

# Blockchain based Government Schemes and Transaction Tracker

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**Abstract** -India, the fastest growing economy in the world has great potential in attracting global customers and adapting to new technologies and innovations. Digitalization has great potential to improve and enhance communication in almost every sector of its economy. But sometimes the distribution of these methods is unequal between the few spheres of government. a large number and a major change in the way / work of a large group of people out there.

Blockchain is one such technology. Due to its divisive nature, security, consistency, the nature of the evidence of disruption is used by all sectors around the world. interest is allocated tons of money as cash. Due to a lack of transparency, Blockchain can be used to close that gap and provide a fully secure, consistent financial tracking system.

**Key Words:-** Blockchain, HyperLedger, IPFS, Blockchain applications

## 1. INTRODUCTION

Blockchain is the most common name in today's competitive and fast-growing world. But sadly very few know about technology. Some of us call crypto-currencies like Bitcoin, Ethereum as blockchain, others find that this works with blockchain policy and so on. . To make things clear in your mind let us first highlight the topic.

The concept of Blockchain was put forward by 'Satoshi Nakamoto' in his white paper. And you are a person who is thought to be a fraud who invented the development of bitcoin. Blockchain is a way of recording information in a way that makes it difficult or impossible to change, distort or alter records.

Also called Digital ledger, which is a ledger that is kept by financial institutions to keep track of records. In the same fashion blockchain is actually a digital ledger that is kept in a separate and distributed location.

Each block in a blockchain is linked to another that forms a series of networks, hence the term "Blockchain". Each block has specific information such as the number of tasks and each time a transaction the record is updated to a network of participants. This way you store data in

The most widely distributed method is human (DLT) which means "Distributed Ledger Technology". This

approach ensures that data integrity is maintained throughout the network.

Today in this age of technology and digitalization the world is digital in every respect. Technology has completely changed the way people see the world or the world and has led to the transformation of humanity in a way that has never been seen before.

India is one of the world's largest democracies with over 1.3+ billion people, with the majority of the population lagging behind economically. The Government of India and the Regional Government roll out various policies and schemes on a large scale for the benefit of the economically disadvantaged. . Sometimes the Agency and the Provincial Government issue policies and programs that many citizens are unaware of and their benefits are not available to citizens.

In cases where there is a conflict between national policies and the policies of the Institutional Government to close this gap and find and follow the best citizen program to reap the benefits of these Government Schemes, Fund Tracker (State and Central) will be implemented. blockchain method.

Literature Survey			
Paper Title	Advantages	Research Gap	Year
1."An investigation into fraudulent tools in the Bitcoin ecosystem" by M. Möser, R. Böhme and D. Breuker	How to use blockchain technology to find cases and how to properly investigate.	No implementation or comment on government programs and budgeting is done on paper	2013
2. An Overview of Blockchain Technology: Architecture, Consensus, and Future	The main advantage of this paper is that it suggests how Blockchain technology can be applied to	It covers only the scope of the future of technology and not just any kind of practical application made	2017

