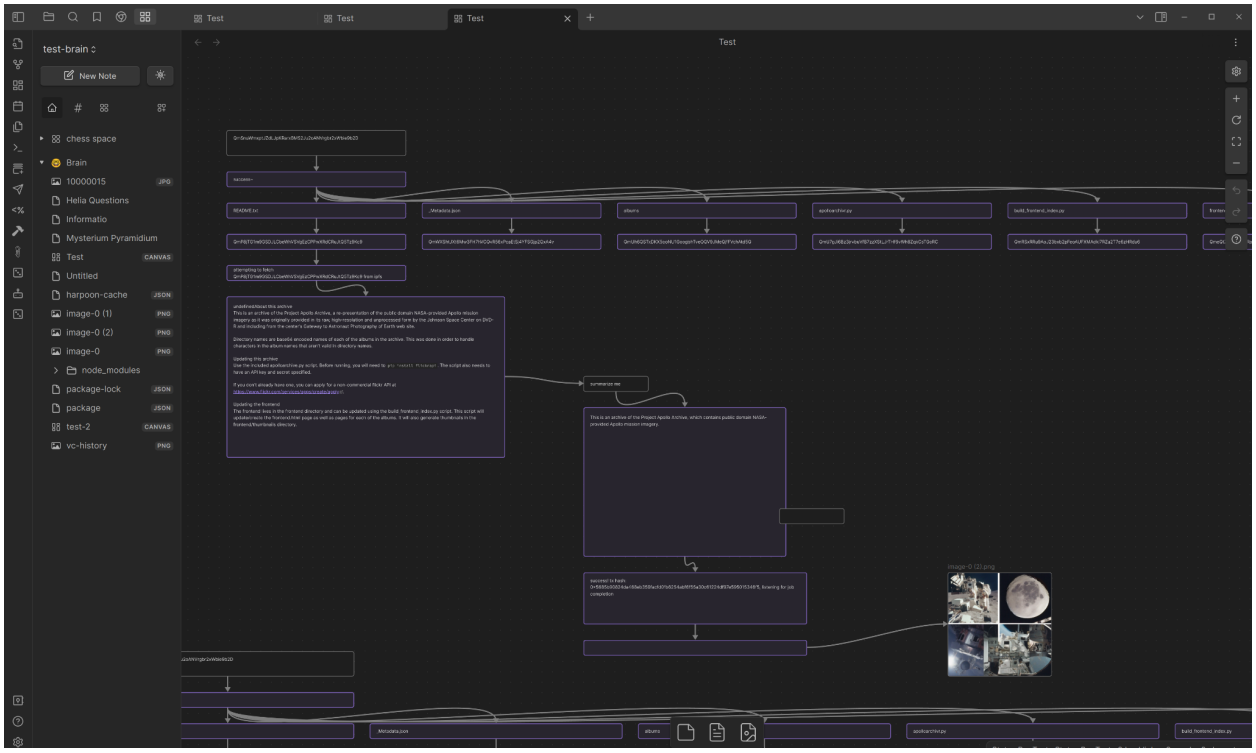

Obsidian-Desci: Decentralized Science Toolchain for Obsidian.md

09.27.2023

Taylor Hulsmans
12445964 Canada Inc.
2315 22a st nw
Calgary, Ab T2M 3X6

Team

Taylor Hulsmans- BA Economics, Blockchain Programmer.

Taylor Hulsmans received his Bachelors in Economics from the University of Calgary in 2016 while learning to code in his spare time for the purposes of creating blockchain based financial games on the ethereum blockchain, which he has been doing since 2018. His code has been trusted with hundreds of millions of dollars in TVL, and his innovative mindset has penned-to-papered several novel financial algorithms. Currently he sees the greatest potential for real world blockchain use cases on the Filecoin-Bacalhau tech stack, that can enable an environment for AI/Ml creations that can compensate its contributors.

Overview

The Scientists Digital Toolchain lacks composability, verifiability, and incentivization. Web3 tools exist that can overcome these challenges but lack a pathway into existing tool sets and often possess a knowledge hurdle too big for the busied schedules of academics. Obsidian-Desci brings web3 integration into a popular tool scientists are familiar with obsidian.md. An infrastructure is created that brings Web3 to Scientists, instead of Scientists to Web3. One can now execute Edge Compute Jobs from smart contracts inside note taking software, fetch and create IPFS content, Collaborate in real time over IPFS pubsub over webrtc, coordinate datadao operations visually and store on Filecoin through the FEVM, and integrate the variety of desci applications with existing tools the scientist is already familiar with. This is how Decentralized Science will get done, This is how we incentivize the next generation of AI/ML tools where contributors get compensated.

1. Provide a graphical interface that allows for the visualization, organization and composition of various desci and cesci applications through Ipfs, libp2p, webrtc, fevm, bacalhau, lilypad, and filecoin
2. Draw on the nodes visual programming paradigm to make it clear what data/functions a node exposes and how it can be strung together with other nodes

Milestones

I. Lilypad Integration

Execute edge compute jobs by calling a smart contract, right from Obsidian. Create a custom kamu bacalhau job to coordinate sql streaming of datasets. Work with Labdao to showcase the Protein folding workflow in Obsidian.

II. IPFS Api, integration with Obsidian Sync

Underpin Obsidian Sync functionality with IPFS behind the scenes, implement multiplayer canvas with IPFS pubsub over webrtc.

III. DataDao Toolset

Demonstrate how datadaos can coordinate with Lilypad and Ipfs pubsub to create novel AI/ML tools that they can deploy to earn and distribute compensation

Timeline

I want to parcel off a years worth of development time to drive desci integrations, solicit product feedback, and prove the tech stack

Associated Projects

Desci Labs, Kamu, LabDao, Desci Montreal, DesciToronto, IPFS, Filecoin, Lilypad, Obsidian.md