

Dubstep Dukeout: An NFT Collection

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Abstract

Dubstep Dukeout is a generative NFT collection of cartoon DJs. Minted on the Polygon network, owning a Dukiing DJ NFT unlocks access to the world of Dubstep Dukeout. The website provides an easy interface where users can mint, view, and interact with their personal collection. Supporting this ability is a backend connection to the blockchain, where a smart contract is deployed for the NFT collection.

Motivation

MacguyverTech and partnering artist, JonahWorks, seek to make a new entry into the world of digital assets. Developing an NFT project allows JonahWorks to share his art with the community and Macguyver Tech to draw more attention to their company and services. In addition, the project gave Lehigh students the opportunity to design a Web3 project from scratch and experience a real-world software development environment.



Spring 2022

- Website Launch
- Generate NFT collection using HashLips Engine

Fall 2022

- Smart contract dev
- dApp
- Testing contract with dApp

Winter 2023

- NFT Minting
- User Portal

Solutions

The Dubstep Dukeout NFT project includes a web application for minting our NFT collection. The web application was developed using Vue.js, Node.js, and MariaDB. To generate the NFT collection, artist JonahWorks illustrated a combination of layers to be generated into NFTs using the Hashlips engine. Vue.js and Node.js were used to develop a dApp that communicates with our solidity smart contract to allow users to purchase our DJ NFTs. The smart contract was tested with Hardhat Tests. To garner an audience for the project, social media presences were created on Twitter and Discord.

Results and Conclusions

The work this year culminated in the launch of the Dubstep Dukeout NFT collection. Users can navigate to www.DubstepDukeout.com to purchase an NFT from the collection.

