DEVISING A BLOCKCHAIN BASED E-WALLET PROTOTYPE 'KRYPT' FACILITATING COIN EXCHANGE AND NFT STORAGE THROUGH MOBILE APPLICATION PLATFORMS

Dr. Sudheer S Marar,
Prof & HoD Department of MCA,
Nehru College of Engineering and Research Centre,
Thiruvilwamala, Thrissur, India
ssmarar@gmail.com

Pramod. K
Asso.Prof Department of MCA,
Nehru College of Engineering and Research Centre,
Thiruvilwamala, Thrissur, India
pramodke77@gmail.com

Dr. Deepa
Asso.Prof Department of MCA,
Nehru College of Engineering and Research Centre,
Thiruvilwamala, Thrissur, India
achatdeepajayan@gmail.com

Dr. Vineetha K R
Asso.Prof Department of MCA,
Nehru College of Engineering and Research Centre,
Thiruvilwamala, Thrissur, India
vpvprakash@gmail.com

Ashish L
Asst.Prof Department of MCA,
Nehru College of Engineering and Research Centre,
Thiruvilwamala, Thrissur, India
ashishlaji@gmail.com

Divya P
Asst.Prof Department of MCA,
Nehru College of Engineering and Research Centre,
Thiruvilwamala, Thrissur, India
divyapakkattil@gmail.com

Sumi M
Asst.Prof Department of MCA,
Nehru College of Engineering and Research Centre,
Thiruvilwamala, Thrissur, India
sumimurali117@gmail.com

Abstract: Digital currency is a by-product of several financial communications and merging of various technological motivations. Currency exchange, pervasive digital wallet design, ATM, including of mining, exchange of digital value models, all and everything was part of this philosophy. Bitcoin was just a trend setter and is considered as an application of this Blockchain concept. Today Blockchain act as the backbone of Financial Technology industries and also supports Industries like Supply chain, Internet of Things, Medical utilities, Valuing systems and even Digital Polling Operations. In short, Blockchain is today designed not just to preserve transparency and cost effective utilities of the customer; but also his rights, duties, responsibilities and basic financial interests. Considering the picture from the side of an administrative unit like a central government, it has

enhanced the convenience for collection of taxes and other financial transactions and maintaining value balance factors for the country, citizens and the entire globe. Moreover any kind of digital currencies and transactions can be much better assessed and recorded, than whichever Legacy systems or traditional paper pen based ledger books.

Electronic Wallet is today's technology and has gained immense interest on various areas of Financial Technology applications, and is getting wide spread acceptance in various allied fields too. This paper tries to result the necessity of a FinTech Application, by creating an e-wallet model supported by Blockchain concept. The e-wallet proposed, is devised as a full-on mobile application; suitable for first hand traders and Novice Traders., who operate on Coin Exchange, NFT portfolios and similar Digitally empowered Value Maintenance Systems..

Keywords: Digital Currency, Bitcoin, Transaction, Ldger, e-Wallet, NFT, Novice Traders

I. INTRODUCTION

In recent years, Cryptocurrencies changed the idea of coinage from being in a physical form to say, virtual form. To ensure the proper exchange of currencies through the chain, functional blockchain technology is used for preventing illicit tampering. The primary motivation behind this project is to create a system that ensures the safe exchange of currencies built on the basic idea of blockchain. The key purpose of the proposed program is the creation of new technology to provide more security for banking transactions. The Blockchain, a platform for the exchange of leader schemes, can be used in a wide number of programs. Blockchain technology typically has key decentralization, longevity, openness, and data authenticity. We provide a specific concept of decentralized conditional confidential payment, acknowledging the value of law, and defining the related safeguard criteria. The platform enhances information management and guarantees effective and secure communication. Confidence is improved when performing banking transactions between parties using Blockchain as it decreases the risk of fraud and creates records of operations automatically. This provides an automatic context tracking of all device users. Blockchain offers transparency because of its decentralized nature and decreases the risk when negotiating a client agreement with a non-known or unknown entity. Blockchain technology refers to any electronic exchange of digital properties. This technology is used in this case to ensure safe banking transactions. blockchain is a decentralized distributed ledger, making it easy to verify all transactions and preventing any backup of the ledger from being updated. demonstrates transactions conducted in blockchain technology.

II. LITERATURE SURVEY

Blockchain is an emerging innovation for sharing decentralized value-based information across vast systems with untrusted members around the world. This enables new types of distribution programming designs. This innovation was essentially built into computerized money when it was first introduced, but it is still a promising innovation in other areas. This white paper provides a detailed overview of blockchain in sorted order. The project also includes blockchain ledger types and some of the terminology and difficulties. Digital money addresses a variety of physical cash issues, including various counterfeit banknotes. In order to build a spent money inventory more easily, this article proposes a combined monitoring system for Ethereum called Blockchain, and uses a database article store to

manage subordinate decentralized money related to blockchain development, send together in motion. A fundamental first result of the testnet Ethereum's notable automated wallet method is that the proposed blockchain-based fund transfer can assemble the parts in a cost-effective manner, and in NFC-bound applications with customers. It shows that you can manage the transactions to and from the products that are executed. Currency transactions between people and businesses are often centrally controlled and controlled by third parties. Digital payments or transfers require a bank or credit card provider to act as an intermediary to complete the transaction. Transactions also incur fees from banks and credit card companies. The same process applies to several other areas such as games, music and software. The trading system is centralized and all data and information is controlled by a third party organization rather than the two main entities involved in the trading process.

