

WHITEPAPER
The PixTapes NFT Collection

*Revision 1
January 2022*

Abstract

PixTapes is an evolutionary collection of NFTs representing music titles, as well as a community which drives its dynamics. Through its unique evolution mechanism, the collection aims at establishing a truly community-based top chart of all time music in a progressive and decentralized process. The collection also intends to become a standard representation of music titles in the metaverse.

This document is currently a **WORK IN PROGRESS**, under the review of our community. Feel free to give feedback on discord: <https://discord.gg/hQdYakpeqE>

PixTapes is an evolutionary collection implemented on the Solana blockchain. Each NFT in the PixTapes collection represents a song, displayed as a retro-style music tape with varying visual traits. The two unique features of the PixTapes collection are its double rarity system and its community-driven monthly rewrite mechanism, designed to ensure a permanent activity of the collection without disrupting the value of individual tapes.

Double rarity system. A specificity of the PixTape NFT collection is that the relative value of a tape with respect to the other ones relies on a double rarity system. Firstly, like in many collections of NFTs, the visual of each tapes is built by assembling elements (background color, tape color, brand, label, dirt) whose possible values are unbalanced, making some combination much rarer than others. This is the *trait-based rarity* (or *objective rarity*). Secondly comes the *cultural rarity* (or *subjective rarity*), which is that each tape represents a song that has a sentimental value in the eyes of tape holders, who are music lovers.

People can seek tapes either for their trait-based or cultural rarity, and even for both thanks to the swap process described below, which can be used by the community to align the objective (trait-based) ranking to what they feel is the subjective (sentimental) value of a song.

An evolutionary collection. The PixTapes collection pushes the metaphor of the music tape up to the point where its content may be erased and replaced with another song. This possibility is not let entirely to tape holders though; it comes with some rules designed to preserve the integrity of the collection, while ensuring that the emergent behavior of the collection is to move towards the songs that the community likes the most. These rules are ensured by a crowd-sourced mechanism called the *Rewriter*.

The purpose of the Rewriter is two-fold:

- Introducing new songs in the collection, in exchange for erasing lesser known titles, thus moving towards more liked songs (and also sweeping the floor).
- Ordering songs, by swapping the titles of two tapes. The rarity ranking is attached to the visual traits, so swapping the titles can be used to give a better rank to a song one likes.

NB Only tapes owned by the Rewriter's special wallet may be modified. An NFT that somebody holds would never be modified.

In order to preserve the integrity of the collection, one cannot introduce arbitrary songs, nor erase whatever they want. Instead, the rewritings are batched through a monthly *rewrite event*. The list of new songs to introduce is voted by the community, and the more tapes one holds, the more importance their votes have.

Somebody who sends tapes to the Rewriter gets one of these new tapes in exchange, drawn randomly from the list the community voted for. This prevents the introduction of songs that only one person knows. Then, before a tape gets erased, it is automatically put for sale at 10 times the floor price of the collection. Anybody feeling that this tape is worth saving may come and buy it to prevent it from being erased.

This monthly event also creates good opportunities for newcomers to get involved and win a chance to receive a free PixTape. Indeed, the person who submitted the top voted songs are awarded with new song tokens.

Rewrite event. In practice, the monthly rewrite event follows the following roadmap:

1. During the 3 weeks preceding the rewrite event itself, the community submits new songs, and upvotes the one they like. People submitting new songs have an incentive to suggest music people like because the members who submitted the top voted songs get special awards. Everybody taking part in the rewrite event has an incentive to upvote the song they indeed like because they will randomly get one of them.
2. Once the vote ends, the list of the top 300 new songs to introduce this month is frozen. Members of the community then decide whether they want to take part in the rewrite event. Participating means erasing tapes they own, by sending them to the Rewriter's special wallet. One can choose either to erase 3 tapes in exchange for 1 *New Song Credit* or to erase 5 tapes in exchange for 1 *New Song Credit* + 1 *Swap Credit*. One cannot do this more than 3 times per rewrite event, and a total of 100 *New Song Credits* can be emitted during a rewrite event.
3. *Save the tapes!* All the tapes sent at the previous step to the rewriter's wallet to be erased are listed at 10 times the floor price of the collection during 24 hours. One can "save" a tape by buying it, all remaining tapes get erased. This means that the title of the song is removed from the visual, as well as from the metadata, but the visual traits remain as is, so that it does not change the rarity of other tapes. Depending on how many people asked for a *Swap Credit*, there are between 300 and 500 tapes erased.
4. *Rewriting!* Among the erased tapes, 300 are rewritten with a new title from the list voted at step 1. Here again, only the song's title/artist is affected, but the visual traits remain unchanged. All new tapes become available in the Rewriter's *New Song* panel.
5. Participants can now spend their *New Song Credits* to *withdraw* a tape from the Rewriter's *New Song* panel. In exchange for one token, they get one random tape. They can also use the Rewriter's *Swap* panel to spend their *Swap Credits*. Swapping two titles means to move the title of a tape to the visual of another tape, and vice versa. It enables one to give a better trait-based rank to a song they like, and in exchange give a lower rank to the song they swap with.

