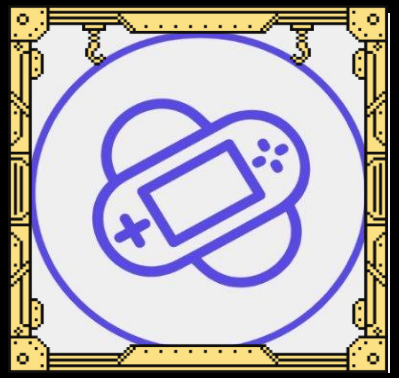
Decentralised and Permissionless: Shorts and Leverage for AMMs



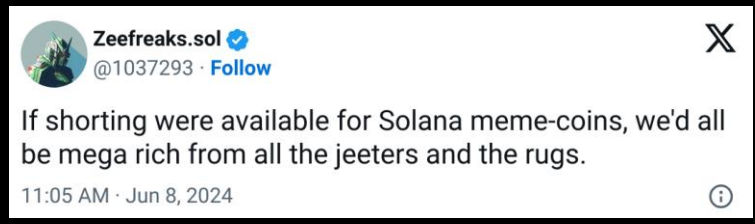
@DaoPlays

@Dave_Kayac

@frnzgs

The Problem

AMMs have been around a long time.. and yet:



Going short or entering leveraged long positions still primarily via centralised exchanges

Decentralised platforms that do offer leverage or shorts are not permissionless – they only provide curated lists of accepted tokens (e.g. flash.trade)

Our Solution

We have built a decentralised, permissionless system for borrowing from an AMM that solves these issues

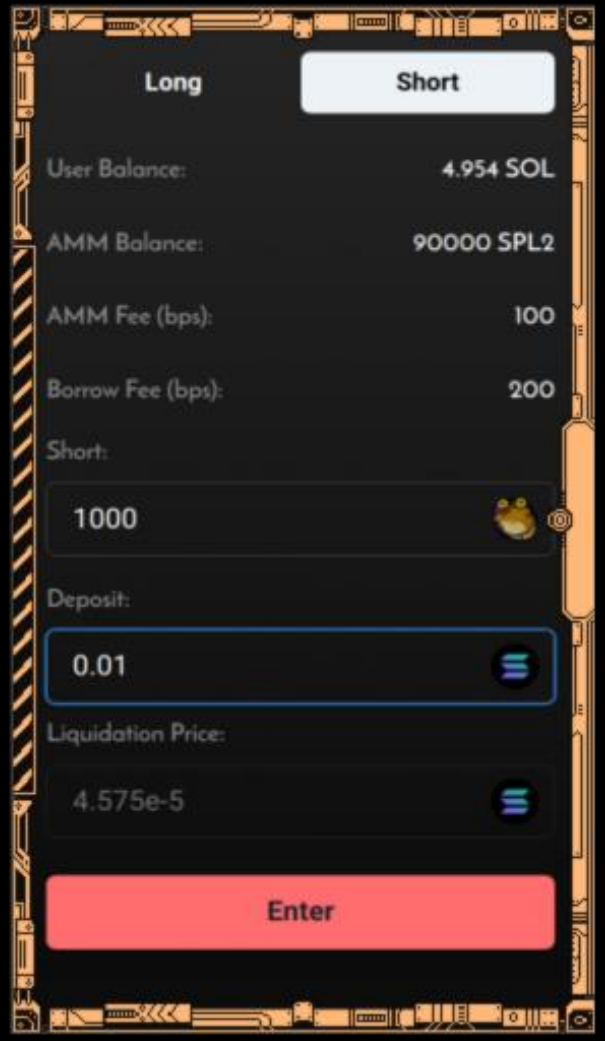
Demo App running on Solana devnet : https://www.daoplays.org/bonkathon2024

Source code for front end: https://github.com/daoplays/blog/tree/main/components/bonkathon

Source code for AMM: https://github.com/daoplays/solana_examples/tree/master/shorts
Source code for Options: https://github.com/daoplays/solana_examples/tree/master/options

Slide deck: https://github.com/daoplays/blog/raw/main/components/bonkathon/Presentation.pdf

Our Solution



Borrow From The AMM

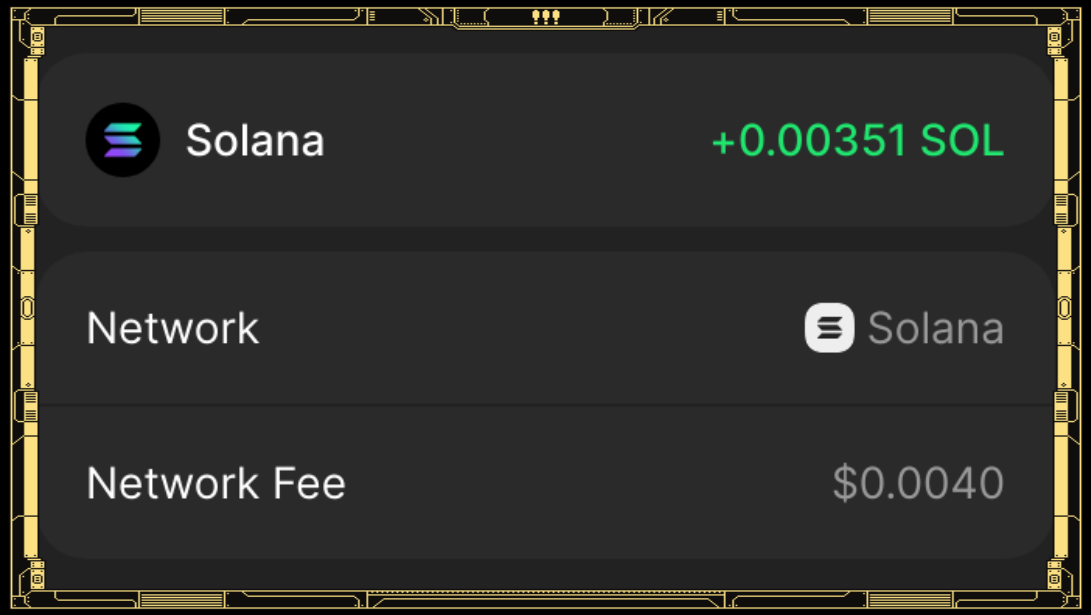
- AMM allocates fraction of its liquidity to a short base pool and a long quote pool for borrowed positions
- User specifies the deposit they want to pay for the position, setting the amount of leverage
- Larger deposit -> More headroom before position can be liquidated but more capital at risk
- Borrow Fees are annualised – The longer you hold the position the larger the fee. Fees collected when position is exited and go to liquidity providers

