# Project Vesper

\*\*Using blockchain to capture the essence of digital art\*\*

## Ideas behind Project Vesper

The idea behind Project Vesper: provide a platform for the creation, distribution and validation of genuinely unique digital art.

A philosophy which is often heard about Bitcoin is that its value is partially attributed to its scarcity.

The value of a piece of art, monetarily or emotionally, may also be partially attributed to its scarcity.

Digital art has some difficulty maintaining the attribute of scarcity - one can simply "copy and paste". The idea of a Non Fungible Token (NFT) provides one way to help create a sense of uniquenesss; indeed, recent activities in the world of cryptoart show that the idea has some merit. It is often heard that the value of a thing is "in the eye of the beholder". Holders of art NFTs may enjoy the fact that the art can profilerate and gain public awareness - this raises the value of the NFT for like-minded individuals. Perhaps incoming generations will adopt that mindset especially if integration with the virtual world increases. Also, commercial and legal interests may come into play more and more if NFTs are to be considered as the virtual equivalent of a copyright, maintained via registration on a blockchain.

Whilst the arguments above may hold sway for some (especially where commercial interests are involved), for others, the ownership of digital art via an NFT may not be enough. The bond required to accept originality has a higher threshold for them and needs to tick certain pyschological parameters. In fact, as with NFTs, there are likely variations in accepted thresholds (and time and peer adoption may have an impact). Despite this, could we learn from the lesson of Bitcoin, cryptocurrencies in general and even the NFTs themselves? Is there a way to capture and encapsulate the uniqueness of digital art? Does direct involvement of blockchain technology on art hold any clues? Does the vocabulary of artists and the art world also hold the key to modelling an artist's unique creation in a digital world?

An aside, let us consider for the moment the concept of mining in the real world and within the bitcoin system.

Real world mining can be a simple act or a full scale industrial operation involving surveyancing, planning, drilling, digging etc. Whatever the steps involved the goal of the endeavour is to spend energy locating and then extracting a resources which then undergoes further purification to produce a thing of value. In fact, we can argue that if something has some inherant value, then the mining process amends that value further (in whatever guise that may be). Metaphorically, a miner has encapsulated time, energy and money within the extrated item to provide a value deviation on the raw untamed resource.

Now the bitcoin mining process is not, on face value, like the real world process. The likeness to real mining though is striking. No actual drills or diggers are used, real machines and electricity are used. Dirt is not dug up and cast aside, but computers sifted through numbers and then cast aside within their program. As for the comparisons to the purification process: when the program on the mining node finds a suitable number (after the sifting process), it send the number to undergo a community level validation process (a consensus mechanism) which, if successful, results in the reward of a bitcoin. Whilst this is by no means a pefect comparison, it does illustrate the point: the term "mining" is used in bitcoin because the underlying models of tangible vs virtual have strong correlations.

This begs the question, what is the true underlying model for a piece of art? Perhaps it is not a single question - as above, one person's "art" is another person's "garbage" - but if we can incorporate more behind ideas from the philosophy, history and psychology then our correlation between virtual art and real world art may begin to narrow.

So back to the idea behind Project Vesper. Its aim is to create a platform for the creation, distribution and validation of genuinely unique digital art. Early iterations may be crude but the goal is to capture the essence of art so that it can truly exist in the digital world.

## Some thoughts on how to acheive our goal:

### What makes a portrait unique or valuable?

- A link to the original painter. Author marks.

- Its accepted age. Markers of degradation and destruction may attest to its age. Idea of a lifespan.

- Its place in history. Documentation trails and witness statements, as well as destructive markers

- Restorative and protective measures.

- Original vs a print run. Uniqueness in both, but brushstrokes may not be fully copied. Also identifying marks added.

