possible, and they exist together nowhere else: **prices** for 195 Stock Tokens (36 with an official Chainlink feed), **corporate actions on-chain** (dividends and splits recorded by each token's `uiMultiplier()`), and a **real market clock** that gives a character a daily rhythm.

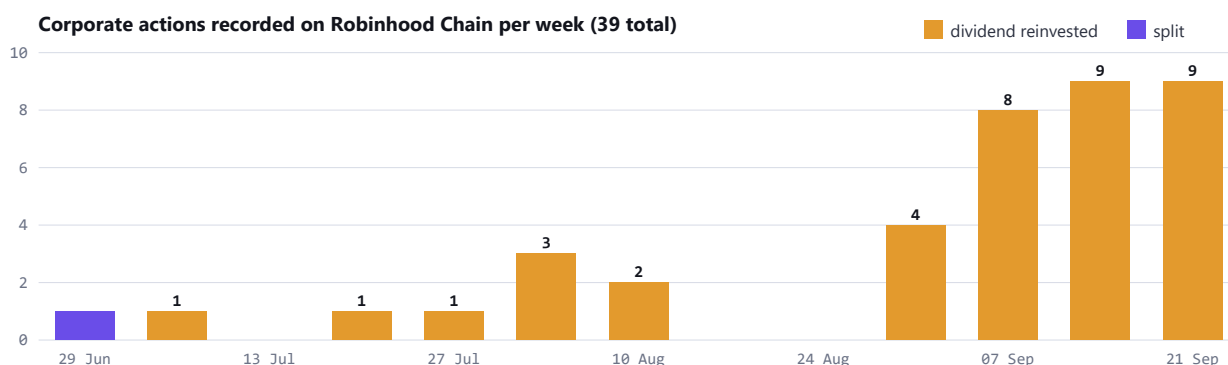


Figure 2. Corporate actions recorded on-chain since launch: 38 dividend reinvestments and one 4-for-1 split (CRWD).

What people do on the site

Feature	What it does
Your Stonkling	A free account (a username plus a key only the visitor holds, never seen or stored by the site) with \$1,000 of demo money to put into any of the 195 stocks: value, today's move, dividends, diversification, life stage and the creature. No wallet needed. Anyone who already holds tokenized stocks on Robinhood Chain can read that wallet instead.
Lobby	Every registered Stonkling wanders one public plaza in real time, clearly labelled if it is a demo bot, coloured and positioned by its real mood and today's move. Clicking one opens its profile (holdings, life stage, today/week/since-hatching move) and a duel against it.
Customize · badges	A cosmetic skin colour, chosen once and changeable any time — mood, aura and life stage stay tied to real data regardless. Small badges mark a Stonkling diversified (4+ holdings of 5% or more), up this week, or a long-time holder (elder / legend), visible on its lobby card.
30-day diary	A wallet's month rebuilt from its on-chain transfers: one mood per day, snack days, trading days; tap or hover any day.
Market + radar	All 195 Stock Tokens with company logos, live market caps, live price tape, 24h charts, company facts (P/E, dividend yield, 52-week range, sector), and every dividend and split as it hits the chain.
You vs the market, this week's league	Every Stonkling is compared with the whole market on the same real 24h prices, and ranked against every other Stonkling on real moves since Monday's close. "Duel" a specific player from the lobby, or share a link (percentages only) so a friend can compare theirs.
Share, alerts, access	Share links with a personalised preview (percentages only, never amounts); installable app with on-device alerts for dividends, the opening bell and big moves; English, Italian and Spanish; keyboard and screen-reader friendly.

