

CROWD FUNDING FRAUD PREVENTION USING BLOCKCHAIN

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Abstract: - Crowd funding fraud prevention using blockchain - Blockchain is shared that facilitates the process of recording transactions and tracking assets in a network. virtually anything of value can be tracked and traded on block chain network, Generally People who are interested in a project can donate by making an online transaction. The donated money goes to the project manager, which he uses to complete the project or to make a product. This existing method of online crowdfunding has a major drawback. It does not allow contributors to have control over the money they have contributed. Since in the existing method the project manager has all the control over the money contributed he can very easily perform malicious activities. Here we address this problem faced by the existing online crowdfunding platforms by using ethereum network and smart contract. The development of Block chain technology has allowed businesses to build decentralized models. It has derived new methods to conduct transactions and make agreements. One of the technologies that propose an alternative to the traditional model is the smart contract. A smart contract is similar to a contract in the physical world, but it is digital and represented by a tiny computer program stored in a block chain.

KeyWords—Blockchain, Centralised & Decentralised Systems, Smart Contract

INTRODUCTION

A blockchain domain takes advantage of blockchain technology. The reliable system is equally important [1,2,3,4,5]The first difference to understand is that these domains operation a decentralized way, compared to the centrally controlled traditional domain

system. This type of domain represents an address on a blockchain using NFT technology and the world of smart contracts. By using one of the services available you can create an NFT that links the blockchain domain to the blockchain address. These domains are held on a public registry and once you buy them, they are yours forever. No

more yearly renewal fees and no controls set by the domain registry or government as it is fully decentralised and your own property. To understand in more detail how these types of domains are different to normal domains, the next section looks at the advantages and uses of blockchain domains. First of all, they are more convenient to use for transactions than traditional wallet addresses. Now a traditional wallet address consists of around 35 characters, which is naturally hard to remember and very easy to confuse. For a person who wants to transfer cryptocurrency funds, it

enter a wallet-related domain name and send cryptocurrency to it directly.

The second advantage relates to content, mainly. Blockchain domains can't be blocked or censored. Now, the registrar has the right to revoke your domain following court decisions (or even without a court decision). In the future, it could hardly be possible with blockchain-based domains. The domain is your asset. You are the sole owner of it and have complete control over it. person can view live data of his or her and can write his own description which will be useful in an emergency situation. Finally if any abnormalities are found an alert message is being sent to that particular employee as a predictive measure. For example, the team behind Unstoppable Domains is developing an exclusive blockchain for domain names. The company plans to both launch new domain zones and introduce blockchain into the existing ones. New domain zones will

exist outside the ICANN system, so users will need additional software to access them.

In the Year (2014) [1] Hiener Evanshiezhy, Martin Eisend, Roger J. Calentone Assessing factors that predict new product success (NPS) holds critical importance for companies, as research shows that despite considerable new product investment, success rates are generally below 25%. Over the decades, meta-analytical attempts have been made to summarize empirical findings on NPS factors. However, market environment changes such as increased global competition, as well as methodological advancements in meta-analytical research, present a timely opportunity to augment their results. Hence, a key objective of this research is to provide an updated and extended meta-analytic investigation of the factors affecting NPS. In year 2017, Hannah Forbes & Dirk shaefer Crowdfunding is defined as the process of taking a project or business, in need of investment, and asking a large group of people to supply this investment. This phenomena has exponentially increased in popularity over the last few years and, as a consequence, is now presented as a viable method of funding for designers. Regardless of its new-found popularity, however, statistics show that the vast majority of crowdfunding campaigns dramatically fail with 81% of failed campaigns reaching less than 20% of their funding goal. This poses two questions; [2] how can designers ensure crowdfunding success and can engineers

design their products to prepare for crowdfunding? In order to answer the second question, the authors have decided to answer the first with an in-depth study of crowdfunding campaigns that is presented in this paper. In year 2019, Olav Sorenson, Valentina Assnova & Gaun cheng Crowdfunding (CF) platforms, such as Kickstarter (KS), offer a means of funding innovation, connecting inventors and entrepreneurs with a multitude of supporters, who each provide a small fraction of the amount required to fund the project. Although considerable funding for innovation has historically come from venture capitalists (VCs),[3]the entrepreneurs funded by VCs often mirror the investors in terms of their educational, social, and professional characteristics and end up concentrated in a small number of regions (1–4). Policy-makers have thus hailed CF platforms, hoping that they will expand access to entrepreneurial finance, including among women and minority innovators, and that the innovations funded will create jobs and spur economic growth (5). But if particular regions, or certain sorts of individuals, routinely produce better ideas (6), and VC concentrates on them, then CF might simply compete with professional investors to fund the same ideas.