III. METHODOLOGY

Compared to other industries, accounting and its digitization are still in juvenile mode. The reason may lie in the very high participation of regulators. Each organization's accounting details must meet all regulatory requirements to maintain the validity and integrity of all transactions. Organizations should take precautions to ensure a high level of security and prevent fraud when developing new ledger systems. To achieve this, many transactions are still manually processed and verified, impacting day-to-day operations. Most of these manual tasks are not automated and are not expected to be automated in the near future, so transactional integrity and validity must be maintained. Centralized ledger systems are used by most organizations to record all daily transactions. A centralized ledger system brings together all transactions managed by a single entity. In other words, there is a single point of administration. Centralized ledger systems must reconcile internal and external data to ensure transactional integrity. In a centralized system, there are no restrictions on the operations that can be performed on the ledger. For example, all users can modify and revert transactions. This can lead to fraud and misrepresentation of financial transactions. The user details are validated and entered or the user is prompted to enter the correct values. Digital signatures are used for secure transactions where each client has a private/public key pair. Sender nodes sign transactions and send them to other users. Receiving nodes sign with their private keys to obtain transaction details and send them to other users as well. A proof-of-work consensus mechanism is used that requires all nodes to participate in the block generation and verification process. The Mobile Wallet application contains four modules: the update details module and the transaction module. Each client square is displayed in one long number with the hash score of the square, the Merkle root, the nonce, the hash estimate of the previous square, and the timestamp. Here, proof-of-work consensus is achieved when a transaction is verified by her 51% or more of the users on this peer-to-peer network. By chronologically ordering transaction timestamps, we carefully avoid double-spending attacks and also prevent chain forking.

