

ONLINE REAL ESTATE REGISTRATION

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ABSTRACT

Online real estate Registration is a project which provides a friendly format for register land properties. Users can search and browse for property in this application. This application also allows users to see land details on online. This application mainly concentrates on maintaining and managing the details of the property. This application deals with lands details.

Now-a-days all applications which require huge security are migrating their application to Blockchain as Blockchain inbuilt security for data. All existing techniques were not having any facility to check whether data store at decentralized (same data will be saved at multiple nodes and if one node hack or down then data will be gather from other working node) server is intact or change.

To check data is intact we can use Blockchain technology to maintain land registration details as this technology maintain tree to store each transaction (any data storage will be consider as transaction) and while storing new data then Blockchain verify all transaction hash code and if data is not alter or hack then same hash code will be generated and verification will be successful and new block will be added and if data is changed then different hash code will be generate and verification will be failed which indicate node is hack.

If we manage land registration details in Blockchain then users can verify data from any other working node upon failure of other node. Blockchain also support tamper or alter proof storage as the data store in Blockchain will get verify upon adding new transaction.

I. INTRODUCTION

Online real estate Registration is performed according to country-specific procedures. However, there are some features which are common for all post-socialist countries. It may be possible to implement and transfer into the Polish system the good management practice which has been developed by leading countries. On the other hand, Poles may have a chance to become acquainted with the rules governing public real estate management in other countries and to identify some practices which ought to be avoided. There is no need to implement faithfully those procedures which in other countries have been recognized as generally inadequate or inefficient and have been replaced by new solutions. This pertains to some principal components of the real estate management system.

Land titles continue to rely on paper documentation, vulnerable to loss, fraud, and mismanagement. In addition, property transfers and permits require a multitude of lengthy and costly legal procedures, sometimes locking land in unproductive use. Blockchain replaces outdated paper deeds with true digital assets and tracks changes on an immutable ledger that acts as a secure shared source of truth for documents between multiple parties and organizations.

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The aim of the paper has been to present Online real estate Registration in India in the context of good governance, and to suggest some indicators for assessing the procedures in these systems in terms of their efficiency.

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II. SYSTEM ANALYSIS

System Analysis is the important phase in the system development process. The System is studied to the minute details and analyzed. The system analyst plays an important role of an interrogator and dwells deep into the working of the present system. In analysis, a detailed study of these operations performed by the system and their relationships within and outside the system is done. A key question considered here is, "what must be done to solve the problem?" The system is viewed as a whole and the inputs to the system are identified. Once analysis is completed the analyst has a firm understanding of what is to be done.

2.1 PROBLEM DEFINATION

Land titles continue to rely on paper documentation, vulnerable to loss, fraud, and mismanagement. In addition, property transfers and permits require a multitude of lengthy and costly legal procedures, sometimes locking land in unproductive use. Blockchain replaces outdated paper deeds with true digital assets and tracks changes on an immutable ledger that acts as a secure shared source of truth for documents between multiple parties and organizations.

2.2 EXISTING SYSTEM:

Now-a-days all applications which require huge security are migrating their application to Blockchain as Blockchain inbuilt security for data. All existing techniques were not having any facility to check whether data store at decentralized (same data will be saved at multiple nodes and if one node hack or down then data will be gather from other working node) server is intact or change.

2.3 PROPOSED SYSTEM:

To check data is intact we can use Blockchain technology to maintain land registrationdetails as this technology maintain tree to store each transaction (any data storage will be consider as transaction).

While storing new data then Blockchain verify all transaction hash code and if data is not alter or hack then same hash code will be generated and verification will be successful and new block will be added and if data is changed then different hash code will be generate and verification will be failed which indicate node is hack.

If we manage land registration details in Blockchain then users can verify data from any other working node upon failure of other node. Blockchain also support tamper or alter proof storage as the data store in Blockchain will get verify upon adding new transaction and if any data block alter then verification will be failed and user can understand his data is alter.

- 1) Blockchain maintain each transaction/storage in blocks
- 2) All blocks may store inside MERKLE TREE
- 3) Before adding new block Blockchain will verify all blocks hash code and each block may have link to previous block and current block
- 4) If any block data alter then its hash code will change and verification will be failed.

III. ARCHITECTURE

3.1 System Architecture

Blockchain is a peer-to-peer network; the word ‘blockchain’ is made up of two separate terms, ‘block’ and ‘chain’. A block being referred to a collection of data, alias data records, and chain being referred to a public database of these blocks, stored as a list.

