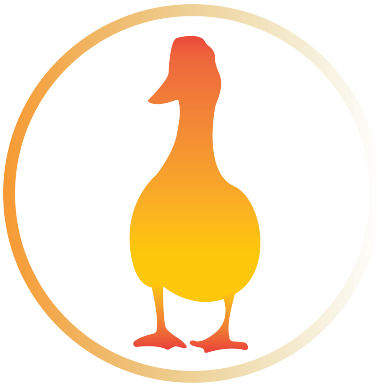

Pondpaper - NFD (Non Fungible Ducks)

$DUCK

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15 June 2021 - V1.0.1 - Amendments to Initial Release,
Buyback, Hackathon, Contract Addresses

Contents

0.1 Abstract

Pondpapers are released as a project specific headline, usually before the project is live. Users should get a basic understanding of the product being delivered.

A Non Fungible Token (NFT) is an indivisible asset that can be created, stored and retrieved from the blockchain. NFTs store metadata containing information about the token's instance and the creator's address enabling decentralised applications to verify ownership.

Like its algorithmically generated Ethereum counterparts, Non Fungible Ducks are 8192 unique $DUCK NFTs that will be minted on the Zilliqa blockchain.

Zilliqa allows for cheap and transparent smart contract execution at scale which is imperative when trying to normalise blockchain technologies.

0.2 Project: Non Fungible Ducks

This document is subject to future changes by the team. Nothing in this document is final.

0.2.1 Introduction

A Non Fungible Duck (NFD) is an NFT minted on the Zilliqa blockchain via a decentralised application. The NFT contains an image of a duck with a unique set of a base, hat, eyes, beak, and an outfit. There are 25 bases, 25 beaks, 23 hats, 24 eyes, 26 outfits. This equates to 8,970,000 possible combinations of ducks (0.0913% of the potential combinations when choosing a unique set of 8192 at equal weightings for rarities).

Each piece attribute has varying levels of rarity. For example, when rolling a common item, there are more positions containing these items compared to a rare item. The base has a slightly different mechanism where there is a chance to get an upgraded rarer base when rolling most bases.

Once the user's NFD is generated, the user will be able to view its attributes and their respective rarities in their personal collection via the NFD store. A page of all the minted NFDs will be available for all users to browse.

Users can pick a name for their duck which is stored on the blockchain, not as metadata. If users want to change their $DUCK name then a cost of 30 ZIL is required to do so. A duck's name can be a maximum of 25 characters. Users can select any name they like, as long as it's not offensive or obscene. Advertising is permitted. Users who repeatedly create offensive names are blacklisted from renaming or transferring their duck and will have its name overwritten.

0.2.2 NFD attributes

Ducks are created by an algorithmic generator that uses random numbers sent by *anu.qrng*[1] which measures the quantum fluctuations of a vacuum. This simply provide a way of generating provable randomness.

The generator rolls 5 dice where the sides are 1 - 65535, where 65535 is the last attributes position in the array. Common items have a greater chanceof being rolled than rarer items. The numbers returned from *anu.qrng* correspond to what items are picked from each array, and each dice represents

each attribute of the duck.

A table of attributes will be listed soon after the launch with the rarities and chance percentages.

0.2.3 NFD Functionality beyond art

From launch, NFDs have the ability to monitor ZilSwap Dex pools and inform its owner of any new liquidity or removal of liquidity changes via discord notifications. Join the Discord[2] and type '$verfiy'. When the caller calls the verify function, they broadcast a bcrypt hash of their discord ID. If the wallet holds an NFD, a message is emitted to the bot signalling to role modify the user's role to 'Non Fungible Duck'

0.2.4 NFD reveal

As part of the initial launch event users will not know what NFD they have been minted. Instead, users should expect to receive a static blacked out image with no identifiable metadata and a pre-generated name.

The unknown pre-event will commence for seven days or until fully minted. In this time users can buy and secure their unknown NFD. After the pre-event has concluded, each NFD will be updated on the smart contract to point to the real metadata.

If NFDs are minted after the pre-sale event, the NFDs minted will have the correct data instead of the placeholder pre-event image and metadata, NFDs can continue to be minted as normal if available.

0.2.5 IPFS

InterPlanetary File System (IPFS) is a P2P network used for saving and distributing files, applications and data.

Using traditional cloud providers to host NFT assets is a risk to investors. If said hosting companies stopped providing that service in the future, URL links would stop resolving to the file.

IPFS resolves this by using content addressing. Instead of referencing files on a server, IPFS refers to the hash of the file. Similarly, the end user knows if the file has been tampered with since the original hash will have changed.

Our users should expect the metadata and image to change once after the reveal and never again.

