

Basic Details

Project name:

JiffyScan

Author name and forum name (please provide a reliable point of contact for the project):

Name: Aditya Agarwal

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Which Voting Cycle are you applying for?:

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I confirm that I have read the landing pages for the [Builders](#) and [Growth Experiments](#) Sub-Committees and that I have determined my proposal is best suited to be reviewed by the Builders Sub-Committee: [Yes/No]:

Yes

Project Details

What are you going to build?:

JiffyScan is the first (and only) block explorer built for the EIP-4337 ecosystem, enabling account abstraction for EVM chains. It shows the transactions as per the new entities introduced: userOp, Bundle, Bundler, Entrypoint, factory, paymaster, etc. This is helpful for all the participants of the ecosystem: Developers can test out their applications in an easier fashion, for users to easily confirm their transactions, and for researchers to get a holistic view of different participating entities.

You can also check out the [Product Requirement Document](#) for the next iteration (by May'23)

Why is what you are going to build going to succeed?:

- **First Mover's Advantage:** We are the first and only block explorer for the standard and its new entities. We have a POC live and are working on revamping the UI to integrate with wallets.
- **Presence in EIP-4337:** We are actively engaged with all the EIP-4337 related communities, including different wallets, and infrastructure providers, and are being guided by the Eth-Infinitism team (creators of the standard).
- **Team:** The team has been building products in the web3 ecosystem since Oct'21 (>1.5 years). In this span, we have won multiple hackathons on Ethglobal, gitcoin, devfolio, and a few independent ones. Our previous projects made us ETHIndia grantees. We've also got accepted early on in fellowships by polygon and Solana. One of us is also a Kernel BA3 member. Our previous venture was also backed by consensys mesh and protocol labs (through the Tachyon accelerator). Prior to working in web3, our team has expertise in building large-scale data systems at Amazon and Zeta (a banking-tech startup now a unicorn).
- **Low incentive for others to build:** Block Explorers are not easy to monetize products and mainly rely on each chain/community supporting the explorer. Because of this, we expect low competition from new players entering the space.

Is your project likely to bring new builders to the Optimism ecosystem? If so, please describe how:

Yes, with additional tooling and API available for the optimism chain, developers can get started building applications leveraging EIP-4337 with ease on optimism over the other chains.

We're prioritizing Ethereum and Optimism as the first two chains to support and mature the explorer for. This will make it easier for developers to build on these chains over the other chains.

Is your project likely to improve the quality of developers in the Optimism ecosystem? If so, please describe how:

Absolutely, let me show you how! The developers will be able to analyze different UserOperations in a bundle, understand different entities at a granular level, and look at the economics for each party involved. They will get a sense of the wait times and issues faced by previous transactions.

We will also be creating content on how to leverage the standard by showing how to build dapps or integrate with existing wallets and verifying the status on explorer. This will enable more mature and aware developers to build on the chain.

Is your project likely to improve the commitment of developers in the Optimism ecosystem? If so, please describe how:

Jiffyscan is being built as a public good, supporting the ecosystem and looking for support from the ecosystem to keep it alive. We will, first and foremost, lead the way in building for the community instead of building for a venture economy by doing it ourselves. This naturally creates a desire for both community and the project to thrive.

The same will be shared in our communication to projects who want to continue building and can do so by being active and supporting the ecosystem to grow.

Provide us with links to any of the following for the project:

- Demo: <https://youtu.be/1TXkVizCPNA>
- Website: <https://www.jiffyscan.xyz/>
- NewSite (WIP): <https://app.jiffyscan.xyz/>
- Twitter: <https://twitter.com/JiffyScan>
- Discord/Discourse/Community:
- Github: [GitHub - jiffy-labs/jiffy-explorer: An explorer for account abstraction](#)
- Other: [Notion – The all-in-one workspace for your notes, tasks, wikis, and databases.](#)

Do you have any metrics on the project currently? (TVL, transactions, volume, unique addresses, etc. Optimism metrics preferred; please link to public sources such as Dune Analytics, etc.):

N/A. The project is still early stages of development, and the EIP-4337 audit was done a week ago. So it's early to show tangible traction. We do have a few developers reaching organically and showing gratitude for the explorer. We're revamping our infrastructure and have a few paymasters and wallets reaching out for integrations.