In the year 2015, Gerrit K.C & Chrishtina Gurther, This paper presents a first-ever empirical examination of the effectiveness of signals that entrepreneurs use to induce (small) investors to commit financial resources in an equity crowdfunding context. We examine the impact of venture quality (human capital, social [alliance] capital, and

intellectual capital) and uncertainty on fundraising success. Our data highlight that retaining equity and providing more detailed information about risks can be interpreted as effective signals and can therefore strongly impact the probability of funding success. Social capital and intellectual capital, by contrast, have little or no impact on funding success. We discuss the implications of our results for theory, future research, and practice.

In the year 2014, Crowdfunding, a novel form of financing, has seen massive growth over the last few years. Under crowdfunding, a large number of small households offers small loans to a firm. But if some threshold is missed, the firm cannot draw the loans. We construct a model to argue that this mechanism can be used to aggregate vague information by many households (for example, potential future consumers of the firms product). Each household can spend an effort to produce a bit of vague information – too vague to justify a straight loan.[12,13,14]

Online reward-based crowdfunding campaigns have emerged as an innovative approach for validating demands, discovering early adopters, and seeking learning and feedback in the design processes of innovative products. However, crowdfunding campaigns for innovative products are faced with a high degree of uncertainty and suffer meager rates of success to fulfill their values for designWhich is done with the help of RWW framework which examines the 26 factors and analyzes the statistical data to predict the success rate of the projectIt results an rating for the success rate for the product ‘1’ represents the 100% success rate of the project ‘0.5’ represents the 50% success rate on the project It follows the centralized network, So that the

changes in the database can be made easily

In our proposed we introduces the block chain concept for overcome the existing system problem. Here the method will fully securely store the data and make a transaction history who are connected on the network. The main building blocks of a Block chain system are its data structure and its nodes, where the logic and computations take place. Each full-function node maintains a complete copy of the Block chain, is capable of executing transactions and contributes to extending the chain. A Block chain starts from its genesis block and new blocks are appended periodically. Each block records executed transactions. The nodes collaborate to connect the blocks into a Block chain, creating a ledger that cannot be changed backwardly without redoing a proof of work (POW).

TECHNOLOGY USED SOFTWARE:

Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. It is a general-purpose programming language intended to let programmers *write once, run anywhere* (WORA), meaning that compiled Java code can run on all platforms that support Java without the need to recompile.^[18] Java applications are typically compiled to bytecode that can run on any Java virtual machine (JVM) regardless of the underlying computer architecture. The syntax of Java is similar to C and C++, but has fewer low-level facilities than either of them. The Java runtime provides dynamic capabilities (such

as reflection and runtime code modification) that are typically not available in traditional compiled languages. As of 2019, Java was one of the most popular programming languages in use according to GitHub particularly for client-server web applications, with a reported 9 million developers^[15] One design goal of Java is portability, which means that programs written for the Java platform must run similarly on any combination of hardware and operating system with adequate run time support. This is achieved by compiling the Java language code to an intermediate representation called Java bytecode, instead of directly to architecture-specific machine code. Java bytecode instructions are analogous to machine code, but they are intended to be executed by a virtual machine (VM) written specifically for the host hardware. End-users commonly use a Java Runtime Environment (JRE) installed on their device for standalone Java applications or a web browser for Java applets.

Standard libraries provide a generic way to access host-specific features such as graphics, threading, and networking.

The use of universal bytecode makes porting simple. However, the overhead of interpreting bytecode into machine instructions made interpreted programs almost always run more slowly than native executables. Just-in-time (JIT) compilers that compile byte-codes to machine code during runtime were introduced from an early stage. Java's Hotspot compiler is actually two compilers in one; and with GraalVM (included in e.g. Java 11, but removed as of Java 16) allowing tiered compilation.^[47] Java itself is platform-independent and is adapted to the particular platform it is to run on by a Java virtual machine (JVM) for it, which translates the Java bytecode into the platform's machine language

