PROJECT: DECENTRALIZED DRIVE

PRESENTED BY:

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2021A1R116

DOMAIN: BLOCKCHAIN

Under the guidance of
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PROBLEM STATEMENT

Creating a system similar to Google Drive, but with a twist: we want to make it more private and secure by spreading files across many computers. We'll do this by using technology that lets computers connect directly to each other and by using blockchain for added security. We'll even give people rewards for participating in the system. All of this to give users more control over their files.
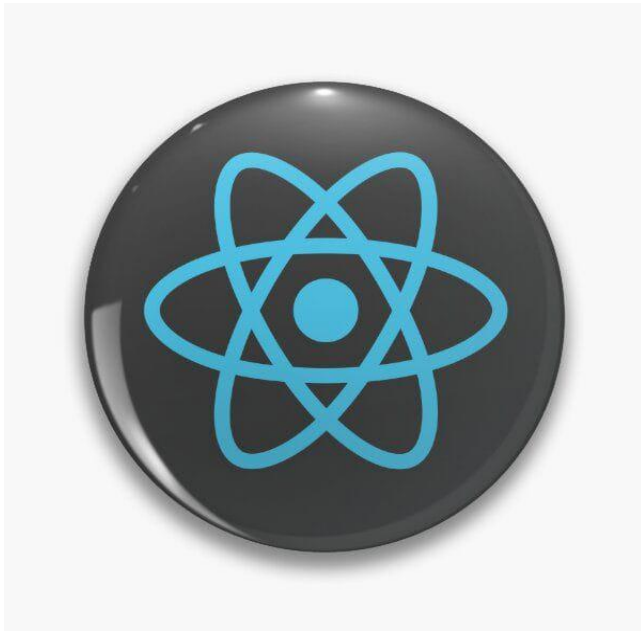
PREREQUISITES

1. BASIC REACT

2. ETHER.JS

3. HARDHAT

4. SOLIDITY

5. IPFS

6. METAMASK

PROJECT ARCHITECTURE

REACT JS

PINATA

SOLIDITY

WHAT IS PINATA?

Pinata is an NFT media management service that allows users to host, manage and share files of any kind on the blockchain.
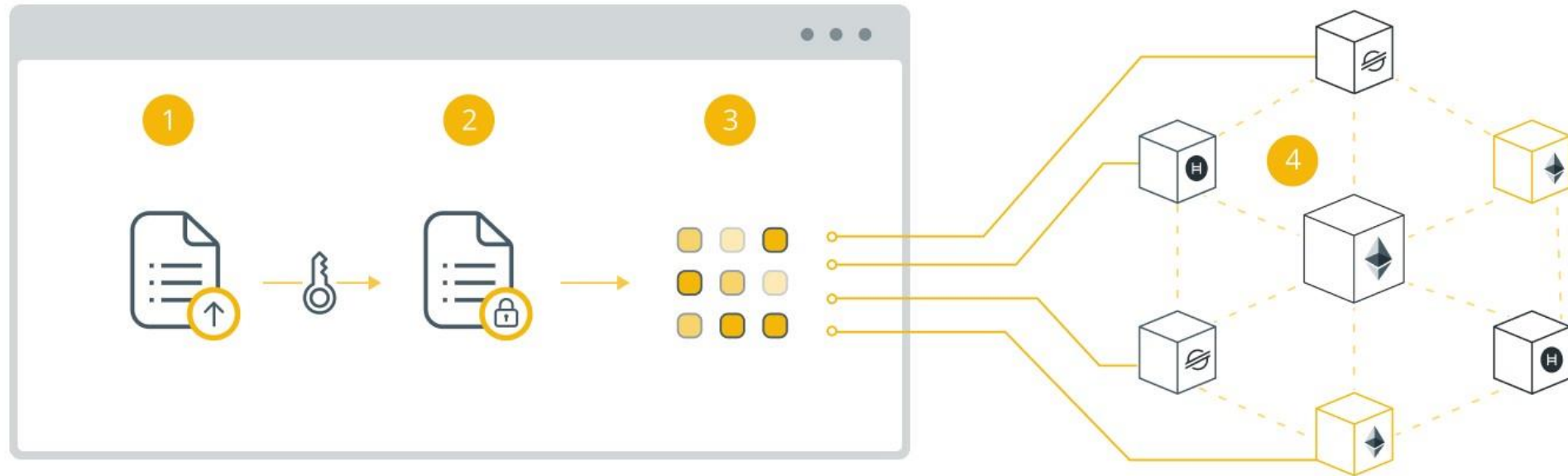
For developers, Pinata is the easiest way to pin content to IPFS and build web3 applications without building and managing your own IPFS nodes.

