

Author:

Saikat Karmakar

GitHub: [@aviksaikat](#)

About You:

I am a software engineer with extensive experience in Python development. I hold a Bachelor's degree in Computer Science and have been actively involved in open-source projects related to blockchain and decentralized applications. My expertise lies in developing Python libraries and tools that simplify complex data structures and enhance interoperability within blockchain ecosystems.

Additional Links:

Twitter: [@Avik_saikat](#)

Similar Projects:

- [GitHub - alienrobotninja/bee-py: Python client library for connecting to Bee decentralised storage](#)
- [GitHub - Aviksaikat/swarm-cid-py: Utility library written in Python to convert Swarm hex references into Swarm CIDs](#)

Grant Category:

Core Development

Grant Description:

This grant proposal aims to fund the development of a Python module for AppData schema definitions, providing Python developers with easy access to AppData schemas used in the CowProtocol ecosystem. The module, named AppDataPy, will include Pythonic representations of AppData schemas and utilities, enabling developers to work with AppData schemas seamlessly using Python. AppDataPy will support Python 3.9+ versions and will follow the latest PEP standards and industry-standard practices. It will utilize tools such as mypy, Ruff, black, isort, and will be managed with a separate build tool like Poetry, Hatch, or PDM to ensure code quality, readability, and maintainability.

Grant Goals and Impact:

The primary goal of this grant is to create a robust and user-friendly Python module for AppData schema definitions. AppDataPy will empower Python developers to integrate AppData schemas into their applications effortlessly, thereby fostering interoperability and collaboration within the CowProtocol ecosystem. The successful execution of this grant will benefit users, developers, and the broader blockchain community by enhancing accessibility and enabling the development of innovative decentralized applications.

Milestones:

Milestone

Due Date

Payment

Milestone 1

[TBD]

\$2000

Milestone 2

[TBD]

\$2000

Milestone 3

[TBD]

\$1000

Milestone 1: Understanding AppData Schema Definitions (Week 1-2)

- Study the documentation of AppData schema definitions

- Identify key features and specifications for Python module development
- Anticipated Outcome: Clear understanding of AppData schema definitions and their relevance to Python module development

Milestone 2: Module Architecture Design (Week 3-5)

- Design the architecture of the AppDataPy module
- Define Pythonic representations for AppData schemas and utilities
- Anticipated Outcome: Well-defined module architecture and representations for seamless integration

Milestone 3: Development and Testing (Week 6-9)

- Implement core features: AppData schemas, utilities, and constants in Python
- Conduct thorough testing of module functionalities
- Anticipated Outcome: Fully functional AppDataPy module with comprehensive test coverage

Funding Request:

Total Funding Requested: \$5,000

Budget Breakdown:

- Development: \$3,000
- Testing: \$1,000
- Documentation: \$1,000

Gnosis Chain Address (to receive the grant):

0x4031D2b95971607F49f5d13f588c64373397340D

Other Information:

N/A

Referral:

N/A

Terms and Conditions:

By submitting this grant application, I acknowledge and agree to be bound by the CowProtocol DAO Participation Agreement and the CowProtocol Grant Terms and Conditions.