


Chapter 12

Block Overflow on Frequently Asked Questions Using Blockchain

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ABSTRACT

This work shows how blockchain technology can evolve in our day-to-day lives and we can benefit from it. Much of the modern research work related to blockchain technology emphasizes its application for cryptocurrencies like Ethereum, bitcoin, etc. Blockchain technology is way more than cryptocurrency, and it can have various applications in the domain of finance, government, the banking industry, accounting, etc. Therefore, this study attempts to explore opportunities and their issues. The proposed system emphasizes the use of blockchain in frequently asked questions (FAQ) systems. The basic idea of the proposed system is that the questionnaire will post a question with an appropriate bounty amount and time so that others from the community can answer the question. The most upvoted answer is rewarded with a bounty amount. This transaction is carried out using blockchain technology. This helps to understand the level of contribution experience a person might have and is worthy in the eyes of the developer community for a reward.

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1. INTRODUCTION

The software known as the “Frequently Asked Questions” (FAQ) system allows members of a community to publish their inquiries or concerns at the same time. Other members of the community then respond with an acceptable response to the same question that was asked. Some of the systems have incorporated reward mechanisms in order to encourage more efficient replies. In which the response that is deemed to be most appropriate will be rewarded. If that is not the case, then many questions remain unsolved. The usage of blockchain technology is suggested for use in incentive systems due to the security, dependability, and speed benefits it offers.

The distributed data store is the most important component of a blockchain. Everyone participating in this distributed network has their own data store in which they keep track of all of the information relating to the transactions that have ever taken place on the network. These transaction records are encrypted before being saved in a series of blocks that are linked together. The chain of participants or peers is required to acknowledge the most current block of transactions at each stage of the technological process. The agreement is established by a process that involves the assent of the majority, the deletion of duplicate entries, double expenditure, and other similar activities. Due to the cryptographic layering of blocks and the elimination of duplicate entries, the agreed blockchain is not only irreversible but also immutable. This is possible due to the fact that the blockchain cannot be altered. It is not possible for any of the participants in this technology to improvise or edit the ‘transaction history’ of the events within this technology without first receiving majority consent from the chain.

Blockchain is a decentralised and distributed digital ledger technology that enables secure and transparent record-keeping of transactions across a network of computers. Blockchain was developed by Satoshi Nakamoto, who is referred to as the “father of cryptocurrency.” Although it is the technology that underpins cryptocurrencies like Bitcoin and other digital currencies, its uses go well beyond those of digital currencies. Because it offers a method of data recording and transfer that is both tamper-proof and verifiable, blockchain technology has the potential to bring about a revolution in a variety of different markets. Blockchain’s decentralized structure has the ability to shake up existing company models by eliminating the need for middlemen and enhancing the transparency and safety of digital transactions. This could cause traditional business models to become obsolete. However, it is vital to take into consideration the problems that are involved with the implementation of blockchain technology, such as scalability, regulatory issues, and energy usage.

The ability of blockchain technology to solve multiple problems plaguing the digital world and open up new avenues of exploration is the primary reason for its significance. The following are some of the most important characteristics that emphasize the significance of blockchain technology: Blockchain eliminates the need for a central authority or intermediary in transactions. This decentralized nature enhances trust among participants, as the entire network collectively validates and agrees on the state of the ledger. This is particularly significant in scenarios where trust is a critical factor, such as financial transactions and supply chain management.

Blockchain uses cryptographic techniques to secure transactions and maintain data integrity. Once a block is added to the chain, it becomes extremely difficult to alter its information due to the interdependence of blocks and the use of cryptographic hash functions. This immutability makes blockchain a secure and tamper-resistant technology. Participants in a blockchain network have identical access to the data that is being stored on the network. All relevant parties are able to view transactions, which increases transparency and decreases the likelihood of fraudulent activity. This function is especially

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