IV. RESULT ANALYSIS

User side

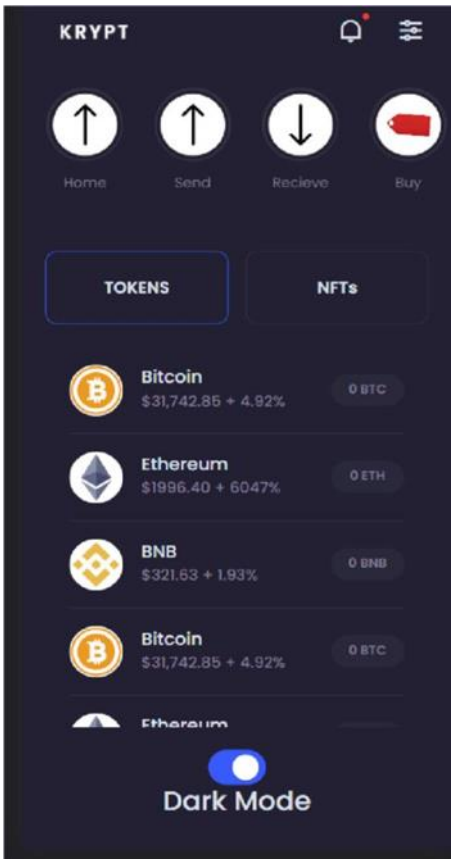

Figure 1: App interface

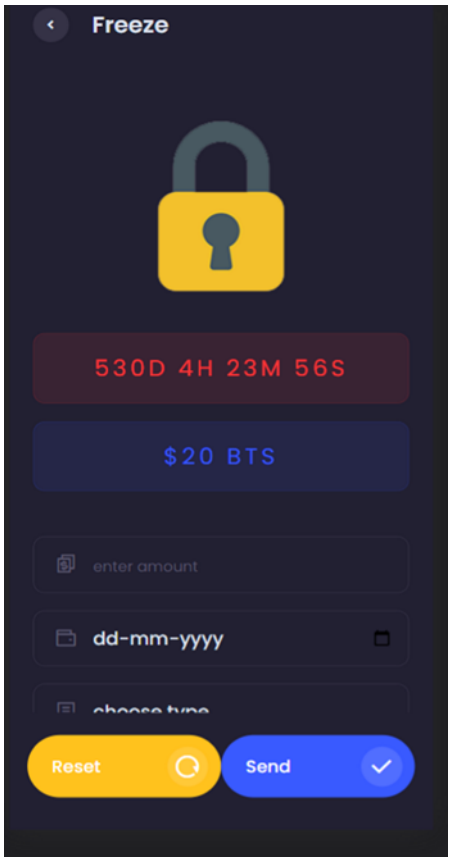

Figure 2: Freeze Coins

Admin Side

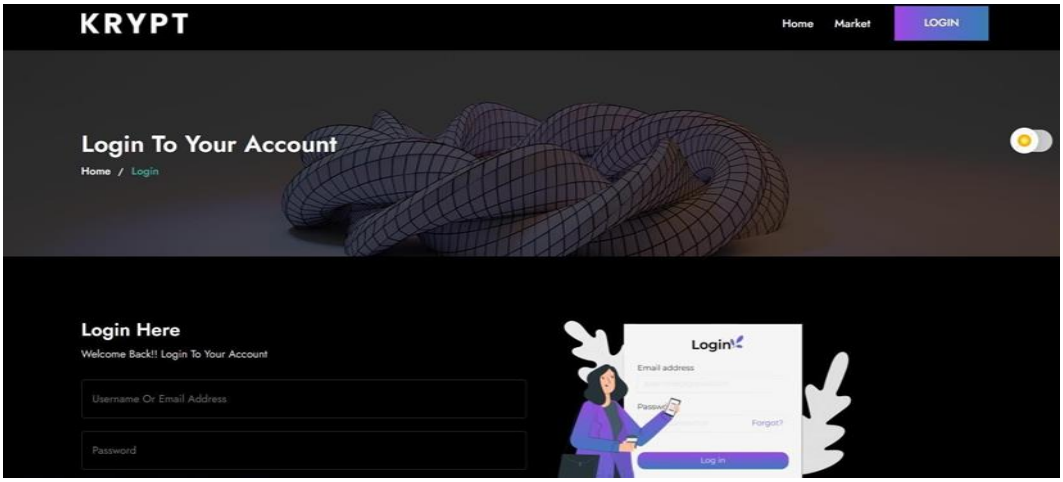

Figure 3: Secured Check-in

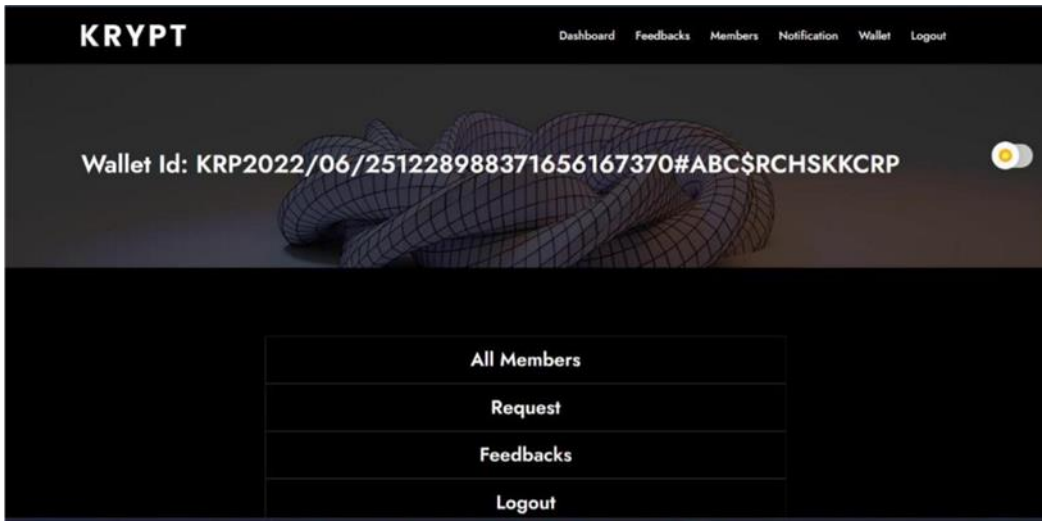

Figure 4: Client Square Display

V. CONCLUSION

Blockchain technology underpins the Bitcoin cryptocurrency. It is a distributed transactional environment where all transactions are recorded on a public ledger visible to everyone. The goal of blockchain is to provide anonymity, security, privacy and transparency to all users. Nonetheless, these attributes pose many technical challenges and limitations that need to be addressed. In order to understand where current research on blockchain technology stands, we decided to map all relevant research results using a systematic mapping research process. The purpose of this systematic mapping study was to examine the current state of blockchain technology and research themes. We excluded economic, legal, business and regulatory aspects and included only technical aspects. In conclusion, We think blockchain adoption will be unhurried due to the risks involved. Most startups fail and there are very few winners. We should see significant adoption within the decade. In this project, a blockchain-based shared cash transfer is not just a customer and a carrier earning money one by one. Furthermore, the fundamental fallout from computerized cash exchange testing using well-known and popular extended cryptocurrency wallets and cloud databases is the feasibility and cost-protected viability of computerized currency exchanges. , showing oversight between payers and payees in a proposed blockchain-based decentralized cash transfer. The proposed blockchain-based decentralized cache movement design includes additional attendant properties. Equipped for next run and consistently delivering excellent investment costs.

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