

Spec 0.51 for BJOU Platform

Overview

BJOU is developing an NFT rental service which will enable 'renters' to borrow NFTs from 'owners' for a set period of time at an agreed cost (ie 7 days at a cost of \$100/day).

Necessary Smart Contracts

This functionality will be delivered by a set of layer-2 Ethereum smart contracts on Polygon.

Rentals

To enable a rental, an owner's NFT will be wrapped by a new minting smart contract. The output of this operation will create a wNFT (wrapped NFT) which will be transferred to the renter. wNFTs will be 'burned' when the rental period has elapsed or if the rental agreement is voided. The specific requirements for the wNFT are that it is:

- unique
- minted to the owner's wallet
- contains the agreed terms of use and a pointer to the original NFT contract
- transferred to the renter's wallet upon starting the rental
- burned after the rental time range has elapsed
- burned if terms of use are violated
- not eligible for transfer to another wallet address (except null) during the rental period
- applied only to a non-wrapped NFT

Payments

The payments smart contract(s) must:

- activate upon the renter's intent to rent
- collect the money up-front from the renter
- charge the owner a service fee for using the platform
- call other smart contracts to wrap, mint, and transfer the wNFT to the renter

There may be the need for an escrow account as well.

