

Decentralized Drive

Prof Bajirao Shirole¹, Aditya S Dhage², Rohan S Randive³, Sarika K Jagtap⁴, Unnati D Bhangare⁵

Department of Computer Engineering¹⁻⁵

Sanghvi College of Engineering, Mhasrul, Warvandi, Nashik, Maharashtra, India

Abstract: Centralized cloud-based storage has received great attention and has been extensively used by many companies in recent years. However, these cloud based storage are not secure because of the involvement of a centralized entity or a third party. On the other hand, there is a need for blockchain based decentralized storage to maximize data privacy and security. This paper proposed D-Drive, an IPFS-based decentralized storage space to solve the problem. D-Drive is a software solution trying to prove that centralized cloud-based storage applications can be decentralized, more secure, and efficient. This paper proposed developing a web-based application that provides a user interface, from which the user can directly share their data or files. Then, the user file is encrypted and stored across a peer-to-peer network using IPFS protocol instead of HTTP protocol and a cryptocurrency will be used as a payment mechanism. D-Drive's primary objective is to provide secure decentralized storage space.

Keywords: Blockchain, Data Security, IPFS, Encryption, Cloud Storage, Decentralized storage

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