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DEPARTMENT OF COMPUTER SCIENCE & TECHNOLOGY

Report on

"Webinar on Introduction to Block Chain"

On 05-10-2020

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Organized & submitted by: Mr.Dr.K.Chokkanathan Assistant Professor, Department of CST

Resource Person Details: Dr.G.L.VaraPrasad, Assistant Professor, Department of Information Technology, QIS College of Engineering and Technology (QISCET), Ongole. Participants: III Year CST Students Attendance: 48 participants Mode: Online-Microsoft Teams



Department of Computer Science & Technology has organized "Webinar on Introduction to Block Chain" on 05.10.2020 (Monday) in Madanapalle Institute of Technology & Science from 10.00 AM to 05:00 PM.

WELCOME ADDRESS

The event commenced promptly at 10:00 AM with a warm and engaging welcome address to all by **Dr.K. Chokkanathan**, **Assistant Professor**, **Department of CST**, Madanapalle Institute of Technology & Science (MITS), Madanapalle. The main objective of a "webinar on Introduction to Blockchain" could be to provide participants with a comprehensive understanding of what blockchain technology is, how it works, and its potential applications across various industries.



Resource Person Lecture:

Dr.G.L.VaraPrasad, Assistant Professor, Department of Information Technology, QIS College of Engineering and Technology (QISCET), Ongole ,Dr.G.L. VaraPrasad started to explain about Introduction to Blockchain:

Resource person discuss about:

- What is Block-chain
- How does the Blockchain Technology work
- Building trust with Blockchain
- What are the benefits of Blockchain
- Is Blockchain Secure
- Blockchain Project Ideas
- Future Scope of Blockchain Technology

BlockChain:

The blockchain is a distributed database of records of all transactions or digital events that have been executed and shared among participating parties. Each transaction is verified by the majority of participants of the system.

It contains every single record of each transaction. Bitcoin is the most popular cryptocurrency an example of the blockchain. Blockchain Technology first came to light when a person or group of individuals name 'Satoshi Nakamoto' published a white paper on 'BitCoin: A peer-to-peer electronic cash system' in 2008.



How does Blockchain Technology Work:

One of the famous uses of Blockchain is Bitcoin. Bitcoin is a cryptocurrency and is used to exchange digital assets online. Bitcoin uses cryptographic proof instead of third-party trust for two parties to execute transactions over the Internet. Each transaction protects through a digital signature.

Building trust with Blockchain:

Blockchain enhances trust across a business network. It's not that you can't trust those who you conduct business with it's that you don't need to when operating on a Blockchain network. Blockchain builds trust through the following five attributes:

- Distributed: The distributed ledger is shared and updated with every incoming transaction among the nodes connected to the Blockchain. All this is done in real time as there is no central server controlling the data.
- Secure: There is no unauthorized access to Blockchain made possible through . Permissions and Cryptography.
- Consensus-based: All relevant network participants must agree that a transaction is valid. This is achieved through the use of consensus algorithms.

What are the benefits of Blockchain:

- Time-saving: No central Authority verification is needed for settlements making the process faster and cheaper.
- Cost-saving: A Blockchain network reduces expenses in several ways. No need for third-party verification. Participants can share assets directly. Intermediaries are reduced. Transaction efforts are minimized as every participant has a copy of the shared ledger.
- Tighter security: No one can tamper with Blockchain Data as it is shared among millions of Participants. The system is safe against cybercrimes and Fraud.

Collaboration: It permits every party to interact directly with one another while not requiring third-party negotiation.



Is Blockchain Secure?

Nowadays, as the blockchain industry is increasing day by day, a question arises is Blockchain safe? or how safe is blockchain? As we know after a block has been added to the end of the blockchain, previous blocks cannot be changed.

If a change in data is tried to be made then it keeps on changing the Hash blocks, but with this change, there will be a rejection as there are no similarities with the previous block.

Just imagine there is a who hacker runs a node on a blockchain network, he wants to alter a blockchain and steal cryptocurrency from everyone else. With a change in the copy, they would have to convince the other nodes that their copy was valid.

Blockchain project ideas

Here are a few project ideas for beginners looking to learn more about blockchain technology:

- wallet 1. Cryptocurrency Wallet: Create a cryptocurrency simple application that allows users to send and receive digital assets.
- 2. Blockchain Explorer: Develop a web-based application that allows users to view and search the transactions on a specific blockchain.
- 3. Smart Contract: Implement a simple smart contract on the Ethereum blockchain that can be used to manage a digital token or asset.

survere scope of Blockchain Technology *pinance*, supply chain management, and the Internet of Things are just a few of the sectors in blockchain technology has the power to upend (IoT). Finance, support of T Finance, support of T that blockchain technology has the power to upend (IoT).

The following are some potential uses for blockchain in the future:

- Digital Identity: Blockchain-based digital IDs might be used to store personal data safely and securely as well as offer a means of establishing identity without
- Supply Chain Management: Blockchain technology can be applied to a permanent record of how goods and services have been moved, enabling improved -Internet of Things (IoT): Blockchain technology may be used to build across decentralized, secure networks for IoT devices, enabling them to exchange data and communicate with one another in an anonymous, safe manner.

Vote of thanks

The guest lecture formally concluded with a vote of thanks delivered by Dr.K. Chokkanathan, Assistant Professor, Department of CST. In his address, he expressed sincere gratitude to resource person for taking the time to share his expertise and inspire our students.

Outcomes:

At the end of Program, Students can able to,

- 1. Learning the basics of blockchain provides a solid foundation in understanding how this revolutionary technology works.
- 2. Understanding Cryptocurrencies: Blockchain is the underlying technology powering cryptocurrencies like Bitcoin and Ethereum.
- 3. understanding blockchain basics allows you to contribute meaningfully to the development and advancement of blockchain projects and the ecosystem as a whole.
- 4. Proficiency in blockchain basics opens up various career opportunities in industries like finance, healthcare, supply chain, and more.
- 5. creating new cryptocurrencies, or improving existing processes through blockchain technology

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