YIELD BUD EMPIRE · PROJECT DOCUMENT

Economy, architecture and roadmap

How the game works inside, how its economy is protected, how the team can sustain itself without selling $FLORA, and what comes next. Everything in this document is checked against the game's code and tests.

Version 1.2 · 24 September 2026 · Status: closed alpha; the whole game runs on an authoritative server · WOLI CBD S.A.

1. What it is and who it is for

Yield Bud Empire is a growing and business simulator played in the browser. You start with one plant in a closet and grow into a hydroponic facility, with an extraction lab, a forge, strain breeding, a dispensary whose demand saturates, lands on a planet inspired by Urbano Monti's map (1587) and a player market. The in-game currency is **$FLORA**.

> **Web2 first.** Anyone aged 18 or over can sign up and play for months without crypto or a wallet. Crypto (linking a Solana or Ronin wallet, taking relics out as NFTs) is optional and only added if the player wants it.

2. Architecture

- **Authoritative server:** the browser only shows things and asks for actions. Each action carries a unique key (never charged twice); the server validates it, moves the balance in a ledger and only then changes the state. Editing the browser changes nothing.
- **One logic:** the simulation lives in pure TypeScript modules used alike by the server, the browser and the tests.
- **Client:** React 19, Vite 8, Tailwind 4 and Three.js for 3D. **Server:** Node.js with built-in SQLite (node:sqlite), atomic transactions and nightly backups.
- **Automated tests:** 307 server checks and over 380 simulation checks (economy, phases, breeding, forge, relics, empire…). If any fails, nothing ships.
- **Scale:** SQLite is more than enough for the alpha. Moving to PostgreSQL is a task for when there are thousands of simultaneous players; it is not needed today.

3. The economy without selling $FLORA

> **Golden rule:** real money can only buy things that do not create $FLORA or that force it to be burned. The economy breaks when more is created than destroyed, not when someone progresses for free.

Safeguards measured by the tests (4-month, 1-year and 2-year simulations):

Safeguard	How it works	Current measurement
75% deflation floor	For every 100 $FLORA created, at least 75 are burned.	Free player: 82% · paying player: 75%
The market saturates	Selling twice as much does not pay twice as much, and splitting a sale never pays more. Every sale pays a fee and a licence, which are burned.	Double volume < 1.7× revenue
Paying speeds up, with a cap	Paying for convenience reaches each step sooner but never skips one. The test fails above 2.6×.	≈2.5× today
Team accounts	Development accounts play with a test balance but cannot redeem anything real or take relics out.	Enforced by the server

4. How the team is sustained: 13 revenue paths

Honest status today: **no path charges money yet**, because the game is in closed alpha. The table shows what infrastructure exists and what is missing.

#	Path	What the player or brand pays	Why it does not break the economy	Status
1	**WOLI CBD products (V2P)**	Game achievements give discount coupons for real products	$FLORA is burned when the coupon is issued; a physical product is sold	Demo
2	**Cosmetics**	Avatars, frames, decoration and colours	No advantage, no $FLORA created	Planned
3	**Season pass**	A track of cosmetic rewards and badges	Cosmetic rewards or small capped supplies	Planned
4	**Founder pack**	Badge, exclusive avatar, name in the credits or on a strain	Recognition, not advantage	Planned
5	**Physical art + NFT**	A hand-made painting with its unique NFT	The price covers the artwork and shipping; in game it respects the caps	Planned
6	**Primary NFT sale in SOL**	Only cosmetics or collectibles with no bonus	Selling advantage items (staff, lands) for SOL would be pay-to-win: ruled out	Limited
7	**Player market fee**	5% of every in-game sale, in $FLORA	The fee is burned; only existing items change hands	Live (burn)
8	**Capped conveniences**	For example, more speed-ups per day	Only within the measured cap (≈2.5×, fails at 2.6×)	With care

9	**Brand advertising**	The brand pays to appear in the game	Its product performs the same as the generic one in its category	**With more players**
10	**Education and B2B**	The growing simulator for courses and academies	A separate product, outside the player economy	**Later**
11	**Merchandise**	Clothing and branded items	A normal physical sale	**At discretion**
12	**Events and tournaments**	Entries with physical or cosmetic prizes	Prizes are never redeemable $FLORA	**Later**
13	**Relic royalties**	Relic resales on Solana NFT marketplaces	Earned only by playing; outside they give no bonus; $FLORA stays in	**Bridge on devnet**

5. Relics and the Solana bridge

- **Earned by playing:** an active week fills the activity chest and the server rolls the relic (common 60%, rare 28%, epic 10%, legendary 2%). Chests are **never sold**, for money or $FLORA.
- **Small, capped bonus:** each relic improves an existing stat, with a cap lower than staff's and never on sale prices. Up to 3 can be equipped.
- **Taking it out to Solana:** with a linked wallet, the relic leaves as an NFT (Metaplex Core) to that wallet. The player pays a $FLORA fee that is burned (20 / 40 / 80 / 150 by rarity) and the team pays the SOL. Limits: 3 per account and 50 game-wide per day.
- **Bringing it back:** whoever sends the relic to the game vault from their linked wallet receives it in their account, even if they bought it outside. Only NFTs from the official collection are accepted.
- **Royalty:** the «Yield Bud Empire · Reliquias» collection carries a 5% royalty for the team on each resale.
- **Status:** live on devnet, Solana's test network, and tested end to end. Before mainnet: a security review, a new wallet and a dedicated connection provider.

6. Legal framework and transparency

- **Not an investment:** $FLORA and the game's NFTs have no guaranteed real-money value, are not financial instruments and there is no buy-back promise. $FLORA is never sold and never leaves the game.
- **No gambling:** there are no random chests paid with real money. Chests are only earned by playing, and the server verifies the activity.
- **Sales outside the game:** selling a relic for SOL is a deal between people. The team does not set prices or cover losses from wallet mistakes or third-party scams.
- **Age and CBD:** 18+ only (confirmed at sign-up). The real sale of hemp-derived products depends on each country's law. When WOLI CBD coupons become real, age and delivery address will be verified.
- The Terms and the Privacy Policy published on yieldbudempire.com (version 2026-09-24) already cover relics and the bridge.

7. Roadmap

Stage	Content	Status
Core and server economy	Plant phases, techniques, ledger, validated actions, deflation floor	Done
NFTs and player market	Lands, staff, avatars and relics; escrow; 5% fee that is burned	Done
Empire	10 ranks and 3 seats beyond hydroponics	Done
Wallets	The game’s own address and signed linking with Solana and Ronin	Done
Relic bridge to Solana	Metaplex Core with royalties; live on devnet	In progress
Solana mainnet	Security review, new wallet and dedicated connection provider	Next
First revenue paths	Founder pack, cosmetics and real WOLI CBD coupons	Next
Later	Seasons, Ronin, more server-owned assets, PostgreSQL when scale requires it	Planned

What changed since version 1.1: test figures updated (307 server, over 380 simulation); the payment cap stated as it is measured (≈2.5×, fails at 2.6×); the bridge was built with Metaplex Core and needs neither a custom Anchor program nor ERC-721/ERC-20 contracts, because $FLORA never leaves the game; the player-market fee is in $FLORA and burned, while what the team earns in SOL is resale royalties; selling advantage items for SOL is ruled out; and statuses reflect that no path charges money yet.