



Knight Foundation
School of Computing
and Information Sciences

Knight Foundation School of Computing and Information Science/Florida International University Spring 2023 Senior Design Project

P2P Drive

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PROBLEM

There are multiple challenges faced when using a traditional data storage system. Some of these include accessing content that is dependent on specific servers which affects accessibility, high storage costs, and security.

By using an IPFS network, the system we created aims to solve these problems. Our decentralized system allows for the upload, share, management, and organization of files in a safe, fast, and secure way.

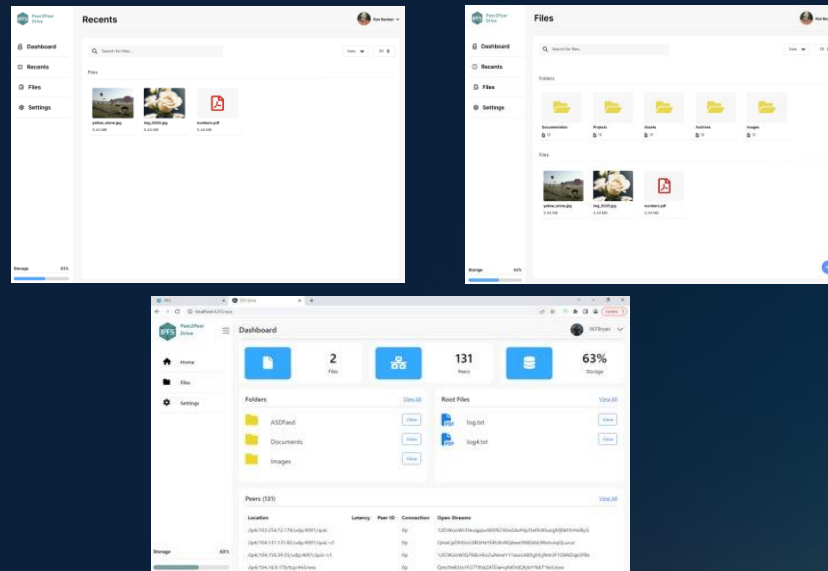
CURRENT SYSTEM

Data in file storage systems often are stored on centralized servers. This is a problem because if certain servers are down, desired content can't be accessed. A centralized system is also more vulnerable to cyberattacks. The cost of hardware can be expensive and scalability can be limited by the server's ability to handle increased traffic.

SEQUENCE Diagram



FRONT-END DESIGNS



Use Case Diagram



SUMMARY

Our system is a new and improved way to store and share files. Using the IPFS network it cost less to store data. Accessing data is easier due to multiple servers hosting content as opposed to one centralized server. The system is more secure because of data organization and the network being spread out.

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