NFDs will use IPFS to host the *metadata.json* and the *image.png*. Users may chose to pin the hash to their IPFS instance.

0.2.6 $DUCK pricing

Users can purchase a $DUCK NFT at a price calculated through a linear curve y = 0.000025(x$\hat{2}$) + 1200 where x is the amount of $DUCK NFTs previously minted. This integrates out to a minimum price of 1200 and a maximum of 2877.7216. Due to a quirk of how payments are checked for the exact amount, if two buyers were to purchase in the same block, only one would be considered valid since the first buyer pushes the price forward.

Users that hold excess $DUCK token may choose to regenerate their duck's metadata. The regenerated metadata is no different and provides users a way of changing the metadata. The $DUCK token collected is funnelled back into the community wallet and is distributed to LPs at some interval yet to be determined.

0.2.7 NFT revenue

The profit from NFT sales will be split as shown in the graphics below. Table 1 shows the overall distribution of profits to all stakeholders.

As shown in Table 2 65% of sales will be distributed across the team. 25% to the treasury wallet, used to fund future developments, maintenance, collaborations and more.

5% of the overall profits will be used to buy $DUCK from the LP to send to the community wallet for future distribution. The $DUCK buyback will occur at a random times. The team are currently readying a proposal which discusses what happens with this percentage share, either sharing amongst liquidity providers or being burnt, or both.

Lastly, 5% will be donated to charities. The team is researching how to liquidate funds for the charities in our respective countries or sending them the Zil directly. Table 3 currently is place-holding our intentions to give this share to charitable causes.

