IPFS BASED FILE SHARING SYSTEM

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PROBLEM STATEMENT

In today's digital age, file sharing is a fundamental activity for personal, academic, and business purposes. However, traditional file sharing methods face several challenges:

Centralized Control: Most file sharing services rely on centralized servers, making them vulnerable to single points of failure, censorship, and privacy issues.

Scalability: Centralized systems often struggle with scalability, leading to slow upload/download speeds, especially when many users access the service simultaneously.

Data Integrity and Security: Ensuring the integrity and security of files is crucial. Centralized systems are prone to data breaches, manipulation, and loss.

Cost: Maintaining centralized infrastructure is costly, and these costs are often passed on to users.

OBJECTIVES AND SCOPE OF THE PROJECT

Develop a decentralized file sharing system using IPFS to ensure data integrity, resilience, and efficient distribution. Implement encryption for security, provide a user-friendly interface, and optimize performance for scalability. Address traditional file sharing limitations by enhancing privacy, reliability, and cost-effectiveness.

This project aims to develop a decentralized and secure file sharing system using the InterPlanetary File System (IPFS).

ABSTRACT

This project aims to develop a decentralized and secure file sharing system using the InterPlanetary File System (IPFS). By leveraging IPFS's peer-topeer network and content addressing, the system ensures data integrity, resilience, and efficient file distribution without relying on centralized servers. Key features include encryption for security, a user-friendly interface for file management, and optimizations for high performance and scalability. This approach addresses the limitations of traditional file sharing methods, offering a cost-effective, reliable, and private solution suitable for personal, academic, and business use.

THANK YOU