<p><b>Trends</b> help us to Understand its future applications in IOT and financial systems by Zibin Zheng and Shaoan Xie.</p>	<p>IoT and financial systems.</p>	<p>by the author. So that we can try to eliminate this issue in our research.</p>		<p>7. "The Security and Performance of Proof of Work Blockchains" by Arthur Gervais, Ghassan O. Karame, Karl Wüst, Vasileios Glykantzis, Hubert Ritzdorf, and Srdjan Capkun</p>	<p>Provides useful information about the safety and performance of various parameters such as block size, distribution time etc.</p>	<p>It does not have a tool to use in government infrastructure.</p>	<p>2020</p>
<p>3. "BLOCKCHAIN CH: A Framework for Analyzing Private Blockchains" by Tien Tuan Anh Dinh, Ji Wang, Gang Chen, Rui Liu, Beng Chin Ooi, and Kian- Lee Tan</p>	<p>This paper discusses how Blockchain technology can be used in a private blockchain and how transactions can be filtered through corruption that protects users' privacy.</p>	<p>did not address issues with how this will be done in Government infrastructure and how rural development can be addressed.</p>	<p>2017</p>	<p>8. Platform for Tracking Donations of Charitable Foundations based on Blockchain Technology Hadi Saleh, Sergey Avdoshin, Azamat Dzhonov</p>	<p>This paper presents useful information on how wallet management can be done using Blockchain and addresses Cyber Security threats alike.</p>	<p>Lack of practical or prototype information about the model and its standard survey paper.</p>	<p>2019</p>
<p>4. "An Online Identity and Smart Contract Management System"</p>	<p>A smart contract-based framework has been proposed and how it can be used to achieve social dependency networks.</p>	<p>It is all the same description of theater and no portable model or implementation has been done.</p>	<p>2016</p>	<p>9. Bitcoin: A Peer-to-Peer Electronic Cash System Satoshi Nakamoto</p>	<p>In this case, a form of electronic money from a peer group can allow online payments to be sent directly from one party to another without having to enter a financial institution.</p>	<p>There is no mention of public finance management and rural development information using the same method</p>	<p>2009</p>
<p>5. "Ensuring data integrity using blockchain technology" by Zikratov, A. Kuzmin, V. Akimenko, V. Niculichev and L. Yalansky.</p>	<p>The detailed research paper primarily focuses on how integrity is maintained in Blockchain.</p>	<p>This paper provides some useful information but has no actual implementation or just use of the prototype.</p>	<p>2017</p>				
<p>6. Government Fund Distribution and Tracking System Saket Sharma<sup>1</sup>, Raj jaiswal<sup>2</sup>, Davendra Rathi<sup>3</sup>, Farah Sayyed<sup>4</sup>, Gaurav Tiwari<sup>5</sup></p>	<p>This paper discusses and analyzes the construction of private and public blockchain security based on traditional analysis of blockchain structures</p>	<p>Can't face or suggest how to use that in the real world. Although the information is useful, it is not satisfactory.</p>	<p>2019</p>				

**A. SYSTEM REQUIREMENTS**

Ganache 2.5.4

NodeJS 10.16.3

Geth 1.10.17

Meta Mask 10.14.6

Atom 1.60.0

Truffle 4.2

**B. FRONT-END PART**

We have created a site that offers the user to bid on government-listed schemes for sale. Previously we used web technologies such as HTML5, CSS3 and JavaScript to enhance site and site management. part of logic.

This portal serves as a visual link where merchants (government officials) and consumers (those bidding for certain schemes) engage and benefit from the full, conclusive and informative witness system they have.

**C. BACK-END PART**

The backend of our project is fully developed using frameworks based on Blockchain technology like Ganache, Truffle suite.

Ganache is actually a personal Ethereum blockchain that you can use to run tests, perform instructions, and check status while controlling how the series works. It gives you 10 ethereum accounts with each 100ETH to scan the network. And all transactions that take place in the network are stored in blocks with specific information such as TimeStamp, block hash, and other information needed to complete the book.

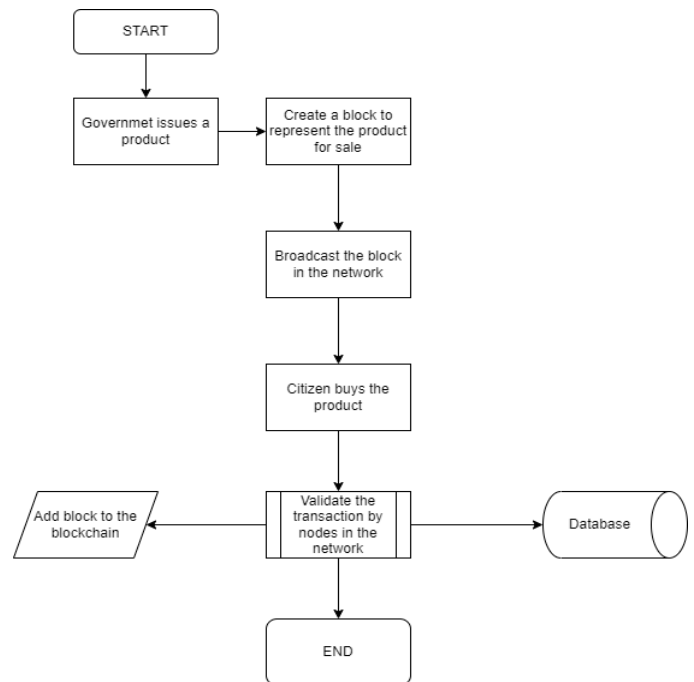
Truffle is actually a development site, a framework for testing everything in one place. It is based on Ethereum and allows for the smooth and seamless development of DApps i.e. Distributed Applications. With truffle you can integrate smart contracts and apply them to web applications and use them to enhance the frontend of your apps.