Associated Credits. The *New Song Credit* and *Swap Credit* awarded in exchange for taking part in rewrite event, or during community contests, are regular blockchain-backed tokens. They can be freely traded, but their main purpose is to interact with the Rewriter, to respectively *withdraw* randomly one of the tapes that have been newly introduced into the collection, or to swap the titles of two tapes.

Economic Sustainability. The long term robustness of the PixTape NFTs is ensured by several mechanisms. The most important one is the rewrite event, which has the effect of regularly sweeping the floor, because it uses tapes as a currency.

Another important point is that besides the song's artist and title, the distribution of traits is never modified. Despite the collection being evolutionary, the rarity of each trait value – and this the trait based rarity of each tape – remains stable. Holders can hence keep a tape for a long time without worrying about sudden changes of its value.

Governance. The PixTape collection is operated by a small teams that initiated it, but aims at becoming more autonomous and decentralized. In order to easily adapt and fine tune their mechanics, the first rewrite events are conducted manually, but our long term goal is to move the whole process onto the chain, and implement it as a Solana program (a.k.a. *smart contract* in other blockchains).

Website. Our website is where the rewrite event mechanism happens. One can connect their wallet to access the vote for new songs (vote being digitally signed using the wallet to authenticate it), the rewrite machine to get new tapes in exchange for New Song Credits and the swap machine where one can spend Swap Credits. The website also provides a way to browse the collection, link to market places and even send sale proposals to holders.

Collaborations and Metaverse

The value of a NFT collection also lies in its potential of intertextuality, i.e. its ability to take part in the web of other collection and communities.

For new collections. Collections that are in their pre-mint age can directly contact us to contract the following deal if their NFTs represent characters (or a variant otherwise):

- 50 of the characters will be listening to a PixTape, meaning that one of their traits will specify the PixTape index and the song's title, and that the pixtape will be visible somewhere in the visual of the NFT.
- The choice of which PixTapes the character will be listening to will be defined by our community: the first PixTapes holders to join the community of the collection of characters will be able to choose among the PixTapes they hold which one a character listens to.
- 10 random winners among the 50 persons to participate receive one of the characters NFT as a reward.

This has the effect for the new collection to recruit newcomers from the PixTapes community, and in exchange this gives a utility for holding a PixTape, since it enables one to have their favorite songs known and remembered in the new collection.

For music artists – Autographed Tapes. We offer the opportunity to any artist represented by a PixTape to autograph its visual, and in exchange we would offer royalties on any sales involving this tape. If you are such an artist, or their manager, feel free to contact us. We will provide you a template to either print in order to really write onto it, or alternatively one can sign using any digital painting application (*Photoshop, Krita, etc.*).

This collaboration will drastically increase the value of the PixTape representing the autographed song, and hence be a win at the same time for the artist and for the whole collection and its holders.

Music platforms. We may look for collaboration with music-related platforms, in particular with *Audius*, a blockchain-based music streaming service.

Sister collections. We are planning on releasing other collections in the PixTape ecosystem. There are event-based spin-offs, like the Halloween PixTapes. We are also working on a collection for representing all other music titles, that only artists could mint. Another collection could represent imaginary titles, that would get awarded to people indeed composing the corresponding music.

Frequently Asked Questions

Q. Why are your metadata hosted off-chain?

A. In order to have more flexibility in the exploration of what the rewrite mechanism enables, before we finally move everything on-chain. The NFT will remain mutable though, otherwise the rewrite event would no longer be possible.

Q. Does a PixTape NFT contain any music data?

A. It does not. The collection does not own the rights for music distribution, and it does not need it actually, since it only refers to music titles as a cultural concept. In order to use easily integrate the PixTapes into games and other platforms, the metadata file provides links to music streaming services such as *Spotify, Apple Music* and *Deezer*. These links are crowd-sourced, so if they happen to be missing or erroneous, you may contact us through [this form](#).