WHAT IS IPFS?

IPFS stands for **InterPlanetary File System,** a powerful protocol that allows creators to host content too large for blockchain on a decentralized peer-to-peer network, leveraging cryptography to ensure content is unable to be unchanged.

Working of a decentralized storage system

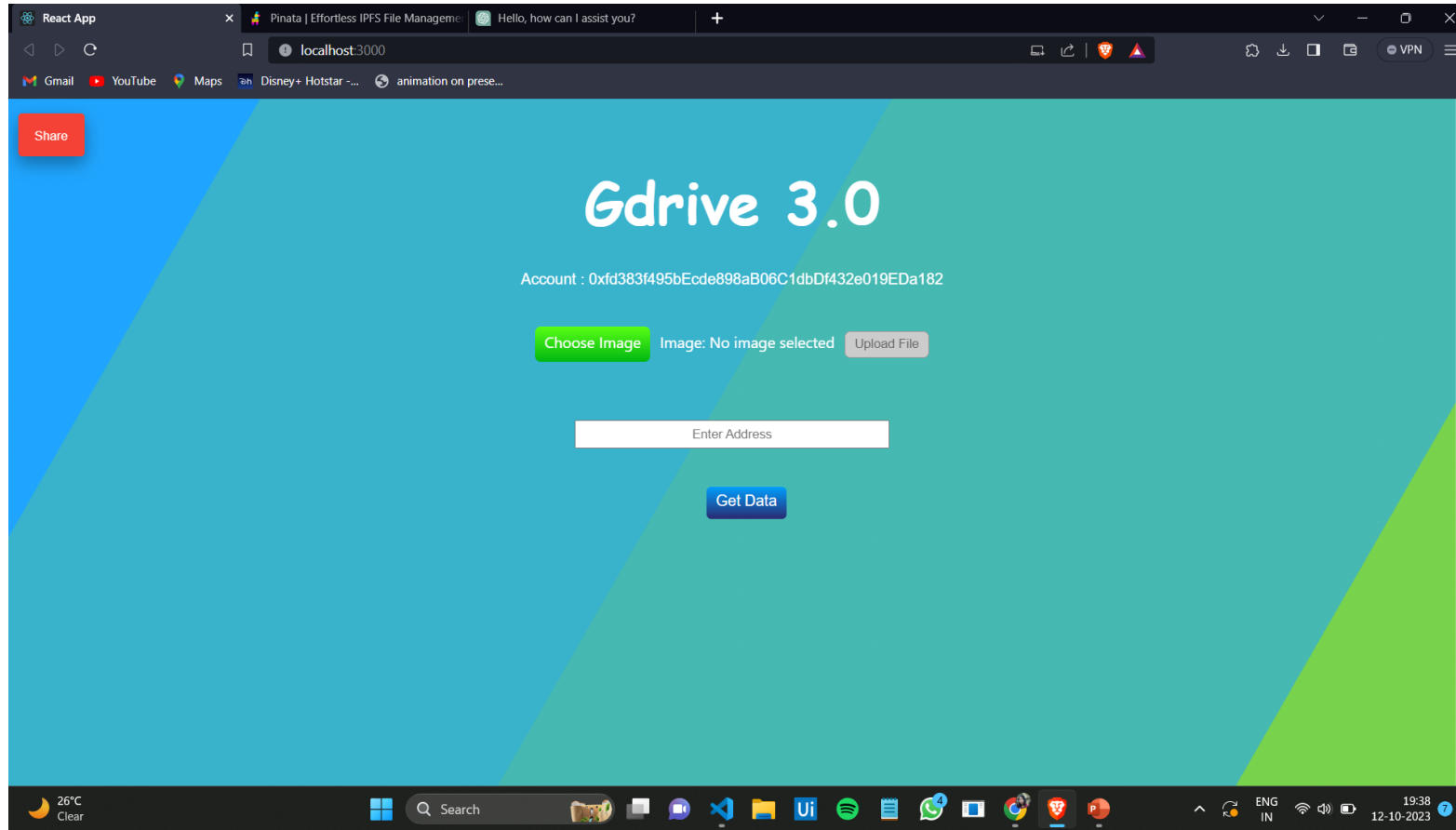|			
User uploads file to DCS **1**	File gets encrypted **2**	Encrypted File splits into pieces **3**	Pieces get stored across multiple storage nodes in the DCS network **4**