Wise contracts are made using the language of Solidity which we use to establish the terms of the agreement between the buyer and the seller of the schemes.

At the payment gateway we have used MetaMask which serves as a wallet for your web applications. All activities that take place are verified using metamask.

**D. PROCESS**

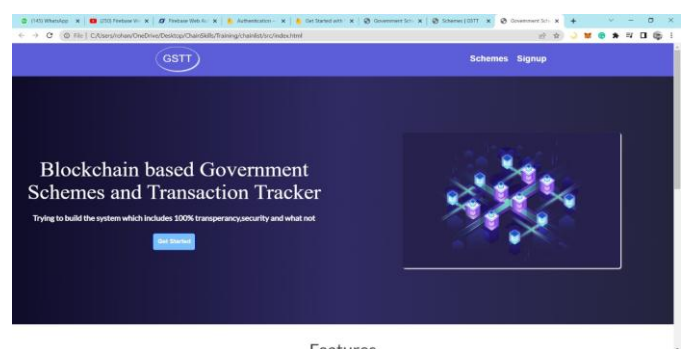
It includes many projects, maintenance or repair work and recording local rental and much more is included in the role of the role of government and central government. The biggest obstacle the central government faces is the low level of corruption that is sometimes impossible to follow which hinders the progress of development. We will therefore propose a blockchain-based theory, which covers the tracking of everything else that is done within the city on the basis of small industries or large companies. This allows for a clear and accurate record of required activity data on a need-to-know basis.

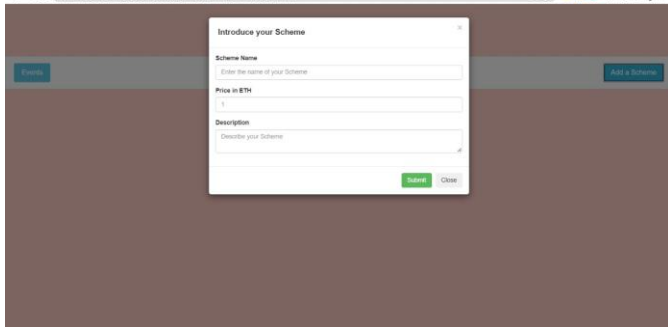
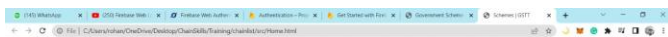
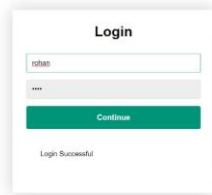


The system uses encryption to protect transaction data using hashes to maintain a block of transactions in a series that is maintained and verified by all the involved nodes in order to ensure transaction and data storage transparency. The system allows for a fully-fledged, secure, authentic and authentic fund-sharing system and a fund tracking system to help build a sustainable government system.

The whole process starts with a payer service and ends with a transparent website that is provided to the public. Therefore transaction details such as payer, borrower, amount of payment, why the work was done, are all monitored and stored on the website. In addition a block with action details, is added to the network. After the verification process, a block with transaction details is checked and added to the blockchain network. Work can now be done on the network. All activities and details of activities, published and added to the distributed brochure and will be made available to the public to keep track of transactions.

**RESULTS**





### 3. CONCLUSIONS

Blockchain features such as fixed, tamper-proof, secure and segregated method helps to remove the security risks of the application. Hyperledger Fabric is similar to other blockchain technology with ledger, which uses smart contracts and is the system by which participants manage their transactions. It provides good governance and access control and can be expanded whenever needed.

Consideration of accessibility and privacy while developing. With further development in the system this program can provide transparency in all government-related activities.

By going to the lower part of the community, approving the proposed program will help them to better understand how these programs will benefit them and because of the clarity of the plan they will be able to watch everything that

is being done. location. The authorities will ensure the integrity of every cent. In this way every cent of the Indian people lives in good hands and the citizen has the right to view and question the authorities equally.

Blockchain technology has the ability to store data on a P2P network. Blockchain Technology eliminates potential threats to any type of modification and modification in the system.

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