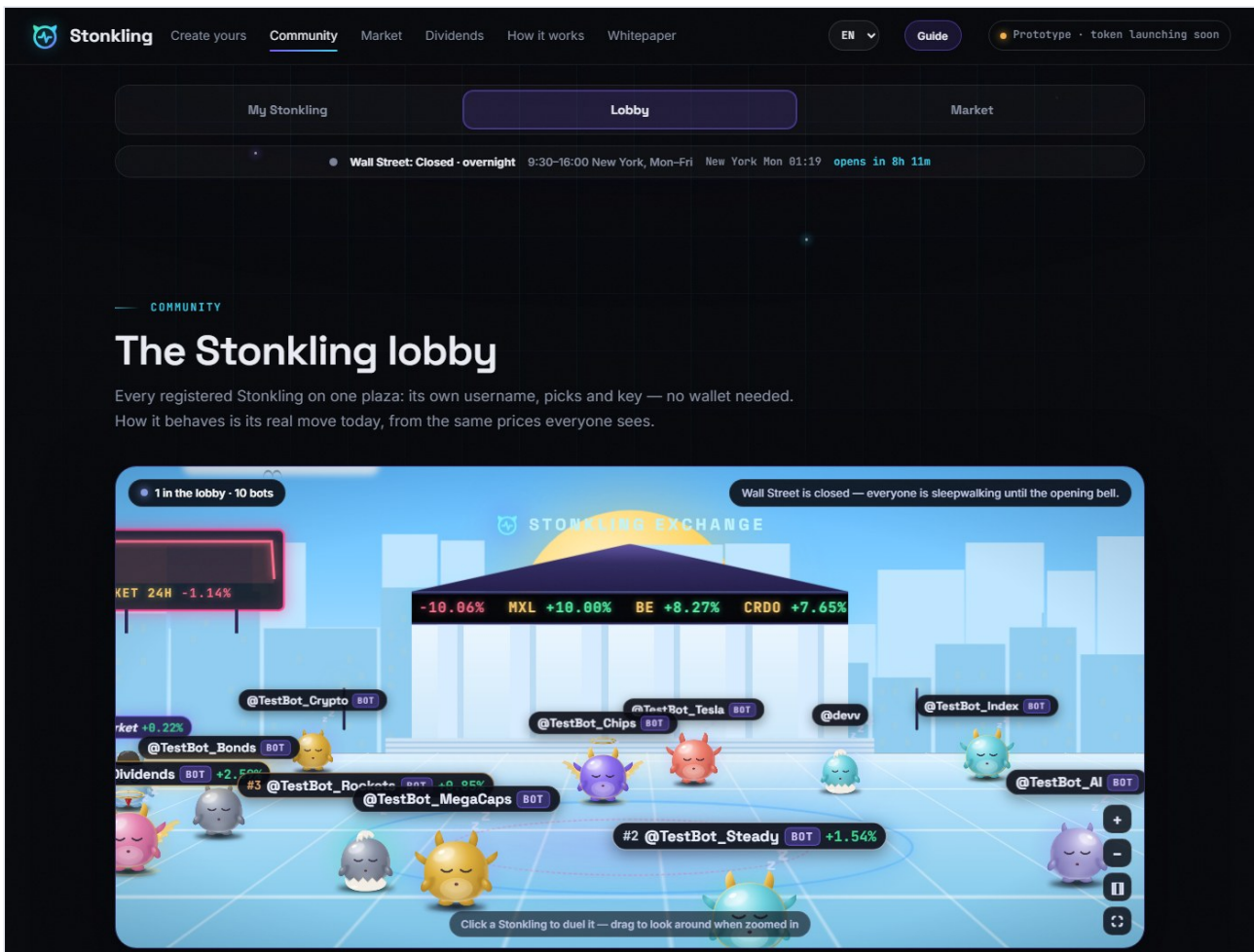


Figure 2b. The lobby: every registered Stonkling (and ten clearly-labelled demo bots) on one plaza, positioned and coloured by its real mood, with a live board of the day's biggest movers.

03 · THE CHARACTER

Every look has a public trigger

The engine is a pure function: the same public inputs always produce the same creature. No randomness, no hidden server logic.

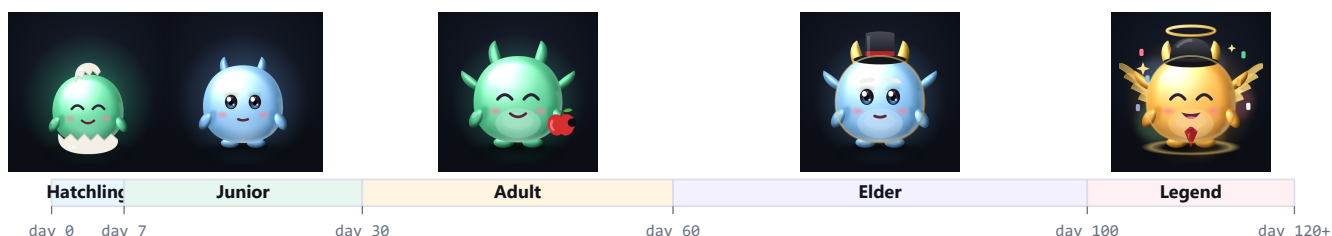


Figure 3. Evolution by days of holding, counted from the wallet's first Stock Token transfer: egg, hatchling (shell), junior (horns sprouting), adult (fins, belly), elder (white brows, gold rim), legend (wings, halo, golden pedestal).



