

Government Fund Allocation Tracking System Over Blockchain

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Abstract: *The state government working involves a large number of trans- actions activities towards various operations throughout the state. This includes new actions, initiatives, projects, granting contracts, farmer schemes, and so on. One of the most challenging factors that top governments face is low- level corruption which at times is hard to follow and denies the state progress. As a result of the current system, tracking is very problematic and this provides needy people with a service that is sometimes difficult to track, which deprives them. In this case, we use blockchain which enables cryptography and transaction security at every stage while maintaining transparency so that every transaction is backed up with proof of its authenticity. Hence, we present a framework that uses blockchain innovation and a full proof fund transfer system. Blockchain contains growing list of records called blocks. Crypto- graphically hashed data, a timestamp, and recent transactions are included in each block.*

Keywords: Blockchain, Transactions, Security, Tracking, Transparency, Encryption.

I. INTRODUCTION

Presently Available Systems for the Same

Existing systems of funds at every single stage till it reaches the beneficiary's account. The system relies on hashing. The proposed framework expects to tackle all misrepresentations submitted within the public authority area and provides a sequence of secure exchange of information, cash, and other individual data of each transaction. There will be no requirement for the outsider and also the exchanges are regulated all the more sturdily and transparently. This system will assist in limiting human blunders and time delays in fund allocation. be an increasing interest in this technology in the next few years.

II. PROPOSED ALGORITHM

Algorithm 1: Protocol for Peer Verification

Input : User get IP address, User Transaction TID,

Output : Enable IP address or current query if any connection is valid

Step 1 : User generate the any transaction DDL, DML or DCL query

Step 2 : Get current

IP address If (connection (IP) equals(true)) Flag

Flag true

Else

Flag

False

End For

Step 4

if (Flag == true) Peer to Peer Verification valid Else

Peer to Peer Verification

Invalid End if

End for

Algorithm 2: Hash Generation

Input : Genesis block, Previous hash, data d, Output : Generated hash H according to given data

Step 1 : Input data as d

Step 2 : Apply SHA 256 from SHA family

Step 3 : Current Hash=SHA256(d)

Step 4 : Return Current Hash

Algorithm 3: Mining Algorithm for valid hash creation Input : Hash Validation Policy P[], Current Hash

Values hash Val Output : Valid hash

Step 1 : System generate the hash Val for ith transaction using

Algorithm 1

Step 2 : if (hash Val. valid with P[])

Flag

Else Flag=0

Step 3 : Return valid hash when flag=1

Algorithm 4: Recover Block Chain Data

Input : User Transaction query, Current Node Chain CNode[chain], OldNodesChain

[Nodeid] Output : Recover if any chain is invalid else execute current query Step 1 : User generate the any transaction DDL, DML or DCL query

Step 2 : Get current server blockchain Cchain ← Cnode[Chain]

Step 3 : Foreach (read I into

NodeChain) If (!equalsNodeChain[i] with(Cchain)) Flag 1

Else

Continue Commit query

Step 4 : if (Flag == 1)

Count = Similary Nodes Blockchian()

Step 5 : Calculate the majority of server Recover in valid blockchain from specific node Step7 : End if Endf or Endf or

III. CONCLUSION

In this full-proof, secure government fund allocation and tracking system, the allotted funds are tracked at each level until it reaches the beneficiaries. This proposed framework is added to assist the authorities to lessen corruption and offer transparency in all transactions because of the functions of blockchainlike immutability, proof of work, and security. It offers the right governance and transparency. It will maintain track of all transactions made. As blockchain technology is used the transactions as soon as made cannot be changed and if there's any try of tempering, we can get to recognize approximately that easily. There might be no requirement for the outsider and the exchanges might be regulated all the extra sturdily and transparently. In addition to preventing human errors and delays, it will help eliminate human errors. This framework will make the general public authority framework activities appreciably extra stable and productive. We can nevertheless upload customary schemes from everywhere in the world for fundraising to take it to the subsequent stage for big price range required the humans in need.

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