Who are your competitors?:

Blocknative recently released a simple user op explorer: <https://4337.blocknative.com/>

They are no mature competitors for EIP-4337 currently.

Existing explorers and tools to understand transactions are best suited to eventually move into this space: Etherscan, Blockscout, and Tenderly are having the most volume.

What differentiates you from your competitors?:

We are providing block explorer views created specifically for the EIP-4337 ecosystem. This standard brings a lot of additional complexities, including new entities such as paymasters, factories, bundles, etc.

A single blockchain now includes multiple individual user operations which are shown as one transaction on existing block explorers.

We will provide a crystal way of understanding the operation relevant to individual users, researchers, and developers.

This will include a clear view of the transaction history of a smart contract wallet, actual gas charged for the operation, and not the complete transaction (or a bundle).

It will treat all different entities of EIP-4337 as first-class citizens while designing the explorer views.

Blocknative only has a simple list of user Operations in the Goerli chain so far. There are many more entities that need to be shown.

Also, we're the only one decoding the transaction input calldata and showing relevant fields from it (already live)!

Will your project be composable with other projects on Optimism? If so, please explain:

Our project will be composable with other dapps and wallets leveraging EIP-4337. Most wallets guide a user to an explorer view to see the details. We would be this link wallet will use.

We also expose APIs for fetching historical User Operations for different entities which can be used by the wallet to show the transactions of a user.

Eventually, we will expose Gas APIs at the bundler level which can be used by dapps developers to charge appropriate

fees.

Team

Who are your founders?:

Aditya Agarwal (Co-Founder & CEO):

Previously co-founded [HighFi.me](#), a decentralized wallet-to-wallet messaging platform backed by Consenys Mesh & Protocol Labs through the tachyon.xyz accelerator.

A Devcon Bogota scholar has been building full-time in the web3 space for >1.5 years. During this time has won multiple hackathons, including hack money, roadtoweb3, arbitrum Bogota, etc.

He has also carried worked on grants by Uniswap Foundation to improve their subgraphs.

Prior to getting into web3, he was the first data engineer hired at [Zeta](#), a banking tech startup, which was a unicorn by the time he left.

Gautam Sabhahit (Co-Founder & CTO):

Previously co-founded [HighFi.me](#), along with Aditya.

A polygon Fellow, and has won multiple hackathons alongside Aditya. He started Jiffyscan in EthIndia in Dec'22 and won a bounty on Ethereum Foundation for it.

He has been curiously participating in the blockchain industry for over 2 years and is a Kernel BA3 member and polygon India fellow.

Prior to entering the blockchain industry full-time, he was working as a Full-Stack Engineer in Amazon for the Amazon Pay department.

Note: In October'22, both the founders decided to halt their previous venture, returning 62% of the funds they had received from the accelerators in order to work on products that excited them (core-engineering problems), even if not venture-backable and decided to rely on hackathons and grants to take things forward.

What makes your founders well-positioned to accomplish your goals with this project (1-2 sentences on each)?:

History of building, quality engineering products rapidly and early in the market. We're efficient self-learners and will mountains to grow a new initiative we believe in.

We also have established networks within the industry with folks leveraging EIP-4337.

Tell us about the rest of your team (if there are more teammates):

Currently, we only have a designer Martins Zemlick, from Latvia, working part-time on the project.

He's been an enthusiastic designer for 11+ years and has worked for many fintech companies in recent years. He's been exploring web3 design space for 1 year now.

We do have access to multiple developer communities (for eg: eth India/devfolio in India being a grantee, developers from Devcon Scholars, etc) to leverage and build the right team in due course.