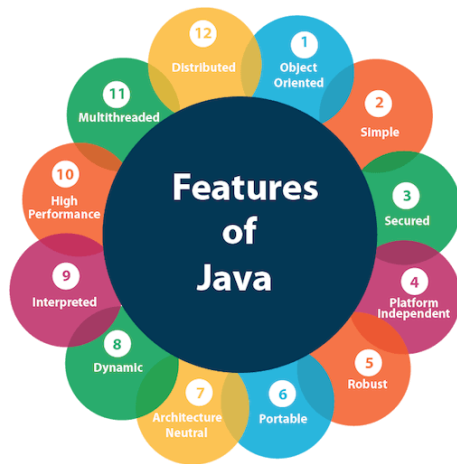


Fig 1. Java Features

JAVA JVM BYTECODE

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Java uses an automatic garbage collector to manage memory in the object lifecycle. The programmer determines when objects are created, and the Java runtime is responsible for recovering the memory once

objects are no longer in use. Once no references to an object remain, the unreachable memory becomes eligible to be freed automatically by the garbage collector. Something similar to a memory leak may still occur if a programmer's code holds a reference to an object that is no longer needed, typically when objects that are no longer needed are stored in containers that are still in use. If methods for a non-existent object are called, a null pointer exception is thrown. Garbage collection may happen at any time. Ideally, it will occur when a program is idle. It is guaranteed to be triggered if there is insufficient free memory on the heap to allocate a new object; this can cause a program to stall momentarily. Explicit memory management is not possible in Java. Java does not support C/C++ style pointer arithmetic, where object addresses can be arithmetically manipulated (e.g. by adding or subtracting an offset). This allows the garbage collector to relocate referenced objects and ensures type safety and security[21-24].

NET BEANS

NetBeans IDE 6.8 is the first IDE to provide complete support of Java EE 6 and the GlassFish Enterprise Server v3. Developers hosting their open-source projects on kenai.com (now defunct) benefited from instant messaging and issue tracking integration and navigation right in the IDE, support for web application



Fig 2. Netbeans

Applications Provided by NETBEANS

The Netbeans comes with the following applications along with Anaconda Navigator. Project management, Visual debugger, Static analysis tool, Code converters, NetBeans Profiler, Batch code analyzers, Cross-platform support, Multiple language support

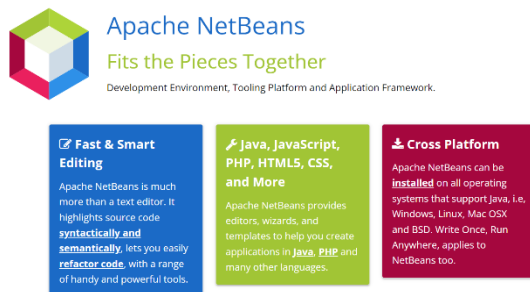


Fig 3. Netbeans Applications

SQL Yog

MySQL is probably the world's most popular open source database engine but it can be difficult to administrate using its text-based tools and configuration files. SQLyog provides a full graphical interface to make using MySQL's powerful features simple even for beginners.

SQLyog's intuitive graphical user interface makes managing all aspects of your MySQL databases easy. Simple

operations can be accomplished using the many pre-defined tools and functions while more complicated tasks can be built using the graphical editor which helpfully generates queries in correct SQL syntax to perform and learn from. SQLyog is able to handle databases of all sizes and can use SSH an HTTP tunnelling to make remote access simple and secure. Data transfer from external ODBC-compliant databases is also easy using the in-built import tool. . SQLyog provides a full graphical interface to make using MySQL's powerful features simple even for beginners.

SQLyog's intuitive graphical user interface makes managing all aspects of your MySQL databases easy



Fig 4. Sql database

6.WEB APPLICATION LOGIN

Web app development is a significant process for a variety of diverse business nowadays. It allows for the development of software that can be accessed via an internet browser, making it rapidly accessible from anywhere. Web application development is the creation of application program that reside on remote servers and are delivered to the user's device over the internet. A web application (web

app) does not need to be downloaded and is instead accessed through a network. Web application development will typically have a short development life-cycle lead by a small development team.



Fig 5: Web Application Development

Each block records executed transactions. The nodes collaborate to connect the blocks into a Block chain, creating a ledger that cannot be changed backwardly without redoing a proof of work (POW). Improving the security Decentralised system and guarantee on money The proposed ssystem is immutable, and it is decentralised

Donor Login

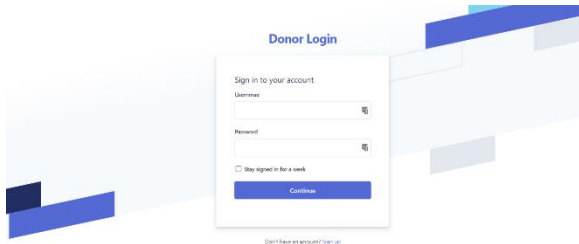


Fig 6: Donor login page

React native is a framework that builds a hierarchy of UI components to build the

javascript code. It has a set of components for both ios and android platforms to build a mobile application with a native look and feel. React native seems to be a viable solution for building high-quality apps in a short time with the same performance and user-experience standards that native apps provide. React native uses different mechanisms to create an efficient, consistent and reusable visual identity for the applications.