Figure 4. Mood from the value-weighted 24h move of the holdings. The site and the on-chain contract use the same thresholds.

Signal	Public source	What the creature does
Market closed / extended hours	New York clock (DST aware)	Sleeps overnight and at weekends, yawns pre-market and after-hours
Dividend reinvested	uiMultiplier(), UIMultiplierUpdated	Eats a cookie; the diary marks the day
Split	Multiplier jump of 1.2x or more	Recognised as a split, never counted as income
Biggest holding / 80%+ in one stock	Allocation	Wears a product-inspired outfit / the ALL IN headband
Four holdings of 5%+	Allocation	Prismatic aura

04 · LIVE DATA AND ARCHITECTURE

What is real-time, and how it works

Every number comes from Robinhood Chain or Robinhood's own price data. What the visitor triggers is read instantly by their browser; shared market data is refreshed by a small server on a schedule that keeps the public RPC within its limits.

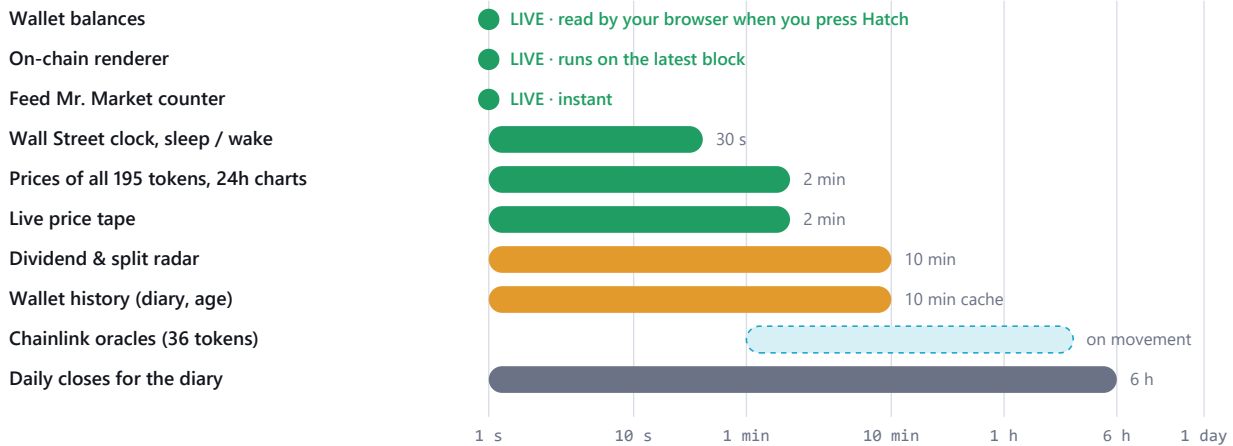


Figure 5. Refresh interval of each data type (log scale).

Measured on the live site	Price snapshot	Latest price bar	Freshest Chainlink update
03:48 New York, overnight	1-2 min	2 min	2.5 min
15:51 New York, regular session	12 s	21 s	64 s



Figure 6. The server only does what a browser cannot (cross-site price data, full-chain wallet scans, caching); balances go straight from the browser to the chain.

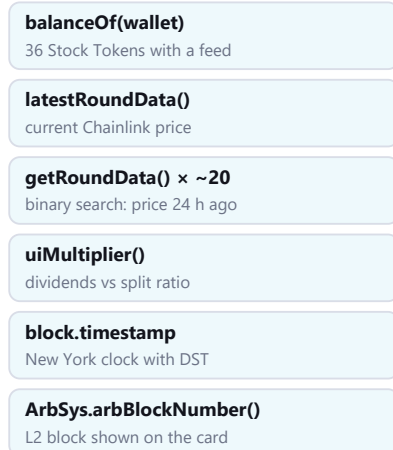
- **No custody, no signatures, no accounts.** Visitors never connect a wallet. "My portfolio" and alert settings live only in the browser; share links carry percentages, never amounts; nothing about visitors is stored (the feed counter keeps only daily totals).
- **Resilient by design.** Rate-limit aware requests with back-off; wallet scans are checkpointed and resume where they stopped.
- **Tested end to end.** An automated suite compares the site with its sources on every release: multipliers of all 195 tokens and 36 Chainlink feeds against the chain, prices against Robinhood, radar events against their transaction receipts, wallet histories against balanceOf(), the contract's values against an independent calculation, and its clock against the New York time-zone database.

