

FATE SWAP

Trade at the price you believe in.

A decentralized exchange where every trade is a bet on your conviction. Sell your memecoins above market price, or buy them below—if fate allows it. The further your target from market, the lower the fill chance, the higher the reward.

~\$0.01

Gas per trade

~1 sec

Settlement time

1.5%

Fate fee

Built on Solana · Powered by Jupiter · Provably Fair · Instant Settlement

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The Concept

Fate Swap reframes binary-outcome gambling as a decentralized exchange feature. Instead of placing a bet, users set a target price for their trade. The further the target from the current market price, the lower the probability the order is filled—and the higher the payout if it is.

“Why sell at market when you can name your price?”

How It Works

Sell side: A user wants to sell 1M BONK. Market value is 0.5 SOL. They set their target to 1.0 SOL (+100% above market). This is equivalent to a 2x multiplier with a ~49% fill chance. If fate fills the order, they receive 1.0 SOL. If not, their tokens are lost.

Buy side: A user wants to buy BONK at a 50% discount. They deposit 0.25 SOL. If filled, they receive 0.5 SOL worth of BONK. If not, the 0.25 SOL is lost. Same math, framed as discount shopping.

Pricing Matrix

TARGET PRICE	MULTIPLIER	FILL CHANCE	FEELS LIKE
+5% above market	1.05x	93.8%	Safe limit order
+25% above market	1.25x	78.8%	Optimistic sell
+50% above market	1.50x	65.7%	Bullish conviction
+100% above market	2.00x	49.3%	Coin flip moonshot
+400% above market	5.00x	19.7%	Full degen
+900% above market	10.0x	9.9%	Lottery ticket

Fill chance = $(1 / \text{multiplier}) \times (1 - \text{house_fee})$. House fee: 1.5%.

Language & Positioning

The entire product is designed to feel like a DEX, not a casino. Every piece of language maps gambling mechanics to trading concepts:

GAMBLING TERM	FATE SWAP EQUIVALENT
Place bet	Set your price / Place fate order
Multiplier	Target price (% above/below market)
Win / Lose	Filled / Not filled
Win probability	Fill chance
House edge	Fate fee
You lost your bet	Tokens claimed by fate ■
Casino	DEX with conviction

Tagline Options

- “Trade at the price you believe in” — Main tagline. Implies conviction, not gambling.
- “The only DEX where your limit orders actually hit... sometimes” — Playful, self-aware.
- “Set your moon. Let fate decide.” — Aspirational, memeable.
- “Not a casino. A DEX with opinions.” — Direct positioning.
- “Jupiter gives you market price. We give you YOUR price.” — Competitive framing.

Viral Mechanics

The language is designed to be shareable. Users will naturally post results: "I just fate-swapped my BONK at 3x and it filled" or "Got rekt on a moon order, fate said no." The buy side is especially

Technical Architecture

Transaction Flow

Each trade is two Solana transactions: one signed by the player (bet placement + token swap) and one signed by the server (result reveal + settlement). The token-to-SOL swap happens atomically via Jupiter CPI in the same transaction as bet placement, eliminating all price risk.

ST EP	ACTION	WHO SIGNS
1	Player selects token, amount, target price	n/a
2	Frontend fetches Jupiter quote (token → SOL)	n/a
3	Backend generates server seed, sends hash to client	Server
4	TX1: Transfer tokens + Jupiter swap + create bet PDA	Player
5	TX confirmed on Solana (~400ms)	n/a
6	TX2: Server reveals seed, game resolves, SOL paid out	Server
7	Result pushed to player via WebSocket	n/a

Gas Costs

COMPONENT	COMPUTE UNITS	COST (SOL)	COST (USD)
TX1: Place bet (player)	~800,000	0.000045	~\$0.007
TX2: Reveal (server)	~200,000	0.000015	~\$0.002
Total per trade	~1,000,000	0.00006	~\$0.01

For comparison: Ethereum L1 swap + game logic would cost \$5–\$50. An L2 would cost \$0.10–\$0.50. Solana is ~100x cheaper than the cheapest EVM alternative.

Key Technical Decisions

- **Swap-on-deposit** (not quote-and-hold): The Jupiter swap converts memecoin to SOL atomically in the same transaction. House never holds volatile memecoins.
- **Commit-reveal randomness** (not VRF): Server commits hash(seed) before bet, reveals seed after. Result = hash(server_seed + player_nonce). 5-minute reclaim timeout protects players.
- **Dynamic bet limits**: Max bet = min(config_max, bankroll × 2%). Kelly criterion-inspired bankroll management prevents ruin.
- **Token eligibility filter**: Minimum \$50K DEX liquidity, <1% price impact, must be on Jupiter's strict token list. Prevents illiquid/scam token bets.

Tech Stack

LAYER	TECHNOLOGY	PURPOSE
Smart contract	Anchor (Rust)	On-chain game logic, vault management
DEX aggregator	Jupiter v6 CPI	Token → SOL swap, price discovery
Backend	Phoenix LiveView (Elixir)	Real-time UI, seed management, settlement
Frontend	LiveView + JS hooks	Wallet connection, TX construction
Wallet	Solana wallet-adapter	Phantom, Solflare, Backpack support
Mobile	Capacitor (PWA)	Native-like mobile experience
Randomness	Commit-reveal (SHA-256)	Provably fair, single-TX settlement

Revenue Model

REVENUE STREAM	RATE	NOTES
Fate fee (house edge)	1.5%	Applied to winnings, not total wager
Jupiter referral fee	~0.1%	On every swap via Jupiter Referral Program
Partner revenue share	20% of edge	Paid to referral partners on winning bets only

Unit Economics Example

User sells 1M BONK targeting 2x market price (0.52 SOL → 1.04 SOL). Fill chance: 49.3%. If filled, gross payout = 1.04 SOL. Winnings = 0.52 SOL. Fate fee = $0.52 \times 1.5\% = 0.0078$ SOL (~\$1.39). Jupiter referral = ~0.1% of swap = 0.00052 SOL (~\$0.09). Net house revenue per filled bet: ~\$1.48. Gas cost: ~\$0.01. Net margin per trade: >99%.

