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Title FAKE PRODUCT IDENTIFICATION USING BLOCK CHAIN TECHNOLOGY

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To Secure Your Paper As Per UGC Guidelines We Are Providing A Electronic Bar Code

Fake Product Identification using Block Chain Technology

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ABSTRACT
As of late , block chain has gotten expanding consideration and various applications have risen up out of this innovation. Concerning this , we are utilizing Decentralized Blockchain innovation way to deal with guarantee that purchasers don't completely depend on the vendors to decide whether items are authentic. We portrayed this framework with items against falsifying , in that manner makers can utilize this framework to give veritable items without overseeing direct working stores , which can decrease the expense of item quality confirmation.

Keywords: counterfeit, Blockchain, Ethereum, QR code.

I.INTRODUCTION

Nowadays, Fake Product has become an essential part of life, still we need to maintain reputation and trust in the product. Transmission and distribution. Blockchain technology is distributed, decentralized that stores transactional information in the form of blocks in many databases which are connected to chains. Blockchain technology is secure technology therefore any block cannot be hacked. By using blockchain technology, customers or users do not need to rely on third party users for confirmation of product safety. As we as a whole realize these days each brand has a phony duplicate of them out there . Indeed, even the specialists of the first organization will most likely be unable to recognize counterfeit items and their genuine items. Each well known brand has counterfeit producers selling similar thing at less expensive rates by compromising with the genuine quality. We use blockchain innovation to distinguish unique items and adding a QR code to them while

assembling. The QR code of the item will be connected to a Blockchain.

We can store the item details and created QR code of that item as blocks in the data set. Presently individuals would have the option to check the QR code utilizing their cell phones and their cell phones will let them know regardless of whether the item is phony. It will look at the filtered QR code against sections in the Blockchain data set. Assuming that the code matches, it will give a warning to the client that the item is unique, if not it will give the notice that the item is phony.

II.LITERATURE SURVEY

Since its 2008 appearance as a foundation of the digital money Bitcoin, the blockchain innovation acquired far reaching consideration as a methodology to safely approve and store data without a confided in outsider. Blockchain is a decentralized exchange and information the board innovation grew first for Bitcoin cryptographic money. Blockchain highlights a decentralized and ethical data

set that has high potential for a different scope of purposes.

A blockchain, initially block chain, is a persistently developing rundown of records, called blocks, which are connected and gotten utilizing cryptography. Each block commonly contains a cryptographic hash of the past block, a timestamp and exchange information.

By plan, a blockchain is intrinsically impervious to change of the information. It is "an open, conveyed record that can record exchanges between two gatherings productively and in an evident and extremely durable manner".

Blockchain is a decentralized record used to safely trade computerized cash, perform arrangements and exchanges [8] and oversaw by shared networks. All hubs follow same convention for between hub correspondence and approving new blocks. Whenever information is approved in any block it can't be changed by any block. To modify specific block information all ensuing block information ought to be changed that will bring about agreement of the organization and that exchange will be dismissed by all nodes.

The primary benefit this innovation gives is its capacity to trade exchanges without depending on confided in outsider elements of any means. It can likewise give information honesty, in-fabricated legitimacy and client straightforwardness.

III.EXISTING SYSTEM
In the current framework the structure has used the ongoing global positioning framework for item delivery. There is a ton of plausibility to change the genuine item while it's going to the customer. This depends on a unified system, it has less security. And outsiders can likewise change the data.

Produce the electronic document of paper QR code. And work out the hash an incentive for itself and store the hash esteem into the block. The framework makes a QR Code string code to fasten to the paper QR code. Used to realness of the paper QR code through.

The Burdens of the current framework is Hyperledger can't utilize public blockchain in light of protection and low adaptability

IV.PROPOSED SYSTEM
If customer have an option to give verify on web based portal, after completion of verify, QR code is saved on blockchain. In this case other person can view the QR code online and No third party validation is required for these digital QR.

We are proposing a web based portal for product and customer that will provide options to companies to get QR code on blockchain and minimize the option of fraud and duplicate product QR code. Blockchain-based products are registered ethereum blockchain that will be secure and tamper proof as data cannot be erased on the blockchain server.

Since a blockchain is a permanent record of transactions that are disturbed. every transaction can irrefutably be tracked back to exactly when and where it happened. In addition past transaction cannot be changed, while the present can't be hacked, because every transaction is verified by every single node in the network.

V.METHODOLOGY
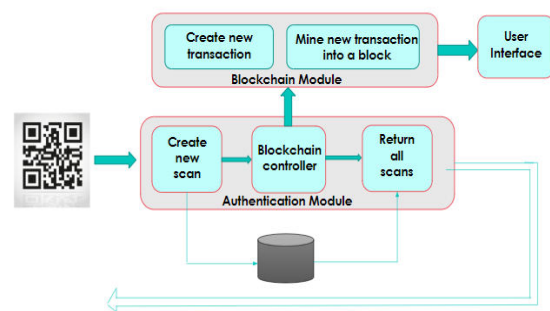
We will use Ethereum blockchain to save company data/QR code. For that we need to write a smart contract that is an interface to connect on blockchain.

Smart Contracts

Solidity is a language used for smart contracts on the Ethereum blockchain and it is a set of code and data that have a permanent address on the Ethereum blockchain. In Object Oriented Programming language, it is similar to a class where it includes state variables & functions Smart.