Our Solution

Powered By Metaplex Core

- When borrowing from the AMM the user receives a core asset as a receipt
- On-chain attributes contain all the metadata describing the position
- Whomever owns that asset can exit the position – they have value and are tradable in their own right!
- Any wallet or marketplace that supports Core will support our borrowed positions out of the box

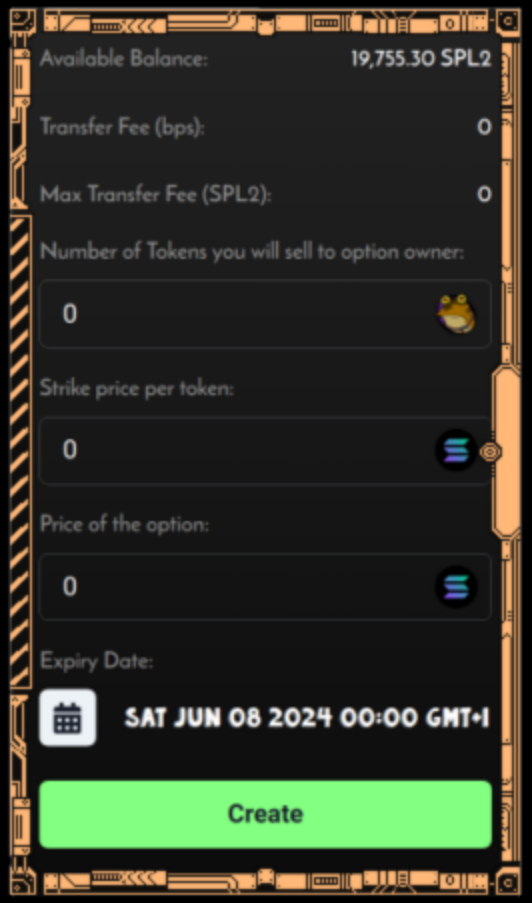
Our Solution



Liquidation Is Decentralised

- Any user can liquidate a borrowed position once it passes its liquidation price.
- They earn the SOL used as rent for the core asset (~0.0035 SOL per liquidation) as a fee.
- Could provide other platform specific rewards to further engage community

Core Is A Powerful Tool



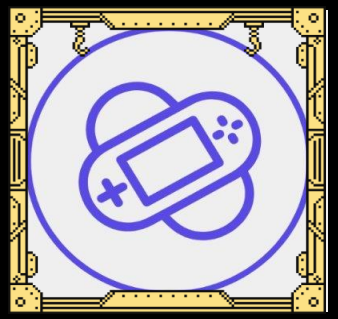
Options Trading Program

- Core asset encodes a Call or Put option
- Option metadata stored as on-chain attributes
- Owner can execute it at any point
- Can be traded on any Core supported marketplace
- After expiry creator can reclaim assets in escrow.

Path To Market

- Initial launch of both options and leveraged trading on MemeFi platform Let's Cook.
- Invite selected DeFi influencers, Developers, and Early Adopters to test the platform and provide feedback.
- Refine product and build initial trust within Let’s Cook community
- Provide additional rewards (e.g. $SAUCE) for liquidators and liquidity providers on Let's Cook to bootstrap AMM pools - similar to platforms like Meteora.
- Partnerships with existing DeFi Projects (BonkSwap, Flux, Raydium etc) to bring leveraged trading to their platforms

The Team



@DaoPlays

- Runs a Solana dev blog at daoplays.org started in 2022
- Developing Solana meme coin token/hybrid launchpad letscook.wtf
- Built crypto projects include push-your-luck dungeon game sol-dungeon.com
- Ph.D. in Astrophysics from Cambridge University with 5000+ citations from published papers and now works in quantitative TradFi.

@DaveR

- Contributing to the Solana ecosystem since late 2021. The first NFT I owned I made myself on SolanArt.
- Established a Solana community and crowdfunded a validator in 2022 (Sentries).
- Has won Solana Hackathon prizes (Gaming) and Honorable Mentions (Consumer).
- Lawyer. Operates own legal office.

@frngs

- Frontend Developer and Technical Project Manager with 4+ years of experience leading cross-functional teams.
- Founded Deez Jobs (deezjobs.xyz), a decentralized freelancing platform built on the Solana blockchain, and Coterie Labs (coterie-labs.gitbook.io, a web/software design and development solutions.

Many Thanks to the organizers!
We look forward to the next

BONKATHON!!!