05 · ON-CHAIN RENDERER (IN DEVELOPMENT)

The creature as a smart contract

StonklingRenderer is a Solidity contract with no owner, no storage and no admin keys. For any wallet it reads the Stock Tokens that have a Chainlink feed, their prices now and 24 hours ago (binary search over oracle rounds), each `uiMultiplier()` and the New York clock, and returns an SVG card.

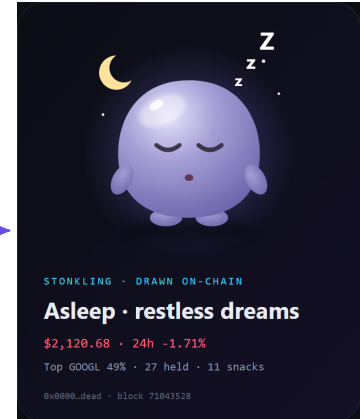
INPUTS (all read on-chain)



read(wallet)

Reading
value (USD, 18 decimals)
24h move, value-weighted
mood 0-4 (same thresholds)
holdings, top holding, share
dividend snacks
asleep / yawning

render(wallet)



SVG card (about 4 KB) returned by the contract

Figure 7. On-chain inputs, the Reading struct, and the card the contract returned in a check against live mainnet state.

- **Not deployed, not on the site.** It will appear on the site only after an independent review and its deployment on Robinhood Chain. Until then it is only checked internally against live mainnet state with `eth_call`.
- **Deployable as is.** solc 0.8.26, 23,824-byte runtime (under the 24,576-byte limit).
- **Honest limits.** It sees only the 36 feed-backed tokens and cannot know the life stage (that needs transfer history).
- **Cannot be gamed for money.** States are cosmetic and prices come from Chainlink, not DEX pools.

06 · TOKEN DESIGN (PLANNED)

An access key, not an investment

A token is planned for launch on Robinhood Chain. It would only unlock your own Stonkling (a free, non-transferable NFT drawn by the renderer) and its alerts. Commitments for the launch: **0% buy/sell tax, fixed supply, liquidity locked, ownership renounced, no yield or rewards**. Everything shown today stays free. It is not a share, not a claim on any company, not a bet and not a launchpad. No token exists yet: the contract address will be published on the live site and in this whitepaper the moment it launches, and nothing before that announcement is ours.

07 · LEGAL AND TRANSPARENCY

- Independent and **not affiliated** with Robinhood Markets, Chainlink Labs or any listed company. Company logos are trademarks of their owners, shown only to identify each stock; the creatures' outfits are product-inspired illustrations.
- **Not financial advice**. The mood visualises past prices; it is not a signal to buy or sell.
- **Data terms**. Robinhood's price endpoints are public but not documented for third parties; before any commercial launch their terms will be confirmed, with an on-chain-only fallback (Chainlink + renderer) available.
- **MiCA**. Before any token is offered in the EU, the applicable obligations (Regulation (EU) 2023/1114) will be assessed and met. This is a product whitepaper, not a MiCA white paper.

08 · ROADMAP

Phase	Scope	Status
0 · Live site	Your stocks in, your Stonkling out; you vs the market, challenge a friend, live market with logos and market caps, dividends radar, diary and evolution.	Live
1 · On-chain renderer	Written and compiled; shown on the site only after independent review and immutable deployment.	In development
2 · Adoption	Free soulbound Stonkling NFT per wallet; access token planned for launch on Robinhood Chain, contract address published here once it deploys.	Planned
3 · Alerts	On-device notifications on fever, dividend snack, split, market open.	Live

09 · RISKS

- **Data**. Prices can lag or hold overnight; holidays are inferred; Robinhood's endpoints could change (on-chain fallback exists).
- **Network and issuer**. Robinhood Chain is young and has halted before; individual Stock Tokens can be paused by their issuer.
- **Contracts and tokens**. Future contracts can have bugs; any future token could lose all value; rules for crypto-assets keep evolving.

Key addresses: Robinhood Chain mainnet (chain 4663), RPC `rpc.mainnet.chain.robinhood.com`, Multicall3 `0xcA11bde05977b3631167028862bE2a173976CA11`, `UIMultiplierUpdated` topic `0x2205df45...b055`. The full list of the 36 Stock Token / Chainlink feed pairs is embedded in `stonkling.51.254.221.170.sslip.io/StonklingRenderer.sol`.

This whitepaper describes a prototype and proposed designs that may change. It is not an offer or solicitation to buy any asset, not financial, legal or tax advice, and not a crypto-asset white paper under MiCA.