Contracts and blockchain are the basis of all Decentralized Applications. Contracts and blockchain have immutable and distributed features as common features. If they are on blockchain then it will be painful to upgrade contracts.

State Variables-variables that hold values that are permanently stored on the Blockchain. We will use state variables to hold Company name, Course detail, QR Code number and validity date.

Functions-Functions are the executables of smart contracts. They are what we will call to interact with the Blockchain, and they have different levels of visibility, internally and externally. Keep in mind that whenever you want to change the value/state of a variable, a transaction must occur-costing Ether.

Events-Whenever an event is called, the value passed into the event will be logged in the transactions log. This allows JavaScript call back functions or resolved promises to view the certain value you wanted to pass back after a transaction. This is because every time you make a transaction, a transaction log will be returned. We will use an event to log the ID of the newly created Candidate, which we'll display.
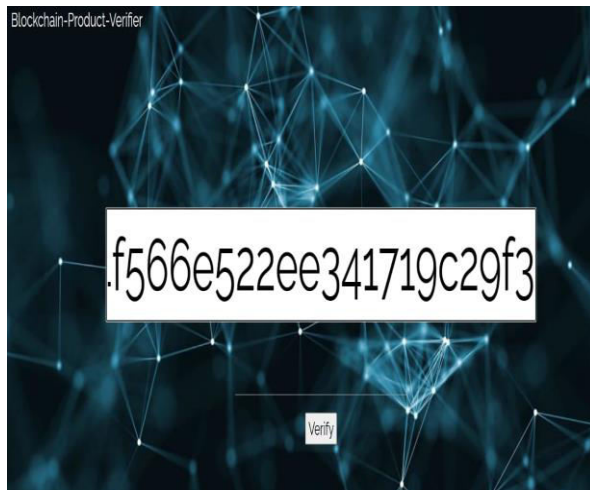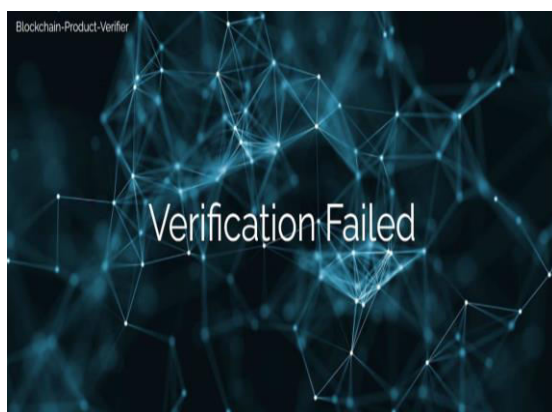
VI.RESULTS

LOGIN PAGE
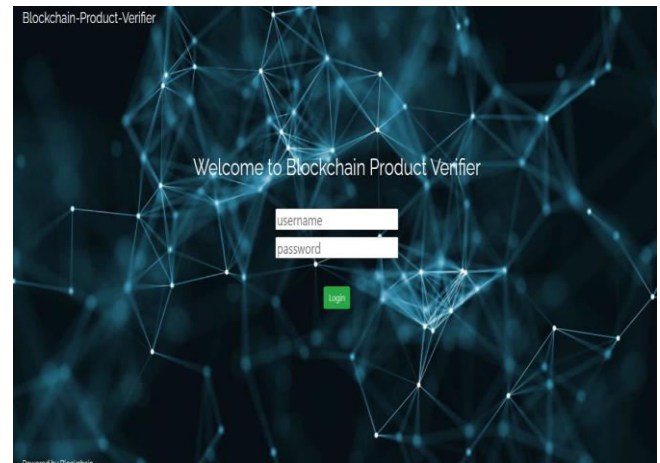
ADDING PRODUCT
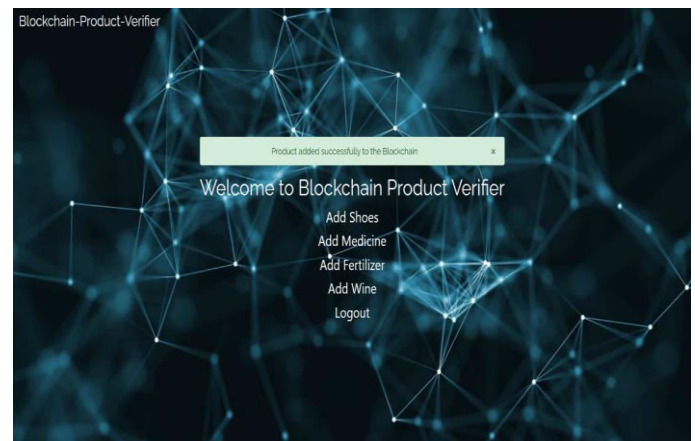
VERIFICATION

ORIGINAL PRODUCT

FAKE PRODUCT

VII. CONCLUSION

At this point we are utilizing web (which is decentralized internet based stage) to sharing data.

Yet, when we move cash; we are utilizing outdated, brought together monetary foundations like banks. In different regions we are additionally utilizing concentrated framework to share data (like schooling where college has full control).

Blockchain innovation gives a method for disposing of this "mediator/focal power. It does this by filling three significant jobs - recording exchanges, laying out character and laying out agreements. Data security is one of the main highlights of Blockchain.

By using this system , the product journey from manufacturer to customer can be recorded, and the customer is assured that the scans weren't faked.

Manufacturer is able to prove their product is authentic and is also able to track their products pathway.

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