VIGNAN'S NIRULA
INSTITUTE OF TECHNOLOGY & SCIENCE FOR WOMEN
(Approved by AICTE, New Delhi & Affiliated to JNTU Kakinada)
Vignan Avenue, Peda Palakaluru, Guntur - 522009
Department of Information Technology

Innovative Practices

Faculty Name : V.Sasi Kala, Mrs .T. Naga Navya
Course Name : Block Chain Technology
Class : IV B.Tech I Semester
Academic Year : 2024-2025
Title of the Topic : Uses of Block Chain
Activity Name : Mind Mapping

Objective

The objective of the Mind Mapping activity is to help students visually organize and understand the various uses of blockchain technology. This activity encourages students to break down complex concepts, such as decentralized applications, smart contracts, and supply chain management, into interconnected ideas, fostering a deeper understanding through visual learning.

Method to Implement:

1. **Introduction (5-10 minutes):**

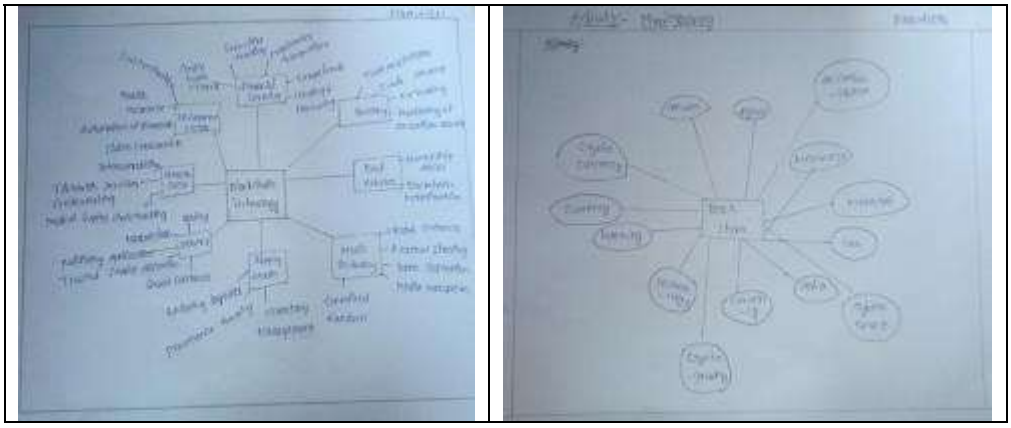
- **Objective:** Introduce students to the various applications and uses of blockchain technology.
- **Explanation:**
  - **What is Blockchain?** A brief overview of blockchain as a decentralized, distributed ledger technology that records transactions across many computers, ensuring security and transparency.
  - **Key Concepts:** Highlight the core principles of blockchain such as immutability, decentralization, cryptographic security, and consensus mechanisms.
  - **Use Cases of Blockchain:** Provide a general idea of how blockchain is used in different industries, focusing on its potential for disruption in areas like finance, supply chain management, and more.

2. **Mind Map Creation:**

- **Central Topic:** "Uses of Blockchain in Blockchain Technology"
- **Subtopics:** Ask students to branch out with specific use cases and concepts related to blockchain. Suggested subtopics may include:
  - **Cryptocurrency:** The foundational use case of blockchain (e.g., Bitcoin, Ethereum).
  - **Supply Chain Management:** Blockchain for tracking goods, ensuring transparency, and reducing fraud.
  - **Smart Contracts:** Self-executing contracts with the terms of the agreement written directly into code.
  - **Voting Systems:** Blockchain's role in creating secure and transparent voting systems.

- **Healthcare:** Blockchain for securely storing patient data and improving interoperability between health systems.
- **Decentralized Finance (DeFi):** Using blockchain for peer-to-peer financial transactions, lending, and more.
- **Digital Identity Verification:** Blockchain for secure and private management of personal identity information.
- **Intellectual Property Protection:** Blockchain for digital rights management and protecting intellectual property.

Screenshot of the Practice



Central Node: Uses of Blockchain in Blockchain Technology

Branch 1: Cryptocurrency

- **Sub-branches:**Bitcoin

Branch 2: Supply Chain Management

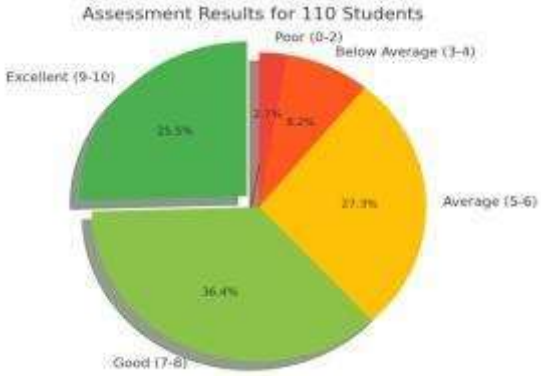
- **Sub-branches:**Product Tracking

Branch 3: Smart Contracts

- **Sub-branches:**Self-executing Agreements

Assessment analysis:

Marks Range	Number of Students	Percentage
9-10 (Excellent)	26	25.24%
7-8 (Good)	47	35.92%
5-6 (Average)	29	28.16%
3-4 (Below Avg)	7	6.80%
0-2 (Poor)	4	3.88%
Total	**103**	**100%**



Conclusion

Blockchain technology is revolutionizing various industries by offering a decentralized, secure, and transparent way to manage and verify transactions. Its applications extend far beyond cryptocurrency, playing a critical role in sectors like supply chain management, healthcare, voting systems, and more.

Signature of the Faculty **Head of the Department**