As of last week, a fellow enthusiast has started supporting us over weekends with FrontEnd development.

Is this your first Web3 project?:

No, we've tried our hands on multiple web3 projects before this.

If not, what else have you built? (Share links, Github repository, or any other useful information.):

HighFy: A end-to-end encrypted, fully decentralized web3 messaging system. <https://highfy-me.vercel.app/>

Github: [GitHub - vintageplayer/highfy-me](#)

MetaLeap: NFT Renting & Access Management Protocol: [GitHub - HighFiMe/meta-leap-pilot](#)

JointNFT: NFT Fund Manager SaaS: A protocol to let people pool together money and invest into NFTs passively by having a fund manager to manage the trades. Github: [GitHub - JointNFT/jointnft-dapp](#)

I understand that Builders grants are subject to a 1 year lock-up, as explained further in [this post](#): [Yes/No]:

Yes

Is your project funded? If so, provide an estimate of how many months of funding runway your project has:

No, we're bootstrapped and have not picked up any form of external monetary support yet. We're working on getting a grant from Ethereum Foundation through their currently open AA grants round. Though we're working on wallet integrations already and are committed to working on the project at least throughout 2023 by bootstrapping, and maybe winning couple more hackathons if push comes to shove.

Grant Request

What is the size of the grant request? (50k OP max):

46k

How do you justify the size of the grant?

This project will require the support of quality engineers interested in understanding lower-level details of how a transaction is processed and stored by a node.

We will also need engineers to host and manage the infrastructure to run the explorer stack.

For meaningful adoption, we need to experiment with creating user-friendly, easy-to-navigate designs for the different types of information shown.

Since AA is very early, the team will also focus on creating content for developers to understand EIP-4337 and gets hands-on with it immediately, rather than just conceptually.

To make this happen, we will require contributions from quality engineers, designers, and dev-rels over an extended period of time.

The tokens from this grant will be used to attract quality contributions and reward them for their support.

30k OP for Team & Engineers

5K Op for Support & maintenance operations

5k OP for Design contributions

6k OP for Content Creation and Awareness, Hackathons

Roadmap

Describe in discrete steps your plan for accomplishing your project:

Each milestone shared below will be implemented in the following iterations:

1. Generate in-depth specs for the data to represent and factor in feasibility within the tech architecture/resource limitations. This could involve interacting with other wallets, bundlers, and researchers. (A detailed PRD will generally be created for each). This will involve getting feedback from a small set of beta users for each release on the upcoming feature set
2. Implement the backend/graph logic to provide the new/updated APIs.
3. Iterate over the design for the specific view.
4. Update the front end using the design prototype and API details.
5. Get feedback and fix make minor enhancements and bug fixes

The project updates will be shared regularly on relevant channels.

Please provide any additional information that will facilitate accountability:(smart contracts addresses relevant to the proposal, relevant organizational wallet addresses, etc.)

We don't have a smart contract. Though we are doubling down on building in public and will be sharing all progress actively over Twitter (at least weekly if not more often). You can also check our GitHub repo for active commits and the Notion Doc for other discussions and research which we are updating actively.

We are committed to building JiffyScan, a product that is very useful but extremely tough to reliably monetize, and bootstrapped for 3+ months now.

Does your plan depend on the receipt of OP tokens?:

Yes, to a major extent, we will need ecosystem support to keep the project running. So the OP tokens will help hire

engineers and help the project grow and continue doing a good job.

What is your plan for the use of the OP token after the 1 year lock-up?:

It will be used for further research, continued infrastructure cost, paying for project members, and sponsoring hackathons to encourage new builders to try out the APIs.

Please provide benchmark milestones for this project. These milestones should guide the Optimism community on the progress of your project during the 1-year lock-up period.

1. Showing details of User Operations for Optimism-Goerli
2. Add HighLevel Information about the new entities: Bundlers, Factories, Paymasters

This will at least list/explore all bundles created by a bundler, smart contract wallet creations by the factory, and paymaster-sponsored transactions.

