

SoulBound Tokens Deployment

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Abstract – A blockchain is a distributed software network that serves as a digital record as well as a platform for the safe transfer of assets without the use of an intermediary. On a blockchain network, anything from currency to land titles to votes may be transferred, tokenized, stored, and traded. NFTs are currently being pushed as the digital alternative to collectibles, much as Bitcoin is the digital alternative to currencies. They are known as Soul Bound Tokens or Non-Transferable Tokens (NFTs). An SBT is a particular sort of NFT that is connected to a soul address that is particular to each person (also referred to as a soul). Hence our goal is to create Soulbound tokens that are a type of NFT, but they differ in one major way — they are designed never to be transferred. For example, a user credential encoded within a soulbound token should be linked to a particular user, not transferable to any account on the blockchain using remix, metamask, opensea, solidity, polygon test tokens.

Keywords— NFTs, SBTs, Blockchain.

I. INTRODUCTION

A new non-transferable, publicly verifiable digital token initiative called SoulBound can serve as an indicator of someone's rank on web 3. On the web3, SBTs might act as a kind of digital CV for a person. The new non-transferable NFTs would contain all details on a person's memberships, affiliations, and credentials. Since Soulbound Tokens can be a key to solve the trust issue, the project platform focused on

easy to deploy, transfer and view Soulbound Tokens (SBT) because The

trust factor is currently the most important problem affecting the web3 landscape. The trust factor is now the most important problem influencing the web3 ecosystem. On the other hand, web3 has to deal with critical issues in this domain due to considerably higher privacy and anonymity in web3 applications.

II. LITERATURE SURVEY

Web3 today centers around expressing transferable, financialized assets, rather than encoding social relationships of trust[1] so the non-transferable “soulbound” tokens (SBTs) representing the commitments, credentials, and affiliations of “Souls” can encode the trust networks of the real economy to establish provenance and reputation for example An individual's identity is made up of a variety of information, including their job, volunteer, and educational backgrounds, their credentials, their medical and criminal histories, their memberships and affiliations, and much more. Moreover (DeSoc)- “Decentralized Society” which brings in trust through dependable sources to provide a CV/Credit report that can live-update the risk or legitimacy of individuals and businesses. SBTs open up new markets with decomposable, shared rights, sybil-resistant governance, community wallet recovery, and other uses with expanding aspirations. Since Soulbound Tokens can be a key to solve this trust issue, the

project creates a Platform where it is easily possible to deploy, transfer and view Soulbound tokens (SBT). SBTs could make it possible for us to effectively represent and manage assets and products that fall somewhere between entirely private and fully public.

III . PROPOSED SYSTEM

The proposed system focuses on creating and sending SBTs to the user's wallet so that it may serve as the user's identity. The SBTs will be produced using smart contracts, and transactions involving those SBTs will be made from one address to another using a Metamask wallet.

A. Block Diagram

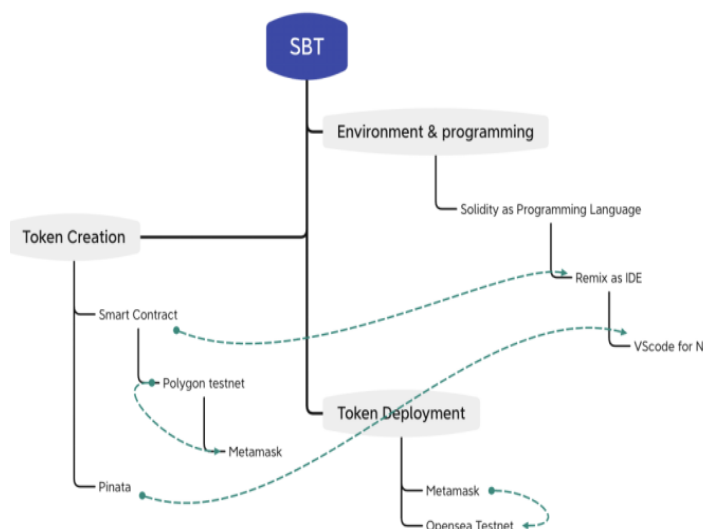


Fig. 1. Block Diagram

Figure 1 depicts the entire block design of the system and all the key points for Token deployment includes the Metamask for wallet and OpentestNet for buying, selling, and NFTs being a decentralised, blockchain-based platform, it uses smart contracts. The platform's smart contracts are intended to prevent fraud, and creators are free to set the price at which they want to sell their tokens.. A cryptocurrency token is a token or a cryptocurrency's denomination. It represents a tradable asset or utility that resides on its own blockchain and allows the holder to use it for investment or economic purpose.

IV. STEPS

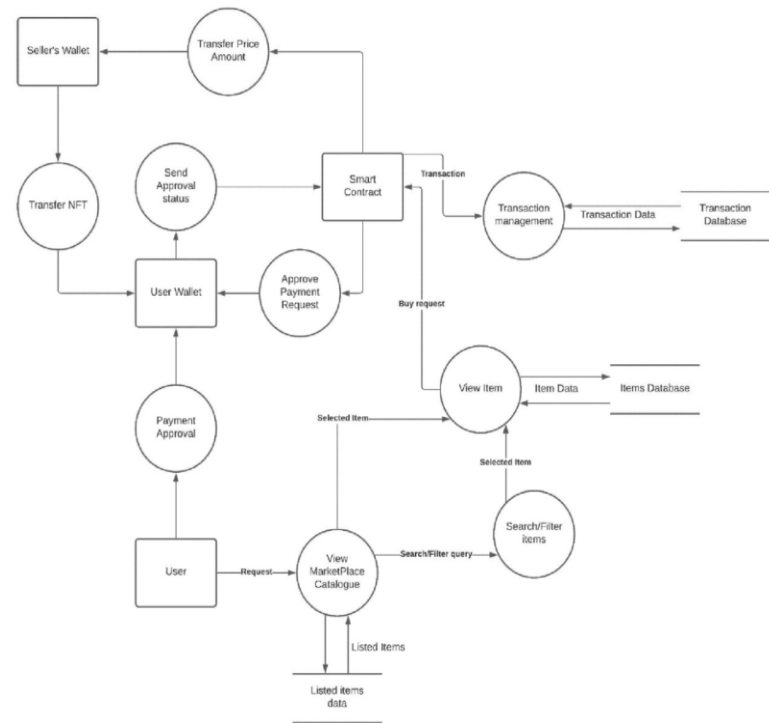


Fig 2 : DataFlow Diagram

A data flow diagram (DFD) depicts how information flows across operations. Smart contract is use to create SBTs and from mettamasks wallet accounts i.e. from one address to another address the SBTs would be placed. After the Soul token or SBT is issued to a particular address or Soul, it can view the token using the OpenSea platform. OpenSea keeps track of all transactions made on the Ethereum network using smart contracts.The user must have a metamask wallet to get the created SBT.

V. CONCLUSION

SBTs provide a wide range of applications to improve current Web3 usage. Large-scale decentralization was one of the goals of Web3, but it still presents a formidable challenge. SBTs

allow for changes to Web3 governance to be made without reverting to Web2 design, which will prevent whale domination and significantly reduce sybil assaults.. Additionally, active community members will be able to demonstrate their interest and will be compensated appropriately. By putting less of an emphasis on transferability and enhancing reputations, SBTs can also considerably improve prediction markets, crypto games, and the financial capacities of Web3 DeFi organisations. They address the identification issues that restrict Web3 and make it possible for it to be more helpful in our daily lives than ever before.

VI. REFERENCES

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