These lists are linked using cryptography, making it the most essential and fundamental requirement for creating a blockchain. Blockchain is a growing list of records, and the blocks get appended to the list with time. **Cryptography in blockchain** can be a tricky concept, but we have tried to simplify it for your better understanding.

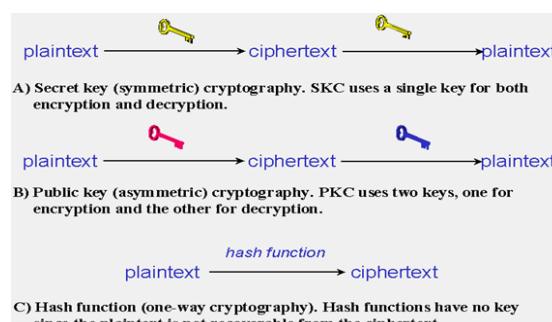


Fig. 3.1 Cryptography in blockchain

Blockchains make use of two types of cryptographic algorithms, asymmetric-key algorithms, and hash functions. Hash functions are used to provide the functionality of a single view of blockchain to every participant. Blockchains generally use the SHA-256 hashing algorithm as their hash function.

IV. IMPLEMENTATION

4.1 MODULES:

To implement this project we have designed following modules

- 1) **Admin Module:** admin user can login to application by using username as admin and password as admin and after login admin can add new land registration

details and then can search land details. Admin will issue registration number to each user land.

- 2) **User Module:** User can search registered plot details by entering plot registering number.

V. SCREENSHOTS

To run project install python 3.7 and then install DJANGO server and then create Python folder inside system ‘C’ directory and then put ‘LandRealState’ folder inside that C:/Python folder and then start DJANGO server by double click on ‘runserver.bat’ file. Now open browser and enter URL as <http://127.0.0.1:8000/index.html> and press enter key to get below home page.



Fig. 5.1 Home page for Real Estate Registration

In above screen click on ‘Admin’ link to get below screen



Fig. 5.2 Admin Login Screen

In above screen enter username as ‘admin’ and password as ‘admin’ and then click on ‘login’ button to get below Admin Screen

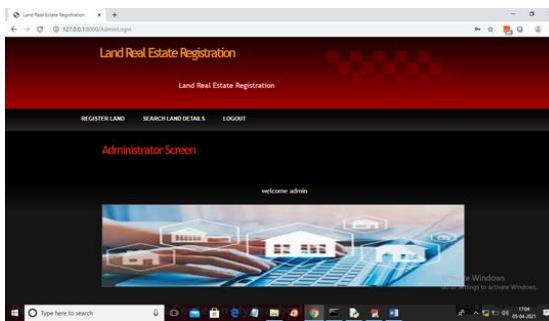


Fig. 5.3 Administrator Screen

In above screen admin can click on ‘Register Land’ link to add new land registration details

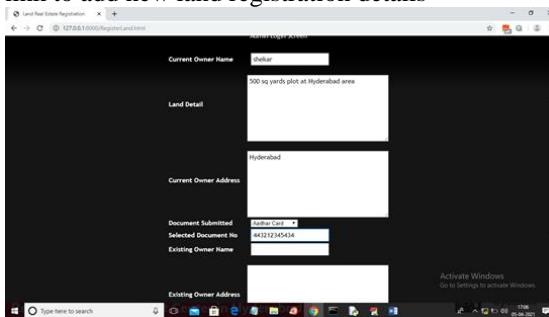


Fig. 5.4 Admin Login Screen for adding land details

In above screen admin will enter plot details.

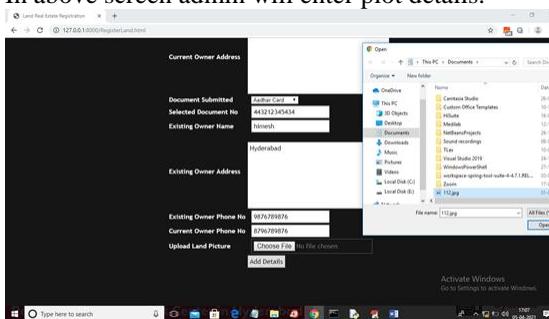


Fig. 5.5 Plot details

In above screen admin can upload land photo also and then click on ‘Open’ button and then click on ‘Add Details’ button to get below screen

