The Official D&I Newsletter

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Words of Visionaries

Module: Technology Take Over

The ongoing module at Dreamers & Innovators: "Technology Take Over" is a one-of-a-kind effort to bring young learners in contact with the details of the technology-powered world they live in and how it is transforming their futures with each passing day. At D&I we work with Dreamers who will change the world tomorrow!

This week's newsletter showcases the ideas of three of our Dreamers: Nivaan, Aanya and Ujjwal, who provide you with valuable insight into the most-discussed yet least-thoroughly comprehended technology to define the future: Blockchains, along with its components like NFTs and Cryptocurrencies.

Dreamers & Innovators is a knowledge and skill-building platform for 21st century learners. We aspire, design and execute interactive learning experiences where global knowledge relevant to today and tomorrow is brought to young Dreamers. At D&I, 21st century skills are honed, confident communication is developed and independent, informed opinions are nourished.

Basics of Blockchain Tech

Nivaan Jain
14 years

Blockchains are incredibly popular nowadays. They are a peer-to-peer network of computers that validate transactions. On the network, users make and verify transactions immediately without a central authority. Blockchains are relevant as they reduce risk in a major way, stamp out fraud and bring transparency in transactions.

As the name indicates, blockchain is a chain of blocks. These blocks store data of the transactions made between users on the network. Cryptography is used to link the blocks together. There are two types of blockchains, public and private.

A blockchain works in a few steps. Firstly, a transaction is requested. A block that represents the transaction is created which is then sent to every node in the network. The nodes validate the transaction and receive a reward for the Proof of Work in the form of a certain number of coins of cryptocurrency of that blockchain, for example: on the Bitcoin blockchain, the miners (validating nodes) receive a set number of Bitcoins. The transaction is completed when the block is added to the existing Blockchain.

Recently, a Swiss Blockchain company helped in conducting elections in Africa's Sierra Leone through Blockchain technology thereby saving the government's costs and making the votes impossible to be tampered with. Hence, Blockchain is a very useful technology that would help in shaping the future of the world.

NFTs: The Future of Assets

Aanya Mehra
16 years

Non-fungible tokens or NFTs are digital tokens that serve as proof of ownership of an asset and cannot be replicated. They can only have one owner at a time and are secured by the Ethereum blockchain, meaning nobody can modify the details. NFTs rely on blockchain technology and are scarce. Now, what exactly is blockchain technology? Blockchain technology is a system of recording information in a way that makes it impossible for someone to hack. It is a digital ledger that has an entire history of transactions that is decentralised with no governing authority. To make it easier to comprehend, one application, Bitcoin (the most traded cryptocurrency) is built using blockchain technology. Crypto currency is heading towards a big boom soon.

Another asset to lookout for with promising future is the NON FUNGIBLE TOKEN. Throughout the year 2021, interest in NFT's increased dramatically with many celebrities and artists releasing their own series of virtual works. Undoubtedly, 2021 has been a record-breaking year as far as the NFTs are concerned. "Everydays — The First 5000 Days," by the artist known as Beeple was sold for whooping $69 Million! However, the most popular NFT of 2021 has been the first tweet by the founder of Twitter, Jack Dorsey which was sold for $2.9 million among others. With each passing day, the world is moving towards technology and NFTs are soon going to be considered as the new normal for future transactions.

Benefits of Blockchains

Ujjwal Goel
14 years

Blockchain is a technology that enables the existence of cryptocurrency and is made to make transactions more secure by keeping the data not on one but a network of multiple devices as a result of which tampering with the data becomes more difficult.

Blockchain is a revolution as it is a public ledger to which everyone has access but no one can control. It allows individuals and companies to transfer funds with an unprecedented amount of trust and transparency. It is cryptographically secure but fundamentally open.

Unlike a bank, blockchains are very decentralised and there is a ledger maintained for public viewing. This improves data reconciliation and reduces the points of weakness and improves security in a big way. Blockchain-based cryptocurrencies are not controlled by any government, bank, or central bank. This means that they cannot be meddled with by governments. Government meddling is a problem that has led to the devaluation of many currencies throughout history.

Blockchain-based cryptocurrencies provide transaction times that are often much, much faster than bank transaction times. For some bank transactions, such as wire transfers, it can take days for the transaction to go through. However, transactions made on a blockchain usually take just minutes.