FLAT BOOKING

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ABSTRACT

A blockchain is a decentralized, digital ledger that is used to record transactions across a network of computers. It allows for the efficient, verifiable, and permanent recording of transactions between parties, and can be used for a wide range of applications, including the buying and selling of goods and services, financial transactions, and record-keeping for various types of assets. Because it is distributed and decentralized, a blockchain is able to provide a secure and transparent record of transactions without the need for a central authority or intermediary. In store when we go to purchase something, we get a receipt and there is also a record of payment store in our banking database. Banks keep track of money and details as how much you have in the account, how much we get and how much we spend each month.

Independent flats have complained about the exorbitant commissions charged by Online Agencies such as Booking, LateRooms, and others.The intermediates can be removed, resulting in a 30% cost reduction. Even in the context of automation (automatic updating of room availability on the website), many booking phases are carried out manually, making them inefficient and unreliable.

While it is true that the decentralized and immutable nature of blockchain technology can help to add transparency and honesty to review systems, it is important to note that this does not completely prevent the possibility of manipulated or forged reviews. For example, it is still possible for vendors to bribe or coerce customers into leaving positive reviews, or for malicious actors to create fake accounts and use them to leave fake reviews. Additionally, the use of blockchain technology in review systems is still a relatively new and emerging area, and it is not yet clear how effective it will be at addressing these types of issues. It is important for users of these systems to remain vigilant and to carefully consider the credibility and reliability of the reviews that they read.

Keywords: Blockchain, digital ledger, permanent, decentralized, immutable, technology, Reliability.

Literature Review

1	Yarlagadda Jyotsna, Keerthi Gampala	This paper discusses the Block chain and smart contracts in the commercial and residential real estate sectors. The development of blockchains for real estate assets involves creating a distributed ledger that records all transactions on the asset chain. This can be done using both public and private ownership by a single community entity.
2	Swati Mathur and Lokesh Vijayvargy	This study concentrated on a detailed description of blockchain technology and its various business applications, as well as its impact on various business models. The study focuses on various BT barriers, motivators, and tools, as well as their impact on various parts of an organisation.
3	Guy Zyskind,Nathan	One of the major contributions of this paper is: potential solutions to the issue of the public nature of the blockchain include the use of private or permissioned blockchains, which can be restricted to a specific group of participants, or the use of off-chain solutions, which allow for the storage and processing of data outside of the blockchain itself.

Introduction

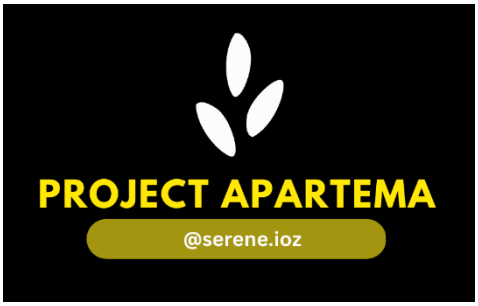
Block is nothing but a container for data. In a blockchain, each block typically contains three main pieces of information:
Data: This is the information that is being recorded in the block. In a Bitcoin blockchain, for example, the data would include information about the transaction, such as the sender, recipient, and amount of Bitcoins being transferred. In a file storage blockchain, the data might include the file name, size, and date.
Hash: This is a unique digital fingerprint or code that is generated for each block using a cryptographic hash function. The hash is created based on the data in the block and the hash of the previous block, and it serves to link the blocks together in a secure and tamper-evident way.
Hash of previous block: As mentioned, each block includes the hash of the previous block, which helps to link the blocks together and create a chain. This ensures that the data in the previous block cannot be modified without also modifying the current block, making it difficult for any tampering to go undetected.

Using blockchain technology to create a platform for connecting societies and the constituent flats that are available on rent or sale could be a useful application. By using blockchain to store information about the properties, such as their ownership status, rental agreements, and any changes to these agreements, you can create a transparent and secure record of the information. This could be particularly useful for tracking changes in ownership or rental agreements, as it would provide a permanent record that is difficult to alter or forge.

Using Ethereum, a blockchain platform that supports smart contracts, you could also create automated processes for handling rental payments and tracking ownership changes. This could help streamline the process of managing rental properties and make it easier for people to find and rent or buy properties.

In terms of frontend technology, you could use a variety of technologies to create the user interface for your platform. Some popular options for building web-based user interfaces include HTML, CSS, and JavaScript. You could also use a frontend framework, such as React or Angular, to help you build a more feature-rich and interactive interface.

