

BLOCKCHAIN BASED PROPERTY REGISTRATION USING CONCEPT OF SMART CONTRACT

ABSTRACT

BLOCKCHAIN BASED PROPERTY REGISTRATION USING CONCEPT OF SMART CONTRACT is a “simple Dapp based on the ethereum blockchain. It can replace the current approach. Here the land owner(Buyer) registers the land details along with the land value by providing digitalised documents. Only a registrar or government authority who is uncharged as the admin can do the registration process. Lands coming under a area (eg., a village) can register to the system only through the admin(registrar) assigned to that area. The smart contract has been created in a way that the owner has to transfer his full asset(data or documents) to the buyer and no partial transaction of the asset is allowed. Even though the registration process requires a government authority, the entire process is transparent and the transaction happens between the the two clients without any intermediarie.”

1.Introduction:

The aim is to provide a practical reference to help people, decision makers of the land owners as they analyze and consider the implications of Blockchain on their business. It can be designed to evaluate and compare Blockchain technology in key areas from different blockchain providers, taking into account different requirements from various actors including data processing, Register Office, Court, and governments.

1.1 Blockchain :

Sellers and Buyers can store their data and upload records on Blockchain. For security reasons, all data must be encrypted. It uses SHA-256 algorithm for encryption. For Blockchain we have configured public Blockchain named ethereum and it consist of millions of nodes ,it is also know as worlds most powerful suer computer. that is used for making transactions and verification. The service provides enormous storage for less cost. Blockchian that enables users to share a files or make a trustful secure transactions.

1.2 Smart Contract:

Smart Contract is contract system based on blockchain technology, it is used to create an contract between seller and buyer to make a transactions, it is provided by an ethereum blockchain platform, In this case, seller needs to upload a property documents to Smart Contract and Buyer Also send a money to smart contract, if contracts meets valid document and money ,it will make a transaction between seller and buyer, and it will not allow partial transactions,once transactions is finished it will be verified by millions of nodes in ethereum platform and register it on ledger, For each transactions users use the tokens to access these functionality

2 MODULE DESCRIPTION:

Introduction: There are three modules one is Seller,Buyer and Nodes in blockchain based on which the sellers sell the property and Another one is Buyer who wants to buy a property which contains the details of property , Seller and buyer are able to access all the informations, third one is nodes, for each transactions it will verify and copy it on ledger

2.1 SELLER AND BUYER:

Sellers can upload the document to the smart contract, before that document must be digitalised ,if document is not able to digitalised, seller must enter the document registration number on textbook, smart contract will verify it by calling the Encumbrance Certificate API.

Buyers must send the money as Tokens to smart contracts, and no partial transactions will allowed, if smart contracts will meet the requirements provided by seller and buyer then it makes a transactions

2.2 ETHERIUM NODES:

Once it meets the requirement ,transactions will be made after each transactions it will be verified by millions of nodes participates on hashing program, if all node in the platform accepts the transactions it will be successful else it will be rejected, users can pay this platform by ERC-20Tokens

3 MODULE DESCRIPTION:

The another part of module of this project are ERC-20n Tokens and digital signatures . This will be used as a payment money for ethereum platform, the participants seller and buyer needs to pay for each transactions they made in this platform using ERC-20 Tokens

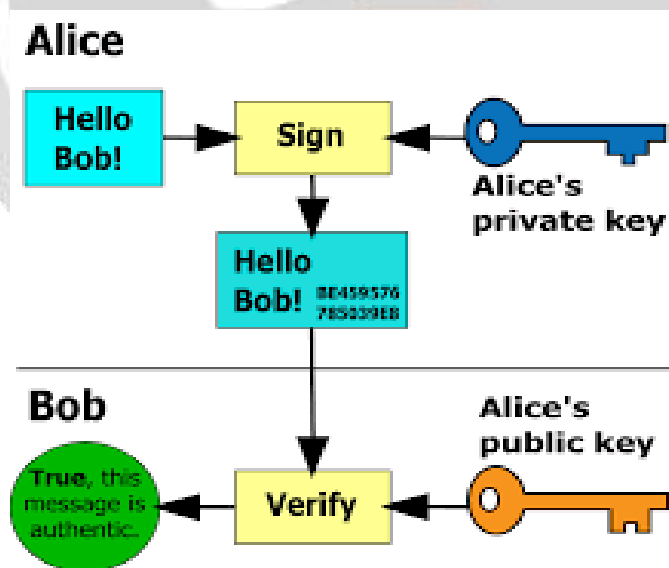
3.1 Digital Signatures

Digital signature uses a public and private key to authenticate the users and if its is validate then it can be moved to next level else it can't.

Each users can have unique public and private keys, so they can use this to make authenticate the sellers and buyers

For authenticate the seller and buyer, we use digital signature to authenticate the seller and buyer, it uses SHA algorithm to encrypt and decrypt the data.

It uses public and private key to encrypt and decrypt the data, and also authenticate the seller and buyer



4. CONCLUSION:

For the backend process the programming language like python and for the frontend HTML and CSS are used to design the forms . This paper is based on to help a patient when they are in critical situations . the project divided into two phases one for seller and another for buyer. The main process to make a property registration in a transparent way . for this process we use Blockchain to securely transact the data and money(ERC-20 token)

5. REFERENCES:

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