1. Revamp UI to make the experience close to the quality of existing explorers.
2. Enrich data shown for a UserOperation

This should include a better representation of the various gas costs of the individual operation in a bundle.

And the decoding of the transaction input triggering the userOperationEvent

1. Show usage Metrics. Eg:

Number of EIP-4337 wallets created,

Avg Gas Cost per UserOp

Avg Daily UserOperations

Fees Collected by Bundlers

1. Add support for Optimism Mainnet
2. Enrich data for Bundlers, and Paymasters: This could include additional stats, staked amounts, and user balances at the paymaster level.
3. Implement Partial Transaction Decoding

For the top contracts interacted with, will need to collect the ABIs to decode the calldata and show it on the explorer.

1. Create an ABI cache infra to run transaction decoding at scale optimally
2. Setup a Node
3. Display non-EIP-4337 transactions where the receiver is a smart contract wallet
4. Work on generic call data transaction decoding by running trace_calls.
5. Show internal Transactions
6. Display Smart Contract token balances

Post this we will expand to hosting bundlers and userOp mempool. The p2p bundler is still under development and by the end of 2023, we should be at the right point to work on providing visibility on the userOp mempool state.

Please define critical milestones for this project. Critical milestones are meant to show good-faith efforts to accomplish the project. Non-completion of these milestones could lead to revocation of remaining grant rewards.

Milestone 1 (ETA- Apr'23):

Release an MVP for exploring user operations.

Benchmark Milestones included: 1,2

Milestone 2 (ETA- May'23):

Release a more user-friendly interface and enrich details for a better developer experience.

Benchmark Milestones included: 3,4

Milestone 3 (ETA- Jun'23):

Make it easy to understand how the space is growing.

Benchmark Milestones included: 5,6

Milestone 4 (ETA- July'23):

Bring the explorer closer to the level of existing mature explorers.

Benchmark Milestones included: 7,8,9

Milestone 5 (ETA- Aug'23):

Setup up a node and decode call data for specific wallet implementations.

Benchmark Milestones included: 10, 11, 12

Milestone 6 (ETA- Jan'24):

Setup up a node and show all transactions and token balances for the smart contract wallet.

Benchmark Milestones included: 13, 14

Milestone completion will be updated on Project's Twitter and to the a thread on the governance forum under [Grant Updates - Optimism Collective](#)

Optimism Relationship

Does your project solve a problem for the Optimism ecosystem?:

Yes! Developers, researchers and users of EIP-4337 have to navigate multiple different screens and filter through different events logs and decode to understand what exactly took place in a specific user op.

They will still have to do additional calculations manually to start understanding actual gas costs for a particular userop in a bundle. They have no easy way to explore transactions at a factory or bundler level.

How does your proposal offer a value proposition solving the above problem?:

We treat all entities in EIP-4337 as first-class citizens in JiffyScan and have views custom-created solely to give a better UX and custom metrics of this standard.

Why will this solution be a source of growth for the Optimism ecosystem?:

EIP-4337 is a step towards better UX in EVM ecosystem and is set to be the catalyst to onboard the next large wave of users in web3. It will also make wallet interaction easier, secure. Wallets/Dapps building on optimism will be able to onboard these users to Optimism ecosystem.

How committed are you (and your team) to building on Optimism?:

We're prioritizing ethereum and optimism chains over all others. With or without this grant, we will role out all new updates for these two chains first. We're 100% committed to supporting Optimism and helping it grow.

Is your project Optimism Native?:

In a manner of speaking. The explorer data is specific to each chain, and thus information on userOps submitted to the optimism chain will be considered optimism native, i.e, strictly for users of the chain.

Confirmations

I understand that I will be required to provide additional KYC information to the Optimism Foundation to receive this grant: [Yes/No]:

Yes

I understand that I will be expected to following the public grant reporting requirements outlined [here](#): [Yes/No]:

Yes