Overall, using blockchain and Ethereum to create a platform for connecting societies and the constituent flats that are available on rent or sale could be a useful application of these technologies, as it would provide a secure and transparent record of property information and could help streamline the process of managing rental properties

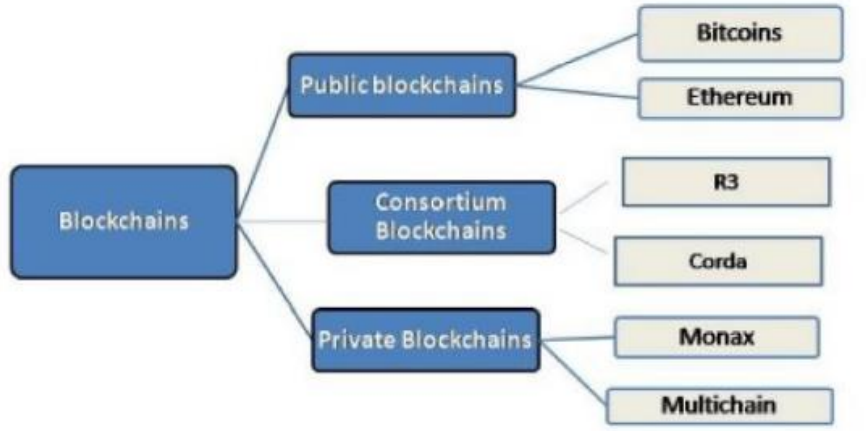


WHAT IS BLOCKCHAIN ?

A blockchain is a decentralized and distributed digital ledger that is used to record transactions across a network of computers. Each block in the chain contains a record of multiple transactions, and the blocks are linked together using cryptographic principles, forming a chain.

The hash value of each block is generated using a cryptographic hash function, such as MDA, SHA-1, or SHA-2. The hash value serves as a unique identifier for the block and is used to ensure the integrity and security of the blockchain. It is important to note that once a block has been added to the chain, it cannot be altered or deleted, making the blockchain an immutable and secure record of all transactions.

In addition to being used to record transactions, blockchains can also be used to store and track a wide range of data and information. They are often used in industries such as finance, supply chain management, and real estate to facilitate secure and transparent record-keeping and facilitate the exchange of value.



Security Features : Blockchain Implementation

One key benefit of using blockchain is that it provides a secure and transparent record of all transactions. This can help ensure that all parties involved have access to the same accurate and up-to-date information, enabling more informed decision-making.

In addition, by digitizing financial assets such as credit ratings, it is possible to incorporate relevant data, such as ownership rights, into the blockchain. This can help improve the accuracy and reliability of financial records and facilitate more efficient and secure trading and settlement of assets.Overall, the use of blockchain technology in the financial industry has the potential to increase efficiency, reduce the risk of fraud and errors, and improve the accuracy and transparency of financial transactions.

Advantages of Solidity Smart Contracts:

Smart contracts are self-executing contracts with the terms of the agreement written directly into lines of code. They are typically stored on a blockchain, which provides a secure and transparent record of all transactions.

One of the key benefits of using smart contracts is that they are encrypted and use cryptography to protect against infiltration or tampering. This helps to ensure the security and integrity of the contract.

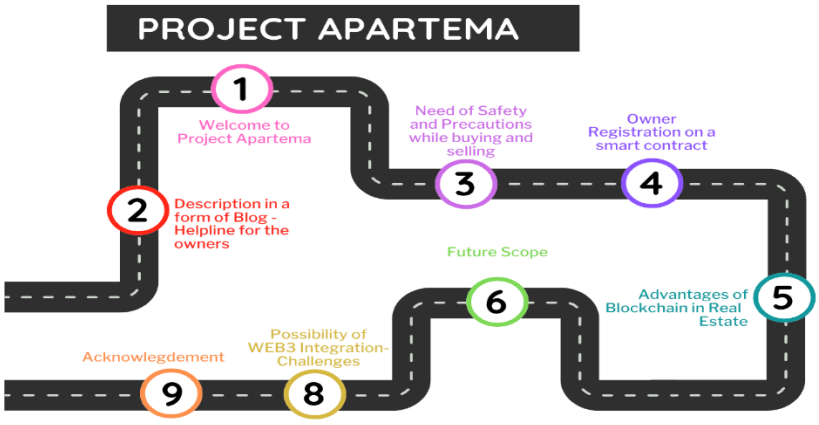
In addition, smart contracts do not require intermediaries such as brokers to facilitate the agreement. This can help to eliminate the risk of manipulation by third parties and can also result in cost savings by eliminating the need for intermediaries to facilitate the agreement.

