

RewardsNft Documentation

The RewardsNft contract is a smart contract that facilitates the creation and management of non-fungible tokens (NFTs) based on the ERC721 standard. This contract extends the functionality of the ERC721URIStorage contract, allowing the secure creation and storage of NFTs with associated metadata URIs. The contract includes functions for minting new tokens, setting token URIs, and overriding certain ERC721URIStorage functions for proper functionality.

Overview

The RewardsNft contract comprises the following main components:

ERC721 Extension: The contract extends the ERC721 and ERC721URIStorage contracts from the OpenZeppelin library, providing the foundational structure for creating and managing NFTs.

Token Counter: The contract includes a tokenIdCounter variable to keep track of the unique identifiers for each minted token.

Contract Details

State Variables

tokenIdCounter: An integer variable that tracks the current token identifier.

Functions

constructor: Initializes the contract with the provided name and symbol for the NFT.

_safeMint: Safely mints new NFTs for the specified contributor address with the associated token URI.

tokenURI: Overrides the tokenURI function to return the URI associated with a specific token ID.

supportsInterface: Overrides the supportsInterface function to check the supported interfaces.

Usage

The RewardsNft contract provides a systematic way to create and manage the NFTs given to anyone who donates to a campaign. Notably, for every campaign, a new NFT is created and given to those who donate to that particular campaign, it is possible to record and track the activity of everyone who participates in the WildLifeGardian DAO,

This contract is suitable for various use cases that involve the distribution of digital rewards, tokens, or collectables on the Ethereum blockchain. By leveraging the ERC721 standard and the features provided by the ERC721URIStorage extension, the contract ensures the seamless handling and storage of NFTs with specific metadata URIs, making it suitable for applications requiring a reliable NFT management system.