

Automobile Dealing Application using Blockchain

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Abstract: Block chain is a growing list of records, called blocks, which are associated using cryptography. Each block contains a cryptographic hash of the foregoing block, a timestamp, and transaction data. This system describes the design of a structure and enactment of Block chain. Because of the popularity of the Internet, the integration services have moderately changed people daily life, such as e-commerce activities on transactions, transportation and so on. This system intends to provide security to users' credentials. It is essential for the stored records to be tamper-proof, Blockchain technology leads to greater transparency, enhanced safety, and easier traceability.

Index Terms: Blockchain, hash, blocks, transaction, maintains.

I. INTRODUCTION

A blockchain is a distributed, public ledger of all cryptocurrencies. Regularly increasing as a completed block with the most recent transactions that are recorded and added to it in sequential order constantly growing as 'completed' blocks (the most recent transactions) are recorded and added to it in sequential order, it permits market contributor to keep track of digital currency transactions without central record keeping. Each node that is computer connected to the network gets a replica of the block chain, which is downloaded automatically. Initially evolved as the accounting method for the virtual currency that is bitcoin blockchains – which use what's known as distributed ledger technology (DLT) – are detectable in a variety of merchandising applications today. Nowadays, the technology is basically used to check the transactions that happen between the customer and dealer, within digital currencies even though it is possible to digitize the code and insert practically any document or information into the blockchain. Further then it generates a permanent ledger that cannot be altered, furthermore, the ledger's authenticity can be verified by the entire community using the blockchain instead of a single centralized consent.

Abbreviations and Acronyms

Distributed ledger technology (DLT)

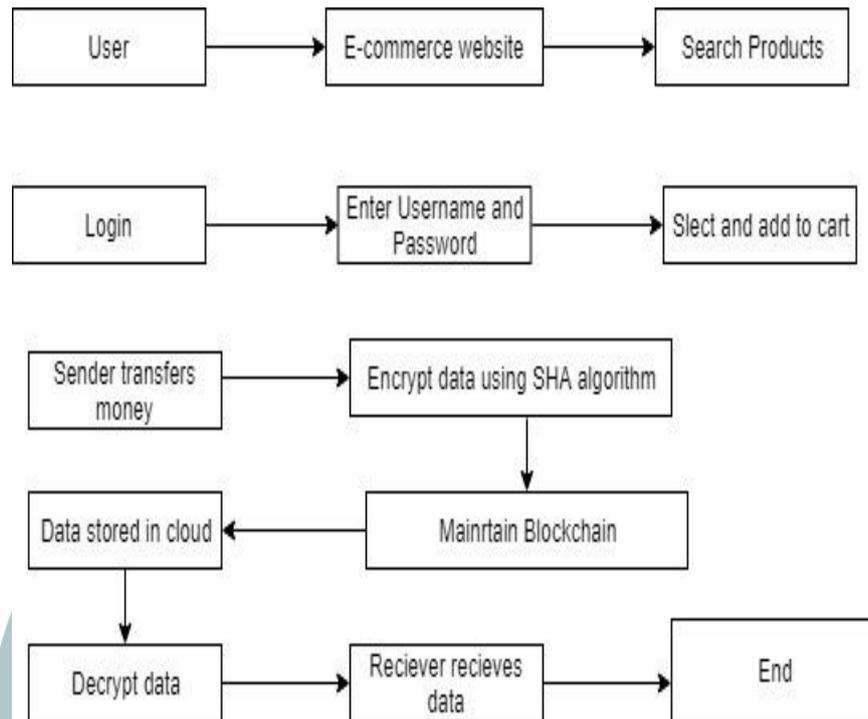
II. METHODOLOGY

The proposed system is centralized and is controlled by an Admin. An admin is the one who keeps the records of the every user transaction details. The details includes user's login credentials, Account no., Amount, Password. The admin then stores encrypted transaction details of each customer into a block and maintains a blockchain of every transaction. Each block is assigned a Hash value. A hash is a string of numbers and letters, produced by hash functions. A hash function is a mathematical function that takes a variable number of characters and converts it into a string with a fixed number of characters. Even a small change in a string creates a completely new hash.

In blockchain each block of records has the hash value of previous block. So it becomes more secure. If in case any intruder tries to forge a particular block of records he will have to also forge the hash value of all previous blocks. As forging of hash value of every block becomes a tedious task which ultimately makes blockchain technology most secure and reliable.

System working is as follows:

- Step1:-User visits the e-commerce website. He searches for product.
- Step2:-Then he login into the system using username, password and add his selected product into the cart.
- Step3:-Now, he buys the product by filling all required details.
- Step4:-The money he transferred is encrypted using SHA encryption algorithm.
- Step5:-These data are maintained by a block chain and stored at cloud.
- Step6:-At the end, data is decrypted and delivered to receiver.

System Architecture:**III.CONCLUSION**

This paper provides a transaction mechanism based on blockchain to ensure electronic seals confidentiality, non-repudiation, and unchangeability. Blockchain Technology makes use of public and private keys for authentication which ensures Security and consent. Blockchain caters the property of Immutability which ensures that data stored in a blockchain is non-susceptible to alterations and hackers. Blockchain is highly potential to be used in many different industries and sectors Blockchain if properly implemented can create a positive disruption in Automobile Industry

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