Overall, the use of smart contracts can help to streamline and automate various business processes, increase efficiency, and reduce the risk of errors or fraud.

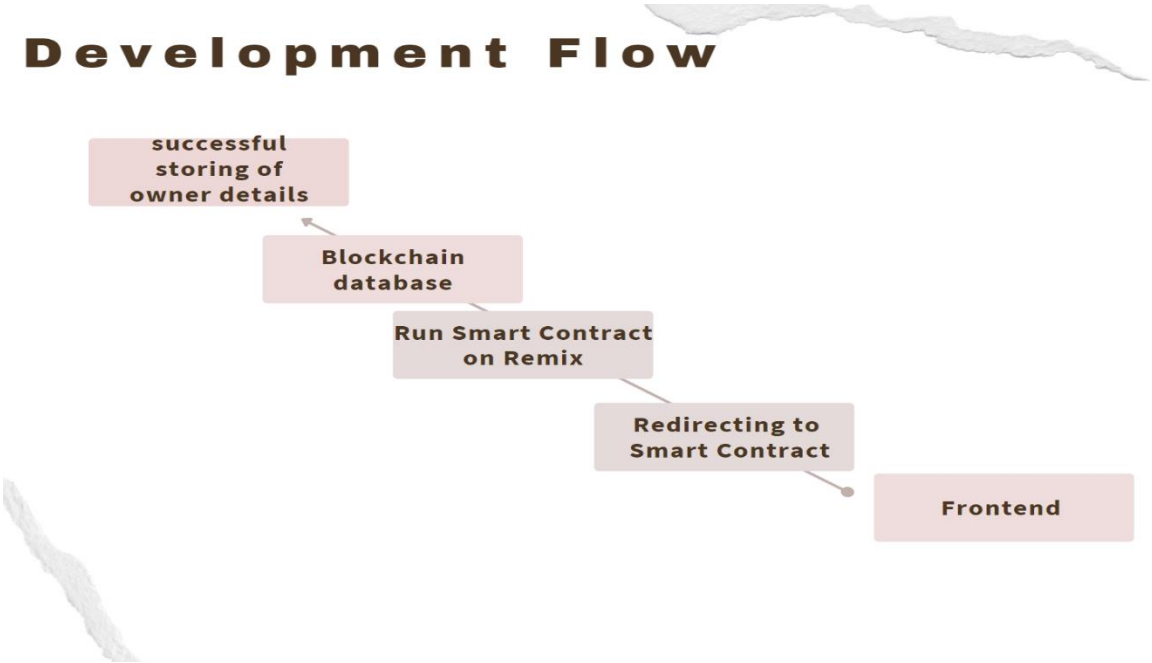
Resolving safety Issues while buying Apartments

Secure registering owners by smart contract with societies and the constituent flats that are available on rent or sale at one place(website) using blockchain technology and use cases of solidity and frontend technology for awareness about real estate frauds.

