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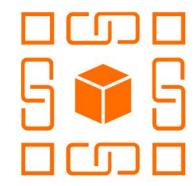
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BChain Dynamics

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Real estate on blockchain

This project aims to ease the manual time consuming process of real estate transfers

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Abstract

I'm planning to tokenize real estate, and facilitate it's transfer, sale, scrutiny on the Ethereum blockchain.

Introduction

I'm planning to tokenize real estate as erc721 tokens and allocating it to the owners, the government could set it's minimum price, when an asset it to be transferred, a smart contract it created, where the erc721 token is deposited, the buyers eth address is whitelisted so others cannot claim the asset by sending funds, the price is set by the seller, if the buyer sends the prescribed amount of tokens to the contract within the stipulated time, the asset is transferred to the seller and the tokens are sent to the buyer.

3.1 Existing System

Existing system is manual and involves a lot of actors which is open to manipulation, all the paperwork is physical, a user has to maintain a lot of paperwork and prove his ownership also the buyer

3.2 Problem with existing system.

- Buyer pays the seller and then they go ahead with registration, the buyer might have shown up fake documents and collected the token amount.

- Sometimes the land is encroached by the land mafia without paying the buyer.

3.3 Solution

Our solutions migrates transactions from physical form to digital form eliminating bad players and assuring the buyer ownership of his asset if he pays from it.

The Buyer has to transfer the amount in stable coin (USDT, DAI) to the contract and the contract will transfer the ERC721 token of the real estate to the seller, in case there is an error, the transfer is reverted.

3.4 Advantages

The ownership is transferred instantly when the funds are received leaving no chance to bad actors

This system makes sure than if the land record is transferred he/she received the funds.

4.1 Software Requirements

Web3 - To interact with the ether node

Truffle - Testing and Deploying

Ganache - Local ethereum node for testing

Openzeppelin - Boilerplate code

React - Frontend design

5. Implementation

1. Creating and distributing the ERC721 token to land owners.

2. Create a factory smart contract that creates new smart contract for every transfer.

3. Overload the transfer function so the asset can only be transferred to whitelisted people.

8. Implementation

https://medium.com/coinmonks/tezos-successfully-incorporates-south-american-and-saudi-arabian-real-estate-to-the-blockchain-4e1c92fdf6a5

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