OUTPUTS
(FRONT PAGE VIEW)

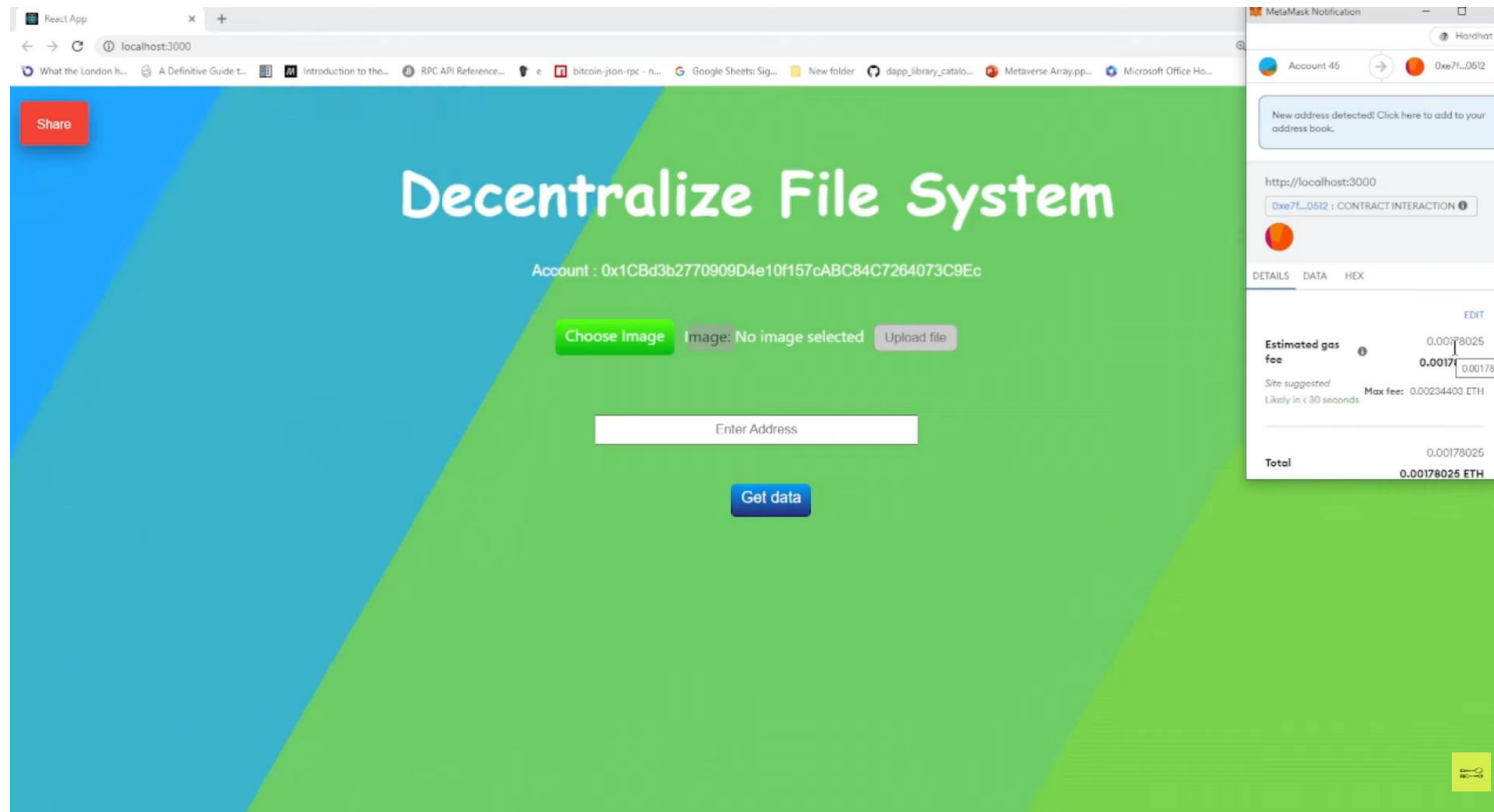This is the view of the front page of my project, 'Decentralized Drive.'

