

Ethereum Clock Overview

Summary

Brainchild aims to bring gamification of NFTs to our physical world via Services-as-a-NFT and project their identity through the cryptoverse. We seek to collaborate with artists and brands to help token holders build their identities and express their individuality within and beyond the cryptoverse.

Token holders will be able to:

1. Redeem - Regularly redeem the physical manifestation of their NFT.
2. Enhance - Interact with our smart contract to enhance their NFT via a probability distribution.
3. Participate - Exclusive access to future mints as well as real-world privileges and events.
4. Vote - Determine what the next product will be, and lock-up period for redemption.

All projects will be open-sourced and resources will be dedicated to integrate token's 3D models and renders into major open-source virtual worlds.

Terms

Redeem:

Token holders will be able to physically receive their token product periodically, different products will have different lock-up periods to prevent abuse. E.g: Ethereum display clock will have a lock up of 3-months

Enhancement:

Token holders will be able to enhance their token to a cooler, rarer and superior version of their product by interacting with our smart contract. They may also fail to enhance causing the NFT to be locked at its current state, given a free redemption regardless of lock-up state, or win the jackpot and mint a god-tier gold version of their NFT. E.g Ethereum display clock +0 enhanced to Ethereum display clock +1, probability of success is 80%, probability of failure 10%, probability of redeem 9.9%, probability of gold mint 0.1%

Participation:

Token holders will be able to participate in future mints, as well as gain access into private events and real world privileges. E.g Ethereum display clock NFT holders will be able to gain access into Brainchild community and private events.

Vote:

Token holders will be able to vote on the next drop and decide its features. E.g Ethereum display clock NFT holders get to vote on future products' features, designs and more.

First NFT Drop: Ethclock

Ethclock is our proof-of-concept NFT, a collection of 5000 NFTs that are perpetually redeemable and gamified. We aim to have a fair launch mechanism, a raffle without gas war and limited quantities per wallet address.

Mint price is 0.12 ETH

Fairmint Raffle: Ethclock

We aim to avoid a gas war via a raffle, promote inclusiveness by collecting signatures within 24h period (timezone agnosticism), and only allowing 1 mint per wallet to prevent whale-hoarding. Our process is heavily inspired by [Paradigm's influential research](#).

In the spirit of 420s and 69s, the closest magic number we got to is 4206.9 which translates to 4207 for the Fairmint Raffle. 697 will be reserved for community building, give-aways, events and promotion. However, the actual number will be lower as we enhance Ethclocks to higher levels for our give-away events.

Ethclock	Quantity	Percentage
Fairmint Raffle	4,207	84.14%
Community Building	697	13.94%
Team/Treasury	96	1.92%
Total	5,000	100%

1. Signature collection

We will collect wallet signatures that interact with our smart contract within a 24 hour window. Fairmint Raffle date is estimated to be early-mid December 2021.

2. Raffle

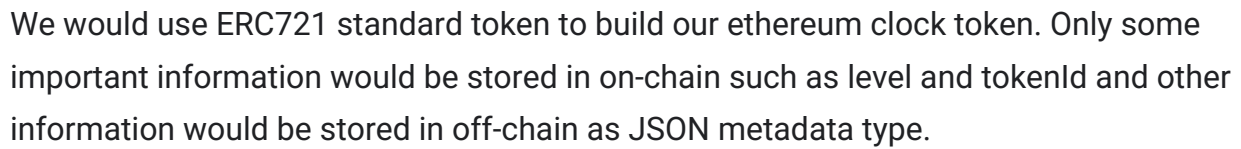
Using Chainlink VRF, we will randomly whitelist 4207 wallets; these whitelisted wallets will be able to mint Ethclock by sending 0.12 ETH during the next phase.

3. Minting

Whitelisted wallet will be announced on our community channels and website, alternatively, you can also connect your wallet via metamask and find out if you have been whitelisted. You will have 48 hours to mint up to 3 Ethclock directly into your wallet by sending 0.12 ETH for each ethclock. Excess ETH may or may not be refunded, please do not send any amount other than increments of 0.12 ETH excluding gas fees.

4. Metadata Reveal

We will do a full collection metadata reveal once all 5000 Ethclocks has been minted. Using Chainlink VRF, all metadata rarity will be randomised. This prevents sophisticated actors from sniping only the rarest piece, ensuring a Fair-mint event.



The smart contract portion of the Ethereum Clock project currently consists of three main contracts - Ethereum Clock Token, Redeem, Enhancement.

1. Ethereum Clock Token

This contract would work as our basic token contract. It would contain crucial variables and functions for token logic.

2. Redeem contract

This contract is used for redeem action; it includes all functions to validate and run for redeem action. We pass on the delivery and logistic fees to the user, which is estimated to be maximum of 0.009 ETH, the physical clock itself comes at ZERO cost to the Ethclock NFT owner.