- An exact replica is not possible on the original (even on prints)

- The item is actually "alive" as the environment acts on it i.e. it ages

### Can we map these?

- Degradation: apply random colour distortions over time

- Restoration: (with effort and cost) “reverse” some of those changes

- Brushstroke: make the contract a mini-art platform or a canvas – artist captures its history, like git for code … or like transactions on chain. This will form part of a final digital signature, will ultimately become part of the image (e.g. a 15px border mark of authenticity added to every image – but the frame would be build from hashing of previous transactions)

- Story of what/who the image has seen: rather than consider the history of the piece (which is interesting) the piece is valuable because perhaps we consider the piece as “living” in time. Its not that the portrait has a history, perhaps it is that the portrait has lived an captured a moment – e.g. the paint has absorbed the air of a revolution, absorbed the molecules of luxurious food particles as it hung in the great hall of a palace. Can our digital art do the same? We can capture the transactions of new owners and evolve the embedded digital signature. The digital image will therefore never be static – giving credence to the fact that you can’t just copy and paste. You can capture and copy – but the original has moved on.

## Actual Considerations:

Chain related:

- Vesper DigiArt NFT on ETHEREUM Avalanche

- NFT Register

- DigiArt Builder/Transactional “Store”

- Vault/Gallery

Backend:

- Transactional API

- Payment Gateways (crypto and fiat)

- Blockscan (use an API)

Philosophy:

- Uniqueness of art (history and signature integration)

- Ageing process

- Restoration and Maintenance of Art

- Classification of Art

- Inheritance (actual ownership or lifetime lease – lost pieces??ability to uncover/recover like archaeological art)

- \* last point – “mined” art

- Platform education

- UX/Human behaviour – community responses

Art Market / Art Investment:

- Opportunities in the space

- growing interest in the space in the media and public conversations

- Auction market

- Microtransaction market

- New chain-related art tools (chain = canvas)

- Disruptive views on art and collectibles

- Disruptive views on existence (e.g. AI, VR, AR) – and hence were we place value and decide what is “real”

- NFT interactions with other tokens???

- Transference

Vocab

- New vocab being used in space

- New vocab to bring/market to space

- That is tied to concepts also.

Other Non-Art but general trends:

- The Great Reset

- Centralised vs Decentralisation

- Disruptive economic and governance models

- DeFi, ICOs, ISOs

Ideas to develop/build:

- Vocabulary list

- Art trading platform

- Help/Guidance

- Presentation

- Unique and semi-unique tokens

Aside:

- Access for owner vs control of access by public (consider levels of access?)

- Custodial facilities?

- Ability to create personal galleries?

- Art standards?

- Art regulations?

- Art Model? (As in business/statical/psychological model of the art sector)

- Just “paintings” (images) – or can idea be extended?

FEATURES TO CONSIDER/EXPLORE/BUILD:

Billing:

- Crypto billing – chain integrations

- Crypto billing – node integrations

- third party dapps integration

- Traditional finance payment systems

- Invoicing/Accounting/Crediting system

- Fee documentation

- Fee structure (options for subscriptions) \*is this relevant?

Blockchain:

- Smart contract deployments

- Smart Contract auditing services

- Chain governance/voting integration tools

- Dapp maintenance area (we provide dapps but host on behalf of others)

- “YOUR” DeFi project (or other service to provide)

- Onramp – wallet creation

- Custodial of keys / or not

- KYC form ?

- Security/Auth

Coding/DevOps:

- (UI) Code pipeline … (web only? App? Progressive App?)

- (Backend) Code pipeline (use same as UI?)

- Smart Contract pipeline

- Security/Auth

Links of interest:

- https://www.bbc.co.uk/programmes/p099tk4k

- https://www.bbc.co.uk/programmes/p099drz7

- https://www.forbes.com/sites/youngjoseph/2021/03/29/nft-market-rages-on-nfts-market-cap-grow-1785-in-2021-as-demand-explodes/?sh=3b08f5327fdc

- https://www.vogue.com/article/nft-art-women

- https://www.researchgate.net/publication/314462222\_The\_Computer\_Medium\_in\_Digital\_Art's\_Creative\_Process

Other:

- Dispute mechanism