If the order is not filled (50.7% of the time), the house keeps the entire 0.52 SOL (~\$92.78) from the market swap. This is the primary revenue source.

Illustrative Volume Projections

DAILY BETS	AVG BET (SOL)	DAILY VOLUME	EST. DAILY REV
500	1.0	500 SOL	~7.5 SOL (\$1,338)
2,000	1.5	3,000 SOL	~45 SOL (\$8,029)
10,000	2.0	20,000 SOL	~300 SOL (\$53,526)

Revenue assumes 1.5% effective house edge on total volume. SOL at \$178.42. Does not include Jupiter referral revenue. Illustrative only.

Competitive Advantage

Fate Swap occupies a unique position at the intersection of DEX and gambling. It competes with neither directly.

	TRADITIONAL DEX	CRYPTO CASINO	FATE SWAP
Target user	Traders	Gamblers	Memecoin degens
UX	Swap interface	Casino games	Swap + conviction
Input tokens	Any	Usually SOL/ETH	Any memecoin
Upside potential	Market price only	Multiplied wager	Enhanced price
Emotional hook	Efficiency	Thrill	Conviction + thrill
Virality	Low	Medium	High (memeable)

Why It Works

- **Regulatory framing:** It looks and feels like a DEX with a risk slider, not a casino with dice and slot machines. The on-chain mechanics are identical to a provably fair gambling protocol, but the user experience is a swap interface.
- **User acquisition funnel:** People who would never visit a "crypto casino" will try a "DEX where you set your own price." The Venn diagram of memecoin traders and gamblers is nearly a circle.
- **Buy-side is novel:** No existing gambling platform offers "buy tokens at a discount." This is a genuinely new product concept that appeals to traders, not just gamblers.
- **Memecoin treasury management:** Holders can "sell high or die trying" instead of dumping at market. This is more fun than a regular swap and the memecoin community will embrace it.
- **No inventory risk:** The house only holds SOL. Every memecoin is immediately swapped via Jupiter. No exposure to 500 random tokens crashing.

User Interface

The interface is intentionally designed to look like a modern DEX swap interface—dark theme, token selectors, and a clean card layout. The key differentiator is the "fate slider" that lets users set their target price visually.

UI Components

ELEMENT	PURPOSE	DESIGN INTENT
Mode toggle	"Sell High" / "Buy Low"	Trading language, not bet/gamble
Token input	Select token + enter amount	Identical to Jupiter/Raydium UX
Fate slider	Set target price (multiplier)	Green→yellow→red gradient = instant risk feedback
Probability ring	Shows fill chance %	Looks like a loading meter, not a win %
Payout card	Shows SOL gain if filled	Frames reward as "extra SOL" vs market price
CTA button	"Sell BONK at 2x market"	Dynamic label reinforces trading frame
Result overlay	"Order Filled" / "Not Filled"	Limit order language, not win/lose
Live feed	Recent trades from other users	Social proof + FOMO. Shows filled/not filled.

Design Principles

- **No casino imagery.** No dice, cards, slot machines, or neon. It's a swap interface with a probability meter.

- **Dark, minimal UI.** Follows the aesthetic language of Jupiter, Drift, and Tensor. Users should feel like they're on a DeFi platform.
- **The slider is the product.** Moving it right feels like setting an ambitious limit order. The color gradient provides visceral feedback without requiring the user to read numbers.
- **Results feel like order fills.** "Order Filled — You received 1.04 SOL" reads like a DEX notification. "Not Filled — Fate rejected your order" is dramatic but not crushing.

Roadmap

PHASE	MILESTONE	STATUS
Phase 1	Anchor program: core game logic, vault, bet resolution	In progress
Phase 1	Jupiter CPI integration for atomic swaps	In progress
Phase 1	Commit-reveal provably fair system	In progress
Phase 2	Frontend: swap UI with fate slider + wallet integration	Designed
Phase 2	Phoenix LiveView backend: seed management, settlement	Planned
Phase 2	Token eligibility system (liquidity checks via Jupiter)	Planned
Phase 3	Buy-side orders (SOL → memecoin at discount)	Planned
Phase 3	Partner referral system (20% rev share)	Planned
Phase 3	Mobile app via Capacitor	Planned
Phase 4	Multi-token fate orders (portfolio-level bets)	Concept
Phase 4	Social features: leaderboards, share cards, streaks	Concept

Summary

Fate Swap is a memecoin gambling protocol disguised as a DEX feature. The math is a provably fair binary outcome game. The UX is a swap interface with a conviction slider. The language is entirely trading vocabulary—no casino, no betting, no gambling. It runs on Solana for ~\$0.01 per trade with instant settlement, uses Jupiter for atomic swaps, and generates revenue through a 1.5% fate fee plus Jupiter referral commissions. The house holds only SOL—zero inventory risk.

