BLOCKCHAIN-BASED SMART REAL ESTATE MANAGEMENT SYSTEM

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ABSTRACT

The use of blockchain technology and smart contracts has the potential to revolutionize the real estate industry by providing a secure and efficient way to manage real estate transactions. This paper presents a blockchain-based smart real estate management system that utilizes the key properties of blockchain technology to record real estate transactions in a private and secure manner.The system also incorporates smart contracts to automate many aspects of the transaction process, reducing the need for intermediaries and minimizing delays associated with traditional real estate transactions.The proposed system can manage real estate transactions comprehensively and can overcome the weaknesses of the current real estate transaction trace system.

PROBLEM STATEMENT

Smart cities and smart houses are in fashion and thus all this can be kept in a blockchain. Design a smart contract using the Ethereum blockchain in a distributed and decentralized network. You should be able to add the property details to the blockchain, query the property details from the blockchain and should be able to change the ownership of the property appropriately.

A blockchain-based smart real estate management system can solve these problems, which includes Lack of transparency which is the current real estate sector lacks transparency, which makes it difficult for buyers and sellers to trust each other.

OUR SOLUTION

To design a smart contract using the Ethereum blockchain in a distributed and decentralized network for managing real estate contracts, the following steps can be taken:

1.Define the smart contract: The smart contract should be designed to manage real estate contracts, including adding property details to the blockchain, querying property details from the blockchain, and changing the ownership of the property appropriately.

2.Develop the smart contract: The smart contract can be developed using the Solidity programming language, which is specifically designed for creating smart contracts on the Ethereum blockchain.

3.Deploy the smart contract: Once the smart contract is developed, it can be deployed on the Ethereum blockchain. This will make it accessible to anyone who wants to use it.

STEPS TO COMPLETE THE PROJECT

Step 1:-

1. Open the Zip file and download the zip file.

Extract all zip files

Step 2 :-

1.Open vs code in the left top select open folder. Select extracted file and open .

2. Select the projectname.sol file and copy the code.

3. Open the remix ide platform and create a new file by giving the name of

projectname.sol and paste the code which you copied from vs code.

4. Click on solidity compiler and click compile the projectname.sol

5. Deploy the smart contract by clicking on the deploy and run transaction.

6. select injected provider - MetaMask. In environment

7. Click on deploy. Automatically MetaMask will open and give confirmation. You will get

a pop up click on ok.

9. Open vs code and search for the connector.js. In contract.js you can paste the address at the bottom of the code. In export const address.

10. Save the code.

Step 3:

open file explorer

1. Open the extracted file and click on the folder.

2. Open src, and search for utiles.

3 . You can see the frontend files. Select all the things at the top in the search bar by

clicking alt+ A. Search for cmd.

4. Open cmd enter commands

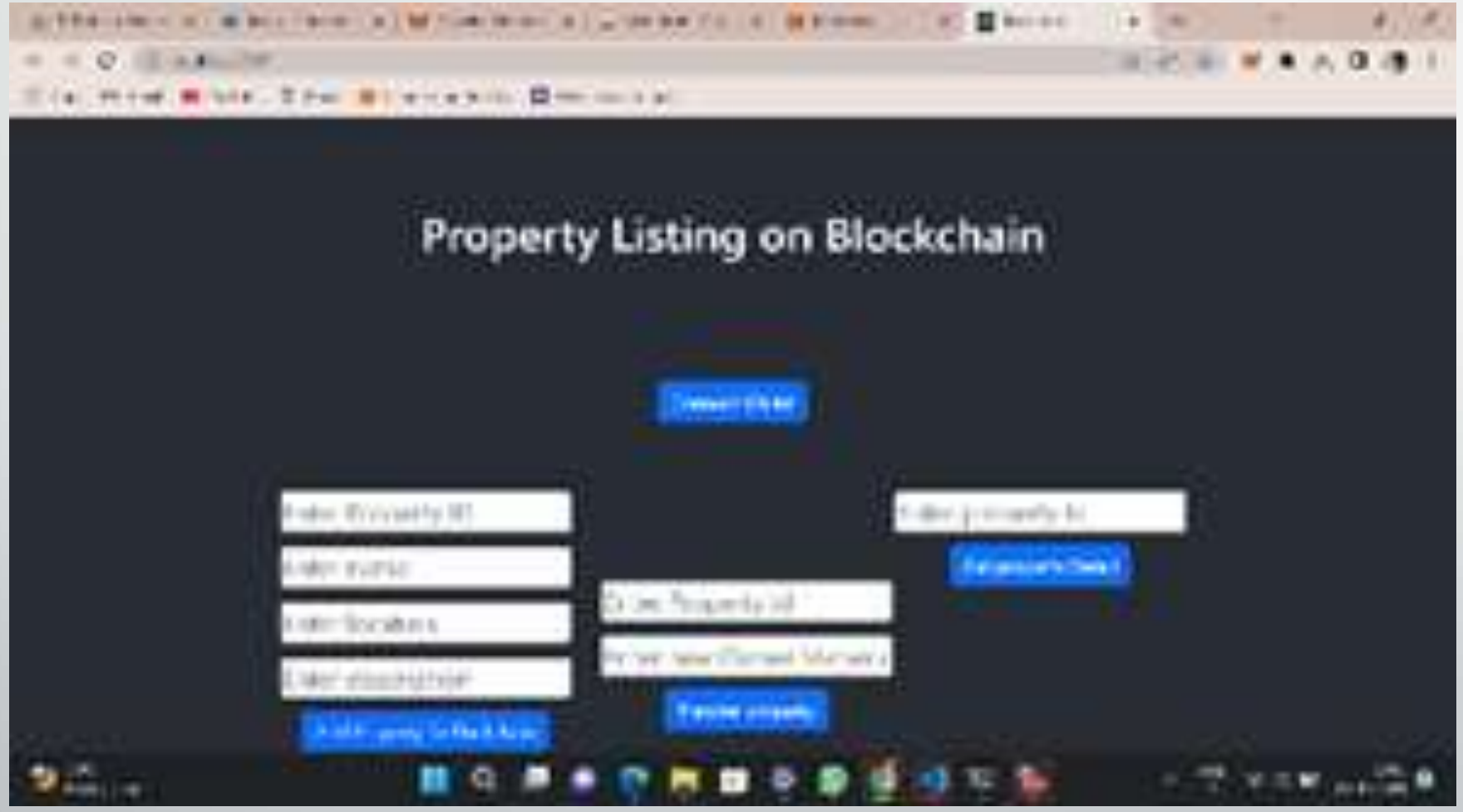
npm install

npm bootstrap

npm start

5. It will install all the packages and after completing it will open {LOCALHOST IP ADDRESS} copy the address and open it to chrome so you can see the frontend of your

OUTPUT



CONCLUSION

Designing a smart contract using the Ethereum blockchain can provide various benefits in managing real estate-related contracts. The smart contract can be used to add property details to the blockchain, query property details from the blockchain, and change the ownership of the property appropriately. Enhanced security, Global accessibility, Integration with other blockchain-based financial products, Liquidity, Transparency, Efficiency are the Some of the advantages of using smart contracts in real estate. By leveraging these benefits, a smart contract designed for real estate transactions can contribute to the development of smart cities and smart houses, enhancing security and efficiency in the management of real estate-related contracts.

THANK YOU