ACTIVITY DIAGRAM OF THE PROJECT



Proposed Methodology



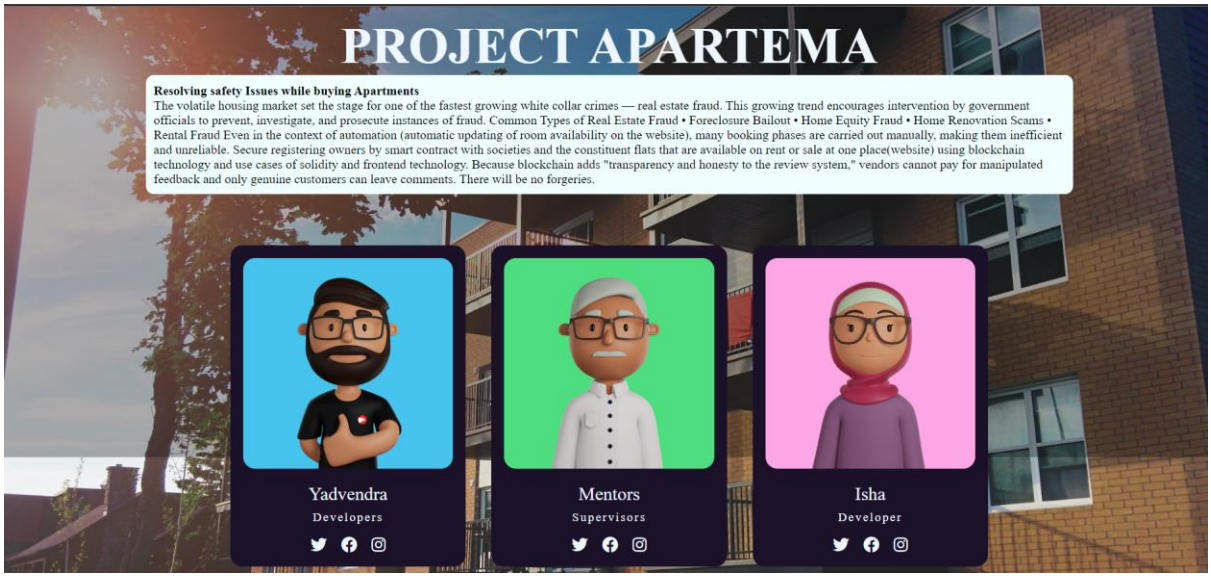
Software And Technology Used

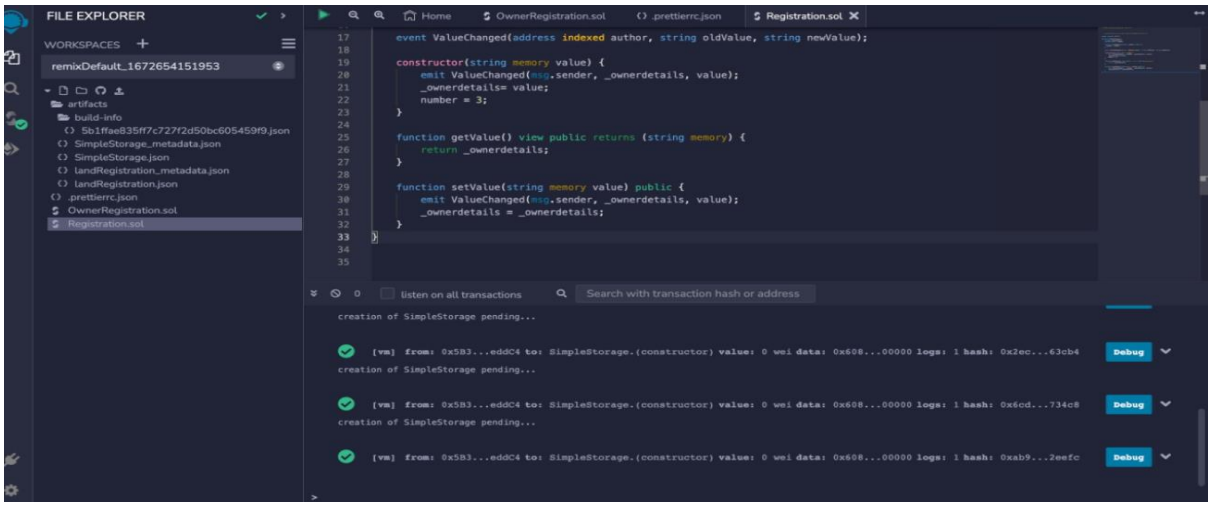
1) Vscode(HTML ,CSS and YouTube embed
2) Remix IDE-For Smart Contract Development
3) Figma-For UI/UX and Canva for logo development
4) Git and Github – For version control

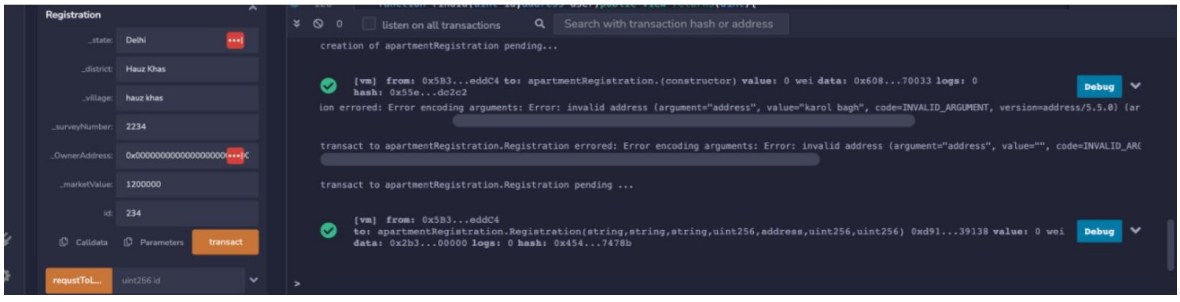
Extension of File used

- .html- for hypertext markup language
- .css - Stylesheets
- .sol – solidity smart contracts
- .md – readme files on version control

PROJECT OUTPUTS/ IMPLEMENTATION :







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