

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 1, October 2023

# Government Fund Distribution and Tracking System using Blockchain Technology

# Sarang Raipurkar

Student, Dept. of Comp. Engg. SKNCOE, Pune, India sarangraipurkar4@gmail.com

## Sarthak Ahire

Student, Dept. of Comp. Engg. SKNCOE, Pune, India sarthakahire456@gmail.com

## Sarthak Jaykar

Student, Dept. of Comp. Engg. SKNCOE, Pune, India 1912saj@gmail.com

#### Hitanshu Patil

Student, Dept. of Comp. Engg. SKNCOE, Pune, India patilhitanshu54@gmail.com

#### Prof. Vrushali Paithankar

Asst. Prof. Dept. of Comp. Engg SKNCOE, Pune, India vrushali.paithankar@gmail.com

Abstract: Governments must address a wide range of governmental responsibilities. State government operations require many transactions related to various functions that must be carried out throughout the state. This comprises new projects, repairs and maintenance, contract awards, government employee salaries, farmer programmes, and so on. The low-level corruption that is sometimes impossible to trace is a key impediment to the state's success. Because of the existing system, tracking it is a challenging effort. We propose in this paper a smart system for tracking money granted to the state government as they move through the government process at each stage. We employ blockchain technology to safeguard transactions at every level while retaining transparency and sealing every transaction with proofs as the funds go forward. Blockchain, or block chain, is a growing set of documents called blocks that are linked together via encryption. Each block contains the previous block's cryptographic hash, a timestamp, and transaction data.

**Keywords:** Hash Generation, Key Recovery, Blockchain, Government Funding

#### I. INTRODUCTION

The blockchain-based fund distribution and tracking management system stores data safely, which improves security. Additionally, it enables blockchain updates across the board in accordance with smart contract technology. The control, configuration, and in particular the secrecy, integrity, and availability of the blockchain networking system are being built. Normal social data set The board plans (like Prophet and SQL), disseminated broadly over many purposes, have one critical functional prerequisite: the organization of data is done by few reliable substances. Scattered Record Innovations (DLT, frequently known as blockchain), a substitute compositional strategy for overseeing data, disposes of the requirement for a confided in power to keep up with and give a continually growing assortment of information. Trust is a central trait of a blockchain. Blockchain trades are supported and checked utilizing keys, which additionally firmly recognize the originator. Usually when a project is allocated funds, there is no knowledge as to how these funds are being used and a large part of it is never show in records due to corruption. To solve this problem, a system has been proposed using Blockchain to provide the transparency.

#### II. LITERATURE SURVEY

In this paper, the author propose an imaginative blockchain-based IOT designing to help with assembling an unquestionably protected areas of strength for and structure. By inspecting the absences of the continuous IOT plan and the benefits of the Block-chain progression. We decay and redesign the primary IOT plan to shape another, multifocus, inadequately decentralized planning. Likewise, the proposed designing tends to an enormous improvement of the chief arrangement, which gives one more going to the IOT advancement.[1]

Copyright to IJARSCT DOI: 10.48175/IJARSCT-13095 www.ijarsct.co.in





#### International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.301 Volume 3, Issue 1, October 2023

This paper gives, through its technique, a coordinated appraisal of the square chain fit in the stock association industry. It portrays the particular pieces of square chain that effect store association, for example, flexibility, execution, understanding instrument, security considerations, district proof and cost.[2]

Data digging structure for assumption and disclosure of financial report intimidation right now. These instructive components are being use for executing association rule searching for assumption and three prudent mining techniques explicitly K-proposes,

Staggered Feed Forward Association, Innate programming for disclosure of monetary contortion. This examination can ruin deceiving monetary uncovering what's more, remember it expecting the heads of the association is great for executing monetary arrangement rundown twisting no matter what the nearness of against compulsion condition. [3]

Data digging structure for evasion and uncovering of financial overview blackmail right now. The plan utilized right now the typical development of data mining. These significant components are being utilized for finishing affiliation rule looking for balance and three reasonable mining procedures explicitly K-gathers, Staggered Feed Forward Association, Innate programming for recognizable proof of money related misrepresentation.[4]

In this paper, the maker propose a square chain connect with useful information mix and secure sharing game plan joining Ethereal square chain and critical help learning (DRL) to make major areas of strength for a protected condition. This second, is utilized to achieve the most raised extent of amassed information, the square chain advancement is utilized to ensure flourishing and persevering through nature of information sharing.[5]

Blockchain is portrayed by its decentralized nature, respectability of the data put away in the chain and its responsiveness. Considering these qualities, somewhere else where Blockchain can be utilized is to deliver government assets for an undertaking. Conventionally while an undertaking is apportioned assets, there is no data concerning how these assets are being utilized and a giant piece of it is never appeared in records because of defilement. To manage this issue, a system has been proposed utilizing Blockchain to give the straightforwardness.[6]