3. Enhancement contract

This contract would support all functionalities related to enhancement.

The cost to enhance follows the function below:

$$\text{Cost to Enhance} = \text{Gas fees} + 0.001 * \text{Target level of enhancement} / \text{Efficiency}$$

For example, the cost of enhancing from Ethclock+4 to Ethclock+5, given that the Efficiency trait of this NFT is 3, will be “0.001*5/3” which is 0.0167 ETH excluding gas fees.

If the token is enhanced successfully, we would burn the token with old token Id and mint the token with enhanced token Id. When we mint, generate a new token URI so that the token can get new JSON metadata including upgraded traits and token image.

Outcome	God-tier	Failed	Frozen	Charred
Probability Function Coefficient	0.10%	3.00%	2.00%	10.00%

Outcome table

Level (n)	Enhance	God-tier	Failed	Frozen	Charred
1	91.57%	0.10%	3.00%	2.00%	3.33%
2	82.42%	0.20%	6.43%	4.29%	6.67%
3	72.96%	0.30%	10.05%	6.70%	10.00%
4	63.29%	0.40%	13.78%	9.19%	13.33%
5	53.47%	0.50%	17.62%	11.75%	16.67%
6	43.51%	0.60%	21.53%	14.35%	20.00%
7	33.45%	0.70%	25.51%	17.01%	23.33%
8	23.29%	0.80%	29.55%	19.70%	26.67%
9	13.04%	0.90%	33.63%	22.42%	30.00%
10	2.72%	1.00%	37.77%	25.18%	33.33%

Following the result, call specific functions - `godTier()`, `enhance()`, `failed()`, `frozen()`, `calculate()`, `charred()`

n is the target level of enhancement (only allows the next level to be targeted, we don't want a case where a sophisticated user can call the enhance function and target another level, allowing them to skip the levels in-between).

Traits

Random traits in tokens determining rarity:

- **Environment**

Each Token will have a different background environment. This may translate to the physical Ethclock in terms of LED backlight for some levels.

- **Shine**

Each token also has a Shine level of 1 to 5, which will translate to different material used in some parts of the physical clock.

- **Efficiency**

Each token has an Efficiency score of 1 to 5. The higher the Efficiency, the lower the cost of enhancement.

FAQ

What is BrainchildNFT?

We collaborate with promising artists and design studios to provide an elevated experience for users across physical, digital and crypto space. BrainchildNFTs will be perpetually redeemable, gamified through enhancement and available in major metaverse & digital galleries.

What is Ethclock?

Ethclock is the first brainchildNFT collection of 5,000 luxury clocks. Set yourself apart from traditional luxury watch, furniture and wearables. Immerse yourself in the new age of luxury.

When do Ethclocks go on sale?

Brainchild will hold a fairlaunch raffle for Ethclock, estimated to be in mid-December 2021.

How many Ethclocks are available?

Ethclock is a collection of 5,000 NFTs with built-in deflationary mechanism via “Enhance” feature.

4,207 will be available for public sale during the fairlaunch raffle.

697 will be reserved for community building .

96 will be reserved for the team and treasury.

How do I buy Ethclock?

Public sale will be held in mid-December 2021 (estimated)

The fairlaunch raffle will be conducted in 3 stages:

1. Signature collection – wallet signatures will be collected within a 24 hour window.
2. Raffle – Using Chainlink VRF, 4207 wallets will be whitelisted for minting. Winners will be

announced on our website and community channels. You can also connect your wallet to find out if you have been whitelisted.

3. Minting – You will have 48hours to mint up to 3 Ethclock per whitelisted wallet.

Any unminted Ethclock will be raffled away by repeating the stages above in each subsequent week.

When is the reveal?

A full collection metadata will be revealed once all Ethclocks has been minted. Using Chainlink VRF, all metadata rarity will be randomised. This is designed to prevent sophisticated actors from sniping/minting only the rarest pieces, ensuring a fairmint event.

We take inspiration from the fine research paper done by Paradigm's Anish and Hasu. (hyperlink the research paper: <https://www.paradigm.xyz/2021/10/a-guide-to-designing-effective-nft-launches/>)

Will rarities matter?

Rarity is relative to the beholder's eye. The deflationary mechanics via enhancement will ensure that the number of NFT and redeemable NFT will decrease as the community unlock higher level of Ethclocks. The randomised traits such as RGB and Shine will affect digital and physical appearance, while Efficiency will determine the cost of enhancement.

What rights do I get as a BrainchildNFT holder?

A BrainchildNFT holder will be privy to private community events and receive advantages in future NFT mints. You will also be able to steer the direction of BrainchildNFT project and future drops.