OUTPUTS
(SHARE OPTIONS)

This screenshot shows the sharing option. If you want to share your drive, you simply need to enter the other user's address in the 'Enter Address' box and then click on the 'Share' button."
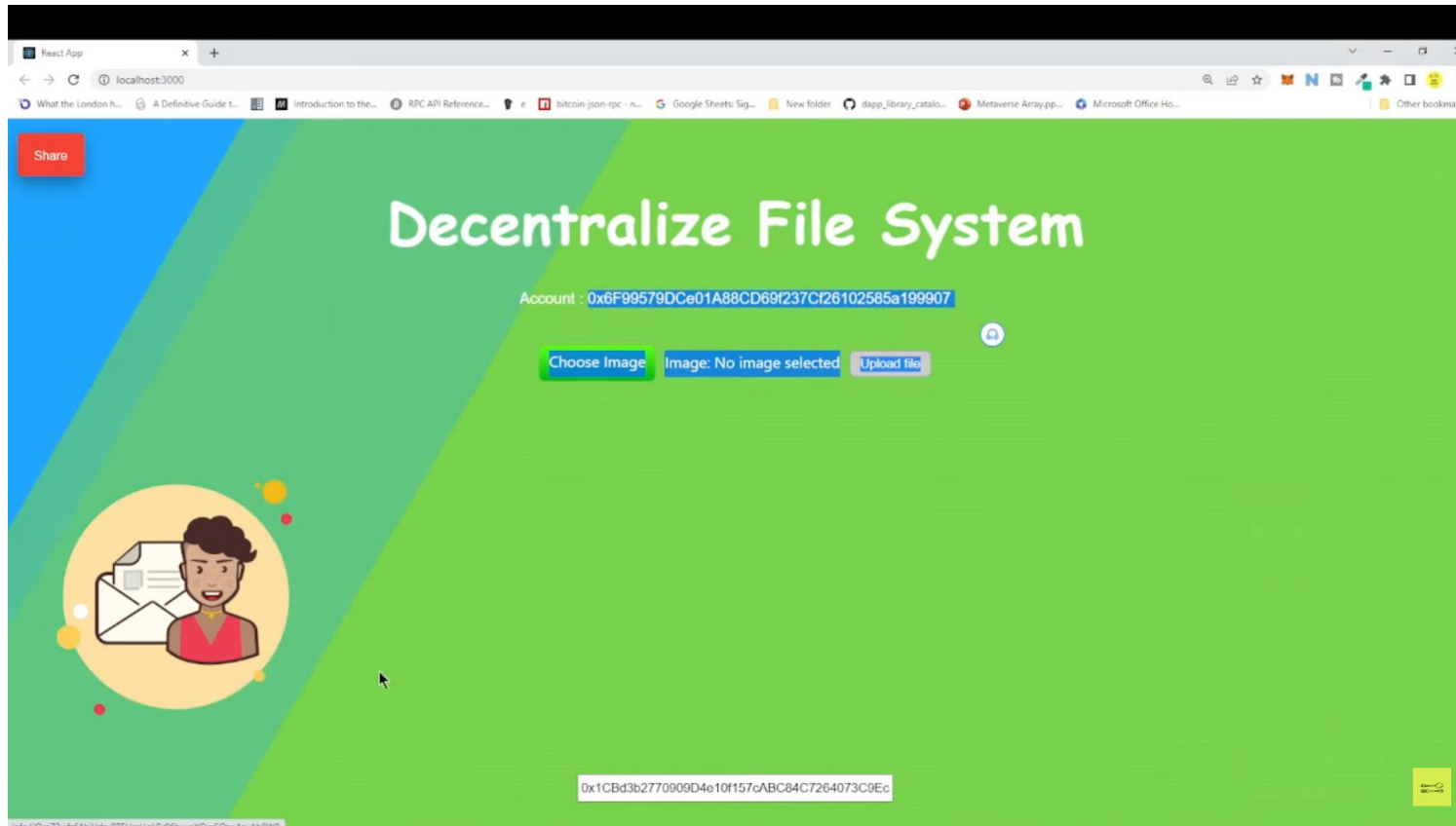
OUTPUTS
(METAMASK ACCOUNT)

