Flashbots is excited to sponsor a series of prizes at the <a href="EthGlobal NY hackathon">EthGlobal NY hackathon</a> September 22 – 24, 2023. We invite all MEV curious hackers, market design tinkerers, and many more to come hack on these fun challenges and maybe learn some alpha while you're at it

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Don't hesitate to reply to this thread, or reach out to dmarz#8851, sui414 or taarushv in the thackathon channel in Discord if you're participating in our challenges!

Open/Innovation Track - \$1500 - Unveiling the MEV Potential

To seize this prize, construct a project that showcases SUAVE, MEV, or programmable privacy concepts, including but not limited to DeFi, Gaming, or any auction market in real life use cases.

Ecosystem Track - \$2000 - Broaden the MEV Landscape

## MEV GAME

Develop a game which leaks MEV that searchers can compete on to stress test order flow solutions like mev-share or new chains testing their MEV-proofness (see Base leaky mempool). Ideal projects might feature a weakly random encrypted password that challenges searchers to brute force for MEV rewards. Ideally this could easily be deployed on any chain.

MEV-aware Uniswap frontend / Flashbots Protect UX

Produce an MEV-aware Uniswap frontend fork, informing users about potential MEV from their trade and directing them towards MEV-share and showing an estimated refund amount.

Backrun My Oracle (MEV-share for Oracle Usecase)

Craft a system where oracle updates can be auctioned via MEV-share or similar services, promoting transparency and dynamic updates.

All projects in the Ecosystem Track should integrate core MEV principles and tools.

Data Analysis Track - \$1500 - Illuminate the MEV Supply chain

rekt.wtf (MEV Lookup Tool for Uniswap Users)

Construct a info site, with lookup function for anyone to query their past Uniswap DEX Trades' MEV related metrics, e.g.:

- the MEV extracted from MEV Bot;
- · the slippage caused by Trade Collision
- the ideal price on top-of-block, so to compare the execution result.

## Swap Execution Dashboard

Design a simulation bot, to query across major DEX/DEX-aggregators' execution quality based on same trade request, so to help the community understand if really:

- aggregators (e.g. 0x API, 1inch) are providing better quotes than DEX? (e.g. Uniswap)
- meta-aggregators (e.g. DeFiLlama, CowSwap) are providing better quotes than DEX/aggregators?
- is solver system (1inch Fusion, Coswap) providing better quotes than traditional aggregators?

and/or, combine with empirical analysis on historical data:

- How vulnerable are each platforms' orders towards MEV?
- · How are price execution (settled token amount onchain) compared between each platform?

## Mempool Hygrometer

Is the public mempool really drying up, with orderflow moving to private mempool (i.e. each builder's)? With the copy of public mempool dataset, build a website to showcase how the private orderflow landscape look like: by checking the onchain transactions included in each builder's block, and cross checking the public mempool history, we shall be able to identify how much of the flow are public vs private, per each builder. How did that evolve over time? How MEV valuable are they? Add metrics and visualizations to inform the mempool evolution after the adoption of MEV-boost, order flow auctions.