ABSTRACT

ON

BLOCKCHAIN-BASED CROWDFUNDING APPLICATION (2022)

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DEPARTMENT

of

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ABSTRACT

People's data is valuable and sensitive, and blockchain can significantly change how it is seen. All transactions are time-taking and date-stamped and are logged irreversibly. Smart contracts can even automate transactions, boosting your productivity and speeding up the process even further. After pre-specified conditions are met, the transaction or process moves on to the next stage. Smart contracts eliminate the need for human intervention and the reliance on third parties to verify that contract requirements have been satisfied. The issue of transparency and security is very paramount in any organization, especially in organizations providing crowdfunding platforms, therefore the intention to provide a reliable, secured, transparent and decentralized solution is achieved by developing a blockchain-based crowdfunding web application. This crowdfunding application is not just like any other application which just allows people to invest their money, but this platform also gives an assurance to the backers that returns will be guaranteed. The application will also provide transparency between the backers and the start-ups so that the backers can stay updated on the progress of the project work of the respective start-ups that they invested their money in. Money will be refunded to the backers in case the project is aborted in between.

INTRODUCTION

What is Crowdfunding?

- This is a Blockchain-Based Crowdfunding Application, a multi-user application that allows the various start-ups to gain funding from renowned investors who will be called Backers.

- The start-ups can create projects and send them for approval by the admin user who is assigned to the work of approving or rejecting a project.

- This crowdfunding application is like no other as it does not transfer the amount which is funded directly to the start-up, rather the amount is stored in a smart contract.

What is smart Contract?

- Smart contracts are computer programs that run when specific conditions are met and are stored on a blockchain.

- Commonly used to automate contract execution.

- Automate transactions, boosting your productivity and speeding up the process even further.

- Eliminate the need for human intervention.

Block Chain

- Blockchain is an emerging platform for developing decentralised applications and data storage among the shared parties with all recorded transactions that have been executed through- out the process.

- Each and every transaction in the public ledger is verified using consensus protocols involving majority of the participants of the system.

- As the new data is emerging blocks are created and encrypted using hashing algorithms. Thus, the information entered once cannot be modified without consulting a legal administrator.

- Blockchain allows one to create a ledger of events, transactions and data, generated through various IT processes with strong cryptographic guarantees, that is distributed and replicated across the network for tamper resistance, immutability and verifiability.

EXISTING SYSTEM

- Not ensure the security of fundings done by the backers.

- Do not give a guarantee of completion of projects listed on their website.

- Direct money transfer to the start-ups.

- Lead to potential losses to the investors.

PROPOSED SYSTEM

- This application aims to eradicate this problem by using a method that ensures that the funding is widely used and projects are completed.

- The method devised, says that the total funded amount would not be transferred to the start-up directly, instead, it would be stored in a smart contract.

- Start-up's will have to complete certain pre- set milestones set by themselves. So, each time a milestone is completed, an amount corresponding to one fraction of the total milestones will be transferred to the start-up.

- Let the total milestones to be completed for the project be n.

- After each milestone is completed by the start-up, 1/n times the total amount stored in the smart contract will be transferred to the start-up

- The application will also provide transparency between the backers and the start-ups

- Money will be refunded to the backers in case the project is aborted in between

- The amount will be refunded based on the following

  Let the total milestones to be completed for the project be n.
  - If no milestones have been completed yet and the project is aborted at this stage, then the whole amount that the backers funded is refunded to them immediately.
  - If the milestone that is completed is m and the project is aborted at this stage, then the amount refunded to the backers will be $n-m/n$ times the total amount funded by that particular backer.

- Hence, by adopting this method, it is ensured that the backers funds are neither misused nor wasted.