Modules

LIST OF MODULES

Database entry, Authentication, Fund Donation, Block allocation

8.1 DATABASE ENTRY

The database module contains database which is made on SQLyog. It stores all the data and entries of the system. It is connected through python. Tables are created on a schema suited to support the system and provide various tables for convenient data storage and retrieval. The system is stand alone and does not require user to carry any device thus making completely automate

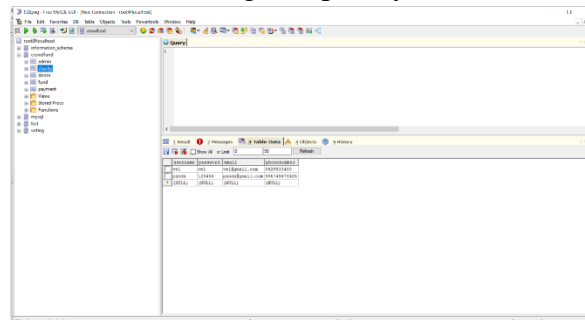


Fig .7 Database Entr

FUND DONATION

The next step to donate fund for the particular project initially the user has to login and Donate the amount for the

particular project with the specified user/donor credentials and the fund raiser account number should be mentioned and the amount to be donated , finally the transactions will be done, Which can be viewed in the sql database as blocks .for each user/donor it allocates a unique block and connects each blocks by block chain technology

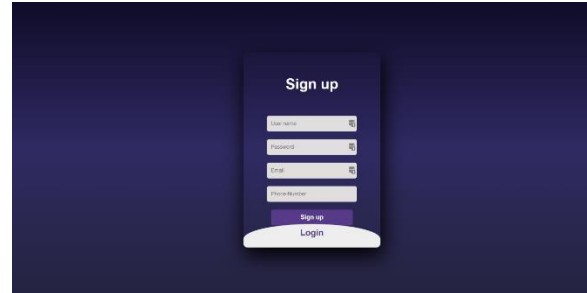


Fig.10 Fund Raiser login page

Fund Information						
Sl.No	Name	Phone number	Amount	Description	Account Number	Date
<input type="checkbox"/>	user	8925533480	15000	xyz	123412341234	2022-05-28
<input type="checkbox"/>	ajada	6446172783279	0	abc	082252886	2022-05-28

Donate

Fig.9 Fund Donation

Fund raiser

- **Registered user/ Signup:**

A registered user is a user of a website, program, or other system who has previously registered. Registered users normally provide some sort of credentials (such as a username or e-mail address, and a password) to the system in order to prove their identity: this is known as logging in Registration is one of the primary modules in any data management system. In case of registered user, the registered user in order to donate for specific project

BLOCK ALLOCATION

The main building blocks of a Block chain system are its data structure and its nodes, where the logic and computations take place. Each full-function node maintains a complete copy of the Block chain, is capable of executing transactions and contributes to extending the chain.

A Block chain starts from its genesis block and new blocks are appended periodically. Each block records executed transactions. The nodes collaborate to connect the blocks into a Block chain, creating a ledger that cannot be changed backwardly without redoing a proof of work (POW). Improving the security Decentralised system and guarantee on money The proposed system is immutable, and it is decentralised system.Data quality is maintained by massive

database replication and computational trust An advantage to an open, permissionless, or public, blockchain network is that guarding against bad actors is not required and no access control is needed. This means that applications can be added to the network without the approval or trust of others, using the blockchain as a transport layer

ADVANTAGES

Improving the security Decentralised system and guarantee on money The proposed system is immutable, and it is decentralised system. Data quality is maintained by massive database replication and computational trustAn advantage to an open, permissionless, or public, blockchain network is that guarding against bad actors is not required and no access control is needed. This means that applications can be added to the network without the approval or trust of others, using the blockchain as a transport layer

FUTURE SCOPE AND CONCLUSION

In our proposed we introduces the block chain concept for overcome the existing system problem. Here the method will fully securely store the data and make a transaction history who are connected on the network Each full-function node maintains a complete copy of the Block chain, is capable of executing transactions and contributes to extending the chain. A Block chain starts from its genesis block and new blocks are appended periodically. Each block records executed transactions. The nodes collaborate to connect the blocks into a Block chain, creating a ledger that cannot be changed backwardly without redoing a proof of work (POW). The idealogy which we had implemented in our project is more secure than centralized systems and can be furtherly made possible in banking systems, Monitoring the supply chains, audit trails, Medicine monitoring, Data sharing,

Copyright and Royalty, Tax Regulation, Equity trading

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