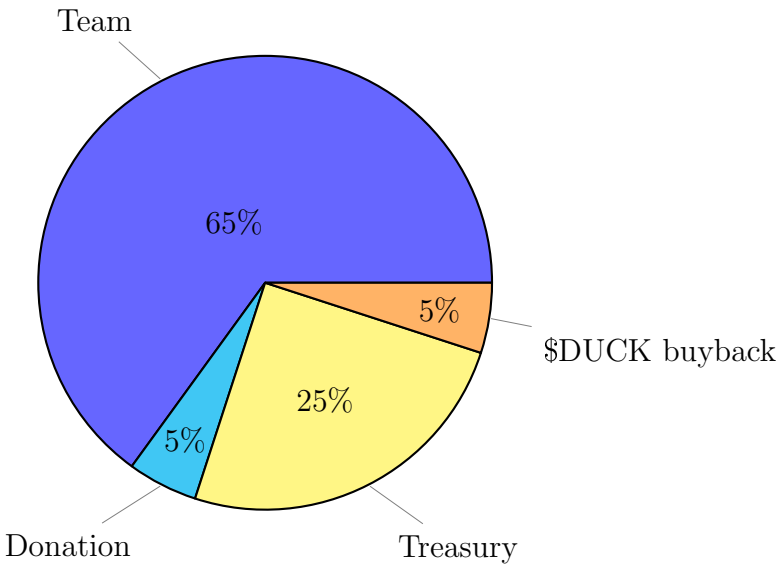

Table 1: Overall NFT profit distribution

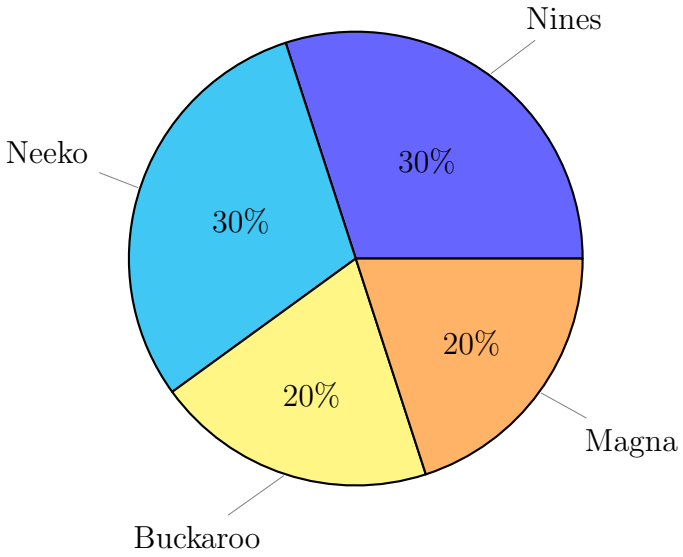

Table 2: Team profit distribution

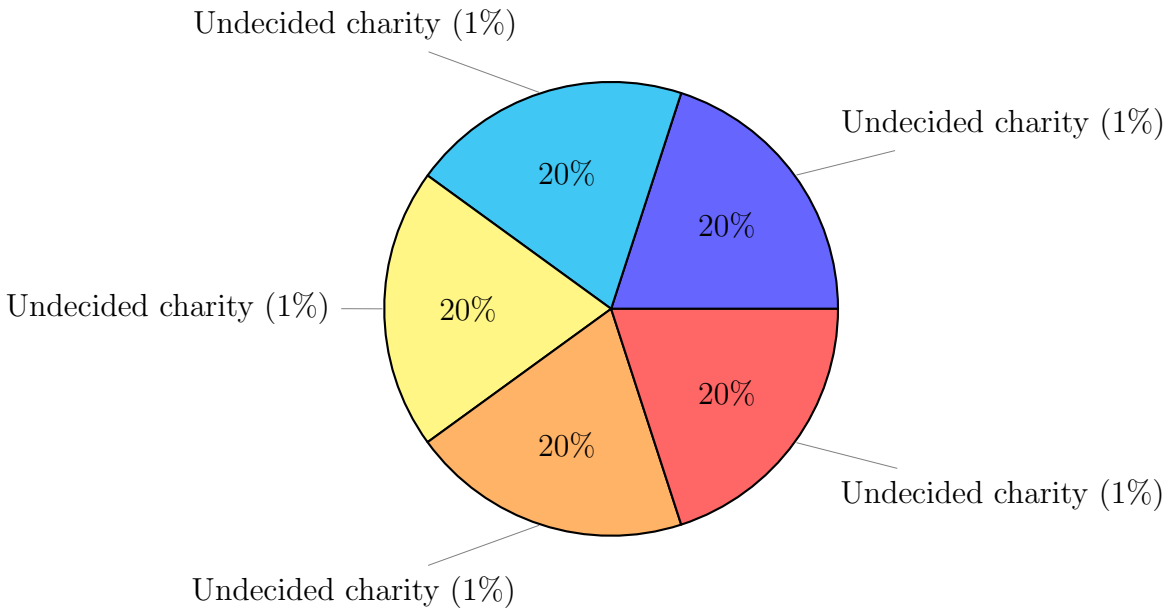

Table 3: Charity profit distribution

0.2.8 Artistic Licence

You have ownership of your Non Fungible Duck's IP when it is purchased and are free to do with it as you please. Including and not limited to editing, printing, commercial use etc.

0.2.9 Zilliqa.Mintable

Mintable is a Zilliqa NFT marketplace where users can buy and sell a range of NFTs [2]. Users who wish to list their NFDs can do so. Mintable requires the user to input the contract address and the token ID that you own for it to be able to retrieve the data for that instance.

We will provide a section of content in the NFD store about how users can interact with Mintable to sell their NFT if they wish to do so.

0.2.10 Duck Auctions

In the future we look to rival mintable in the marketplace space, by proposing minimal fees and enhanced user experiences.

0.2.11 Future Developments

Creating ownership for the ducks is the first step in the journey of building something larger. As we want to build many different projects, NFDs will play a role in the future in those projects. As the amount of $DUCK tokens is limited to 420.69, the NFDs provide $DUCK a means of moving away from using the old depreciated VDR mechanisms.

The community engagement will help the team shape the futures. They should be appreciated for what they are. Cute, exclusive pieces of blockchain art with a twist of functionality and community.

The team plans a phase II project which will further the use case and narrative for NFDs. This is currently being planned under *Non Fungible Duck's phase II* in the widepaper. We plan on completing projects that should take less development effort after the NFD project has concluded, before returning to analyse and develop phase II.

0.2.12 Artistic Preview

Figure 1: An assortment of generated NFDs

0.3 Contracts

Contract/Wallet Name	Address
Non Fungible Duck NFT Contract	zil1qmmsv4w54fvpnec32cltywpk24zf7f8fftmfmp
Duck Fungible Token Contract	zil1c6akv8k6dqaac7ft8ezk5gr2jtxrewfw8hc27d
Duck Community Address	zil14jct2x5nw73rnwdy8g0kjs99k8z29mu0eccspg
NFD Voucher Contract	zil1crpn8dhl92vvd92ejlgflmjazcxwr25u8x9e8k
Duck Minter Address	zil1ge9vdwhjxke0n6sfdxwe3njn26swsyn6uv65yn
Non Fungible Duck Proxy Contract	zil1fakc92f0klx8acpmutjydx6gnfespddsg0kjp8

Figure 2: Upgraded base NFD

Bibliography

[1] *qrng.anu.edu.au* - Quantum random numbers,
`qrng.anu.edu.au`

[2] *https://discord.gg* - Duck Discord,
`https://discord.gg/haAVAW4uVp`

[3] *docs.mintable* - How to sell digital items that are in your wallet,
`docs.mintable.app/zilliqa/basics/how-to-sell-digital-items`