In this paper, a generally adaptable cushy control plot through yield following bungle input has been proposed for supportive yield following of a class of dangerous nonlinear frameworks with huge states and completely dull parts including parametric or conceivably partner shortcomings and outer disturbing effects. The proposed devise gives a fundamental asset for target following of mechanized vehicles, rockets, adaptable robots, and so on, while essentially following goof (abnormality) can be accessible. [7]

This paper portrays a methodology for joining client information with normally made rules. The show additionally created results yet generally speaking the improvement was not essential, this might be an outcome of the strategies that were endeavored. Another wisdom that is made using these outcomes is that disregarding how there was a collection in the show concerning restores, the peril changed execution was stunningly more stable.[8]

In this paper, we propose a thing prominence structure dependent upon blockchain headway, in which all thing moving records are perpetually kept in an appropriated record by utilizing brilliant game plans and a chain is formed that can follow back to the wellspring of the things. Our framework has clear decentralized credits, which for the most part lessens the chance to adjust data inside endeavors inconspicuously. Our framework is portrayed by information openness, fixing, and security from man-in-the-middle attacks. [9]

This paper proposed another data sharing plan subject to blockchain advancement. Clients can deal with their information and comprehend the information being collected about them and how to utilize it without confiding in any outsider. In any case, the game plan didn't consider the chance of the real endeavor playing with information. [10]

DOI: 10.48175/IJARSCT-13095



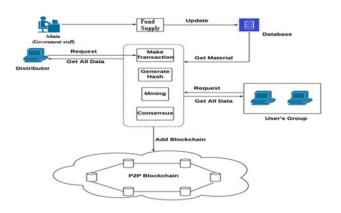


#### International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 1, October 2023

## III. PROPOSED METHODOLGY



### Figure: System Architecture

Module 1 - Government: - Government will give the fund which is requested by the user.

Module 2 –Distributor Authority: - This will authorize or verify the user that it is a valid user as well as valid request or not. A maintains fund by (processing and managing) supply of goods from user valid request.

Module 3 - User (Customer):- User will request for the fund according to their needs

#### IV. CONCLUSION

We are exploring blockchain uses in the proposed system, but we must also consider access and privacy problems. This enables the maintenance of a crystal clear record with on-demand access to transactional data on a need-to-know basis. The system employs encryption to secure transactional data by employing hashes to keep a block of transactions in a chain that is maintained and validated by every node engaged in order to verify the transaction and save the data in a transparent form within the government. With more improvements, this blockchain architecture might guarantee transparency in all government transactions.

#### REFERENCES

- [1]. Jiafu Wan, Jiapeng Li, Muhammad Imran, Di Li, Fazal-e-Amin, "A BlockchainBased Solution for Enhancing Security and Privacy in Smart Factory", IEEE Transactions on Industrial Informatics Volume: 15, June 2019.
- [2]. Antonios Litke, Dimosthenis Anagnostopoulos, Theodora Varvarigou, "Blockchains for Supply Chain Management: Architectural Elements and Challenges to wards a Global Scale Deployment", MDPI January 2019.
- [3]. Mrs. R.Meenatkshi, Mrs. K.Sivaranjani, "A Comparative Study on Fraud Detection in Financial Statement utilizing Data Mining Technique", International Journal of Computer Science and Mobile Computing, Vol.5 Issue.7, July-2016, pg. 382-386.
- [4]. Analysis KK Tangod, GH Kulkarni, "Discovery of Financial Statement Fraud utilizing Data Mining Technique and Performance", International Journal of Advanced Research in Computer and Communication Engineering Vol. 4, Issue 7, July 2015.
- [5]. Chi Harold Liu, Senior Member, IEEE, Qiuxia Lin, Shilin Wen. "Blockchain empowered Data Collection and Sharing for Industrial IoT with Deep Reinforcement Learning", IEEE Transaction on Industrial Volume: 15, Issue: 6, June 2019
- [6]. Apoorva Mohite, Ajay Acharya, "Blockchain for government support following utilizing Hyperledger", IEEE Transactions on Fuzzy Systems, April 2018
- [7]. Ning Wang, Jing-Chao Sun, Meng JooEr,"Tracking-Error-Based Universal Adaptive Fuzzy Control for Output Tracking of Nonlinear System with Completely Unknown Dynamics", IEEEAPRIL 2017.

DOI: 10.48175/IJARSCT-13095





## International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 1, October 2023

- [8]. Adam Ghandar, Zbigniew Michalewicz, Ralf Zurbruegg, Chee Cheong, "Record Tracking Fund Enhancement Using Evolving Multi-Criteria Fuzzy Decision Models", IEEE Congress on Evolutionary Computation.
- [9]. Shangping Wang, Dongyi Li, Yaling Zhang, Juanjuan Chen, "Savvy ContractBased Product Traceability System in the Supply Chain Scenario", IEEE Access, 2019.
- [10]. M. Kim, B. Hilton, Z. Burks, and J. Reyes,"Coordinating Blockchain, Smart Contract-Tokens, and IoT to Design a Food Traceability Solution," in ninth IEEE Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), Univ British Columbia, Vancouver, Canada, Nov. 2018

DOI: 10.48175/IJARSCT-13095