In this slide, we show that in GDrive, we can upload our data, such as files and images, using our MetaMask account.
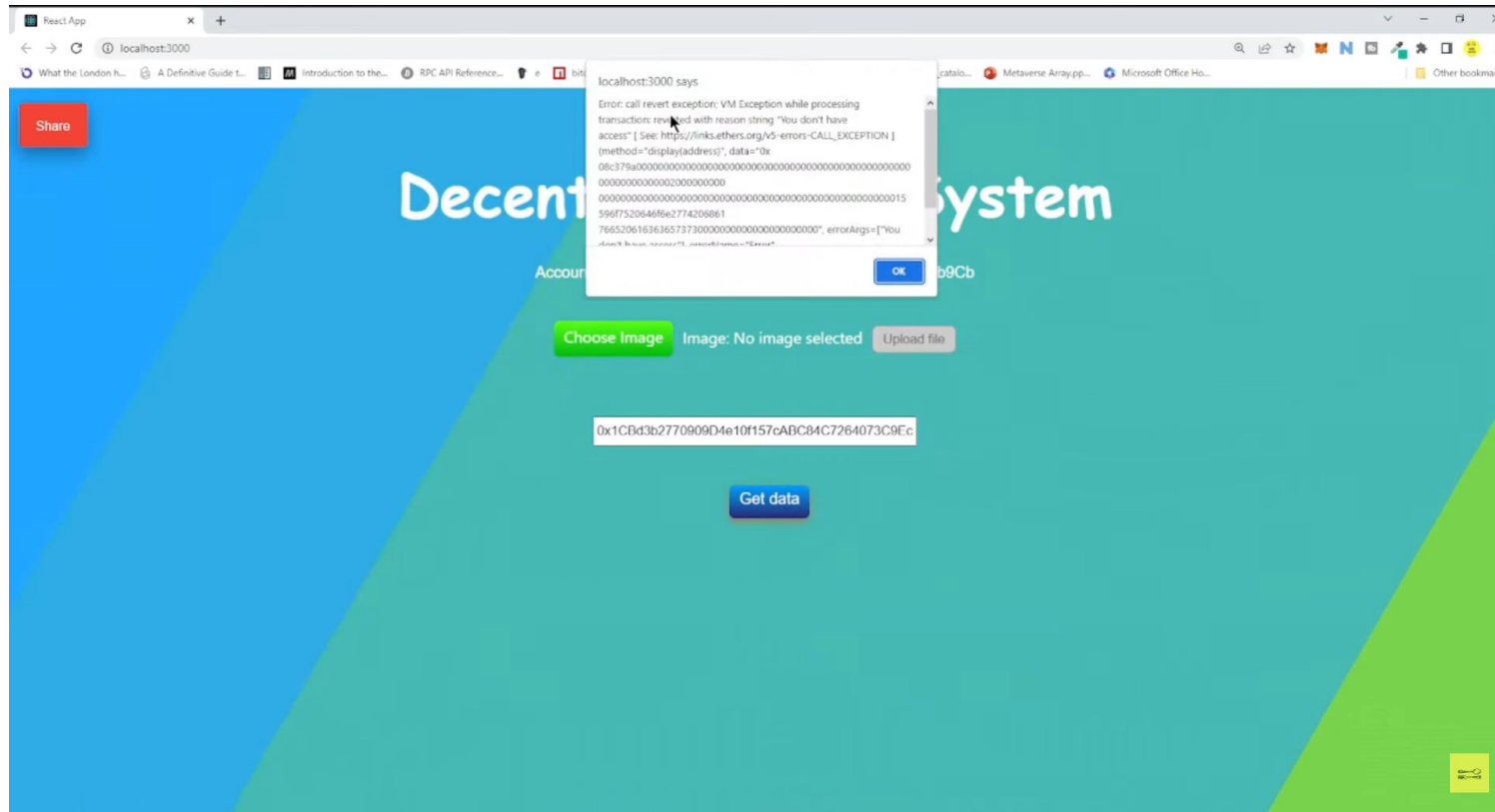
OUTPUTS
(GET DATA)

