SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

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Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

COURSE NAME: 19CS622 -Blockchain Technology

III YEAR /VI SEMESTER

Unit 5- Blockchain Applications

Case study: Blockchain in Identity Management

Blockchain in Identity Management

Decentralized Digital Identity:

- Blockchain enables the creation of decentralized digital identities, allowing individuals to control their personal information without relying on centralized authorities.
- Users can store their identity credentials on the blockchain, granting access to specific data to trusted entities as needed.
- This reduces the risk of identity theft and data breaches.

Blockchain in Identity Management

Self-Sovereign Identity:

- With blockchain, individuals can manage their own identities through self-sovereign identity (SSI) systems.
- SSI empowers users to verify their identities without intermediaries, providing greater privacy and security.
- For example, a user could share proof of age without disclosing their full date of birth, minimizing the amount of personal information shared.

Blockchain in Identity Management

Secure Authentication:

- Blockchain can enhance authentication processes by enabling multi-factor and biometric verification stored on the blockchain.
- This decentralized approach allows for secure access to services and applications, as users can authenticate themselves without relying solely on passwords or centralized databases, which are often vulnerable to hacks.

Blockchain in Identity Management

KYC and AML Compliance:

- In financial services, blockchain can streamline Know Your Customer (KYC) and Anti-Money Laundering (AML) processes.
- By maintaining a secure, immutable record of verified identities, financial institutions can share KYC data among themselves, reducing duplication of efforts and improving efficiency while maintaining compliance with regulations.

Blockchain in Identity Management

Cross-Border Identity Verification:

- Blockchain facilitates cross-border identity verification, allowing individuals to use their verified identity across different jurisdictions without the need for repeated verification processes.
- This is particularly beneficial for refugees, expatriates, and individuals traveling for work or study, as it simplifies the process of proving identity in multiple countries.

Thank you