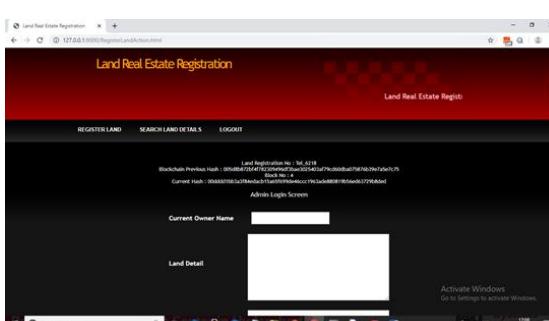


Fig. 5.6 Admin login screen for getting land registration number

In above screen land details added and we can get land registration number and will get index number of Blockchain at which this land details stored and then will get previous block hash code and current block hash code and for each transaction we can see current block hash code will match with previous hash code of upcoming new transaction. Now data is stored at Blockchain and now admin can click on ‘Search Land Details’ link to get all registered land details

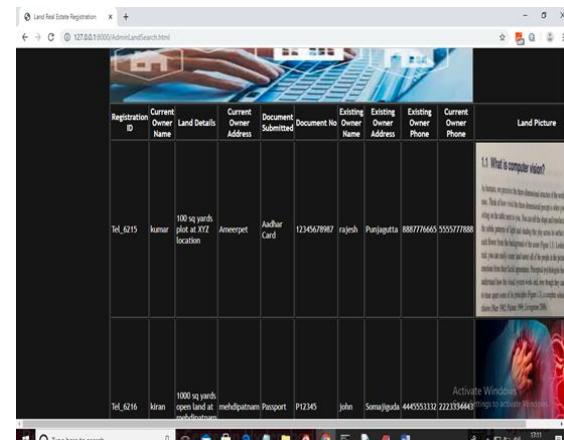


Fig. 5.7 Registered land details

In above screen admin can view all registered plot details and can see land image also as I uploaded some other images so you upload correct land pictures. Now logout and click on ‘Users’ link to get below screen

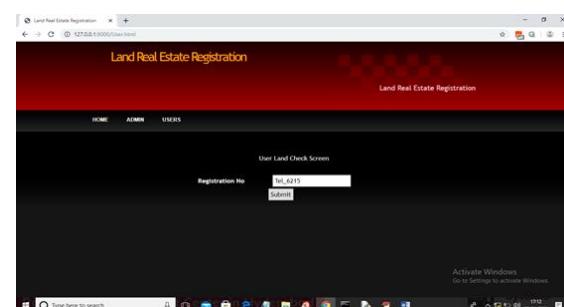


Fig. 5.8 User Land Check Screen

In above screen user can enter his desired land registration number and then click on ‘Submit’ button to get below output

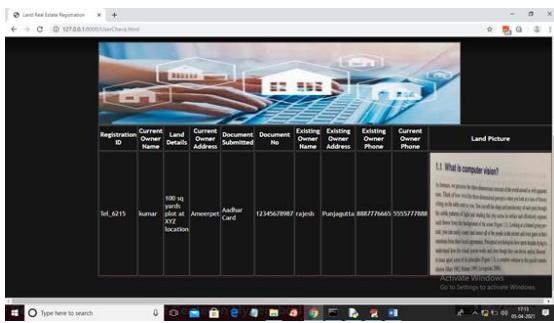


Fig. 5.9 User view of searched land details

In above screen user can view searched land details. Similarly any number of records you can store and searched from block chain server.

VI. CONCLUSION

The project presents a link to offer a conceptual framework for blockchain-based land registry systems. Following a review of various frameworks, as well as some of the more vigorous approaches and concepts employed in these frameworks, they were mapped with a scenario that led to the conceptual framework. The mapping of the scenarios aided us in classifying the major components, which has been useful to our proposed framework. A land registry combined with blockchain technology has the potential to truly revolutionize governance. After identifying the necessary components, we developed a framework based on fundamental notions that have been employed in both classical and new record keeping systems. Land record storage, like today, has a centralized origin. As a result, this centralized storage can be hacked, forged, or misappropriated, while in our framework, we used entirely decentralized blockchain-based solutions. We have also highlighted privacy as a fair consideration. Some of the nodes in the framework are required as part of the decentralized system's characteristics. Only those who are permitted to interact, such as a block generator or a government official or officer, can interact in this system.

In terms of methodology, we gathered primary data directly from the stakeholders, including government offices and officers, village officers, and the general public who use this system. We conducted semistructured interviews to assess our framework and obtain feedback from both public and government entities.

VII. FUTURE ENHANCEMENTS

Currently, we have used a private blockchain-based conceptual framework; however, in the near future, this procedure can be extended to allow the public to connect directly with the system and obtain information about their assets. Furthermore, we have merely been in operation for the purpose of developing a conceptual framework. However, such frameworks can be used to create a software system in the future. As a framework, it can undoubtedly provide insight into the actual system.

8. REFERENCES

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