This slide presents that when we enter the user's address in the 'Enter Address' box, we then click on 'Get Data.' If we have access to that user's account, we can view the data they uploaded to the drive.
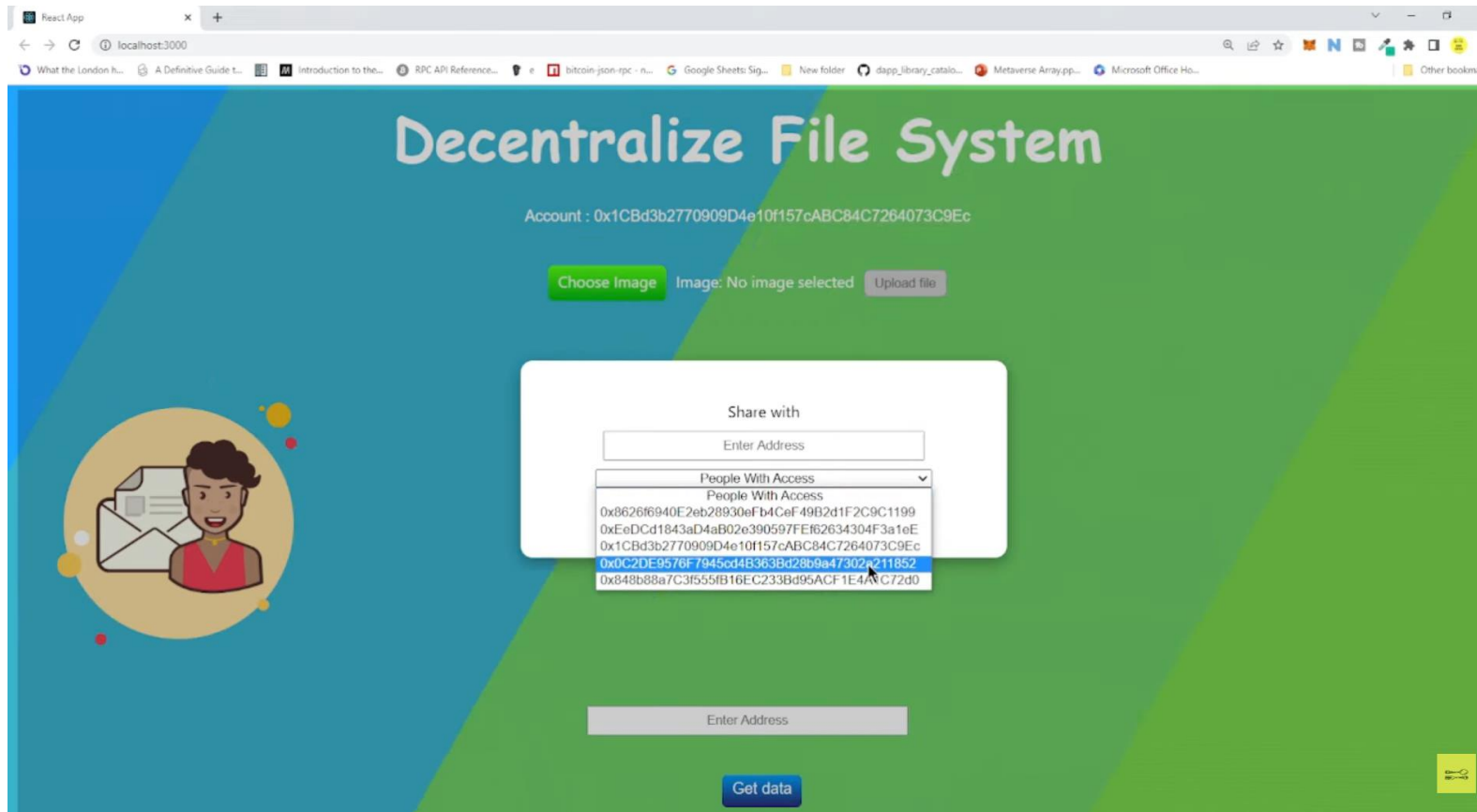
OUTPUTS
(IF YOU HAVE NO ACCESS)

This slide presents that when we enter the user's address in the 'Enter Address' box, we then click on 'Get Data.' If we do not have access to that user's account, an error notification will appear.

OUTPUTS
(ACCOUNT WHICH HAVE ACCESS)

This slide presents the data associated with the accounts that have access to your GDrive

THANK YOU