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## TRANSPARENT AND GENUINE CHARITY APPLICATION

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### ABSTRACT

The charity organizations in India lack transparency and supervising them is difficult, which has a negative impact on the willingness of the people to donate. There exist many online donation platforms in the world and yet issues concerning extra fees, accountability, and processing delay are still a hurdle. We have witnessed increased growth of non-commercial organizations and charity funds through recent years, collecting donations for various philanthropic needs. Unfortunately, charity funds frequently gain much traction from the unscrupulous organization, leading to significant damage for industry's reputation, reducing trust level, affecting the power to boost donations. We strongly believe that utilizing blockchain technology will boost trust, increase efficiency, and encourage more donations. The Charity app project, a blockchain-based charity foundation platform that facilitates the trustful network's formation and is accountable for collecting donation funds. The blockchain network would be comprised of publicly known, trustful, and prestigious organizations. We hope to increase the transparency of charities to enhance the public's trust in charities and promote the development of philanthropy by a blockchain-based charity system.

**Keywords:** Blockchain, Smart contract, Beneficiary, Donors, Charity Application

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### I. INTRODUCTION

Blockchain could be a data structure that could be a growing list of information blocks. The knowledge blocks area unit coupled along, such recent blocks can't be removed or altered. Blockchain is the backbone Technology of Digital Cryptocurrency BitCoin. The blockchain is a distributed database of records of all transactions or digital event that have been executed and shared among participating parties. Each transaction verified by the majority of participants of the system. It contains every single record of each transaction. Bitcoin is the most popular cryptocurrency an example of the blockchain. Blockchain Technology first came to light when a person or Group of individuals name 'Satoshi Nakamoto' published a white paper on "**BitCoin: A peer-to-peer electronic cash system**" in 2008. Blockchain Technology Records Transaction in Digital Ledger which is distributed over the Network thus making it incorruptible. Anything of value like Land Assets, Cars, etc. can be recorded on Blockchain as a Transaction.

**Smart Contract-** A smart contract is a self-executing contract with the terms of the agreement between different users being directly written into lines of code. The code and the agreements contained therein exist across a distributed, decentralized blockchain network. The code controls the execution and transactions are trackable and irreversible. Smart contracts permit trusted transactions and agreements to be carried out among disparate, anonymous parties without the need for a central authority, legal system, or external enforcement mechanism.

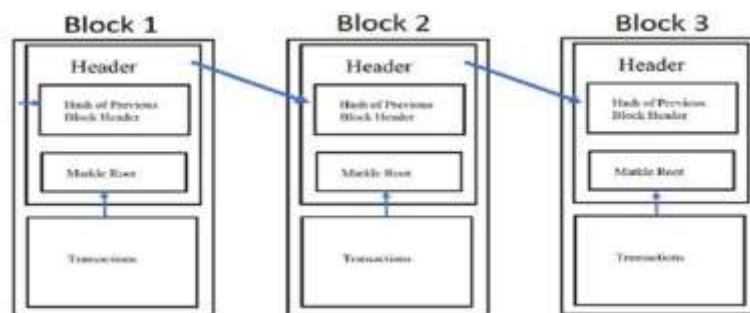
### II. MOTIVATION AND PROBLEM DEFINITION

**Motivation-** The need for decentralization is the key motivation behind the blockchain technology, and decentralization is achieved by distributing the computation tasks to all the nodes of the blockchain network. Decentralization solves several problems of traditional systems

**Problem Definition-** Blockchain-based platforms helps charity organizations to harness the power of peer-to-peer networks by eliminating the financial intermediaries such as banks. This would reduce the transaction costs and transaction settlement time dramatically.

### III. METHODOLOGY

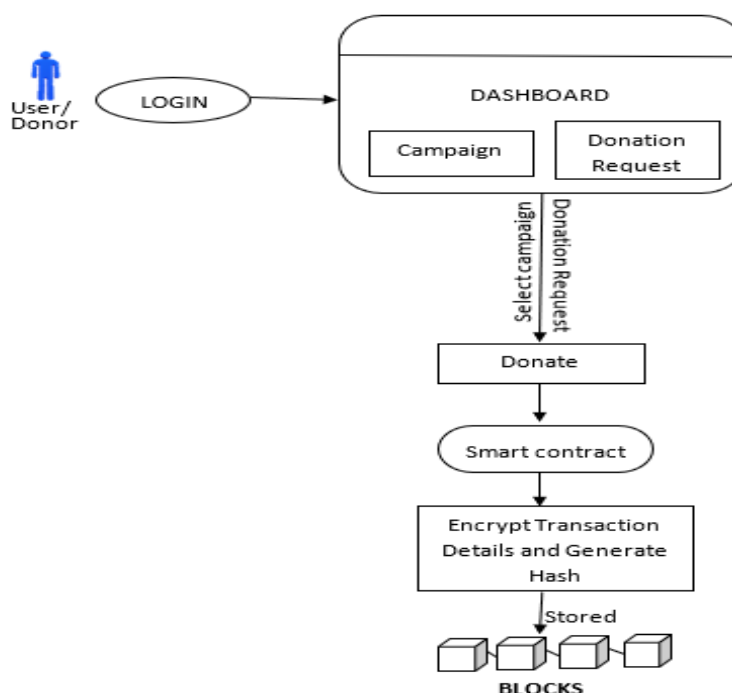
Blockchain is a system of recording information in a way that makes it difficult or impossible to change, hack, or cheat the system. A blockchain is essentially a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain. Each block in the chain contains a number of transactions, and every time a new transaction occurs on the blockchain, a record of that transaction is added to every participant's ledger. The decentralized database managed by multiple participants is known as Distributed Ledger Technology (DLT). Blockchain, is a type of DLT in which transactions are recorded with an immutable cryptographic signature called a hash



**Fig 1: Blocks**

### IV. SYSTEM DESIGN

- i. This system architecture represents for NGO using smart contracts.
- ii. Where in first phase Users and NGO can register with our system.
- iii. NGO can post donation requests or campaign on the system.
- iv. User will check the details about campaign or donation and process for the money transaction.
- v. We will encrypt data of transactions to provide security from hackers and all the data is been store in the database



**Fig 2: System Architecture**

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## V. APPLICATIONS AND ADVANTAGES

1. Bank sector
2. Health sector
3. Money investing application
4. Education sector
5. Data security
6. Data recovery
7. Transparency between NGO and user

## VI. CONCLUSION

We are proposed a decentralized approach for charitable work that a blockchain-based solution was proposed that would increase transparency and trust between NGOs and donor. This system will meet both needs of improved authenticity and security. It will also establish a reliable system and make the entire process more transparent. This will eliminate the need for middlemen between donations and charitable organizations. The functions of creating project, donating, approving funds and checking the Transactions.

## ACKNOWLEDGEMENT

The completion of our project brings with it a sense of satisfaction, but it is never complete without them those people who made it possible and whose constant support has crowned our efforts with success. One cannot even imagine our completion of the project without guidance and neither can we succeed without acknowledging it. It is the great pleasure that we acknowledge the enormous assistance and excellent co-operation to us by the respected personalities.

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