LEVENT ELITE

TEAM MEMBERS

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THEMES ADOPTED

S.H.I.E.L.D.

CLOUDFORT9

Quantum Phantom

The World's First Zero-Existence Cyber Defense !!

Storyline

Idea

Product

VAULTSHIELD

Business

Storyline

As cybersecurity students, we saw the growing threat of data breaches and ransomware attacks.

We realized that traditional encryption fails if keys are stolen, leaving data exposed.

To solve this, we designed a system that encrypts and fragments files for better security.

Our goal is to create a proactive cybersecurity solution that ensures stronger data protection.

Problem

As cybersecurity students, we discovered that traditional encryption poses a major risk if the key is stolen, the data becomes completely exposed.

Likewise, traditional **cloud storage** keeps all data in a single location, making it an easy target for breaches.

These vulnerabilities highlight the need for a more secure approach that ensures data remains protected even if one layer of **security is compromised**.

Solution

Solution

QUANTUM PHANTOM STORAGE:

A system where data only exists when you request it.

When not in use, the data is mathematically erased from physical storage-completely **unhackable**.

Even if hackers breach the system, there is nothing to steal.

Schema

File Encryption – The file is encrypted using AES-256 for strong security.

Fragmentation – The encrypted file is split into three parts to enhance protection.

Cloud Storage – Each fragment is stored in a different cloud provider (e.g., AWS, Google Cloud, Azure) to prevent single-point failure.

Retrieval & Decryption – The system fetches, reconstructs, and decrypts the file when requested by the user.

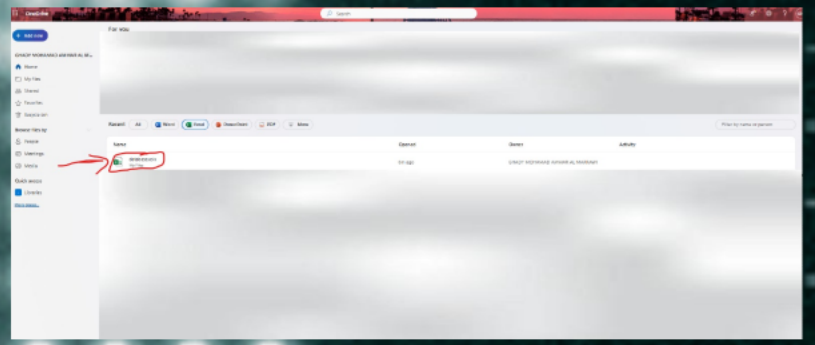
Precedure

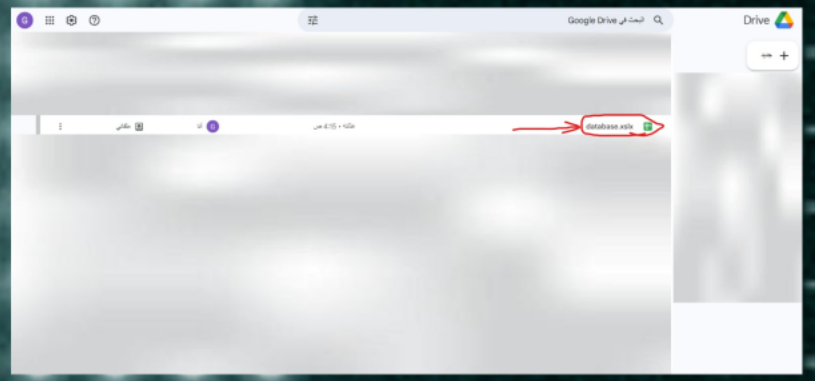
Interface

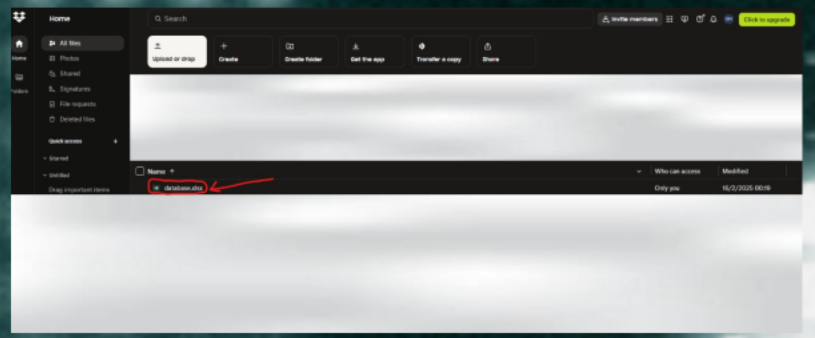
Procedure

We will do the **fragmentation**, and then the file will be deleted and memory will be cleand by overwriting it, so we avoid forensics tracking.

These are the three fragments files that has been distributed into three **secure cloud storages** (OneDrive, Google Drive, and DropBox)







Interface

We designed a **GUI** where users log in with email and password, upload or retrieve files, and log out easily.

Vision & SWOT model

Cost & Scalability – Vault Shield follows a freemium model, offering 5GB free storage with paid plans for growth. Implementation costs range from $27,000 - $62,000, with sustainable revenue from subscriptions and enterprise licensing.

Market Growth – With the cybersecurity market set to exceed $350B by 2025, demand for secure cloud storage is rising. Vault Shield's encryption, fragmentation, and quantum-resistant security make it a future-proof solution in an evolving digital world.

Strenghts and weaknesses

Oppurtunities and Threats

Why Us ?

Strenghts and weaknesses

Strengths:

- Multi-Layered Security
- Distributed Storage Protection
- Resilient Against Cloud Breaches

Weaknesses:

- Increased Retrieval Time
- Key Storage Vulnerability
- Cloud Dependency

Oppurtunities and Threats

Opprtunities

- Growing Demand for Secure Cloud Storage.
- Subscription-Based Business Model.

Threats

- Reliance on Third-Party Cloud Providers.
- High Implementation and Maintenance Costs.

Why Us ?

Aspects

	Vaultsheild	Others
Security	Advanced encryption & fragmentation	Basic encryption
Access Security	OTP-based authentication	Standard password login
Data Privacy	Zero-knowledge, user-controlled	Provider can access data
Quantum Safety	QuantuQuantum-resistant encryption	Vulnerable to quantum threats
Encryption Algorithm	AES-256	Mostly AES-128