

SHIELDNET

SECURE HYBRID WEB-BASED FILE TRANSFER SYSTEM

TEAM : CYBERWARRIORS

Team Members:

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INTRODUCTION

- File sharing apps often depend on internet, causing delay, compression, and privacy risk.
- ShieldNet provides a hybrid solution – works both offline (LAN) and online (Web).
- Browser-based, no installation, no server dependency for LAN mode.
- Designed for speed, security, and simplicity in one system.

OBJECTIVES

- Develop a secure and hybrid file transfer system.
- Allow manual mode selection (LAN / Web).
- Provide multi-user parallel transfer support.
- Add OTP / Token verification for authentication.
- Ensure auto file cleanup after transfer.

SYSTEM ARCHITECTURE

Two working modes:

● Web Mode (Online)

- Works across different networks.
- Files temporarily encrypted on cloud.
- OTP/Biometric verification ensures secure access.
- (Add a simple diagram here showing Sender ↔ Receiver via LAN or Cloud)

● LAN Mode (Offline)

- Local router-based transfer, no internet.
- Very high speed (~1 Gbps).
- Fully private (peer-to-peer)

KEY FEATURES

- **Manual Hybrid Mode Selection (LAN / Web)**
- **OTP / Token Authentication**
- **Multi-User Parallel Transfer**

- **Temporary File Storage +Auto Deletion**
- **Lossless File Transfer (No Compression)**
- **Cross-Platform Browser Access**

UNIQUENESS / INNOVATION

- **Combines LAN & Web sharing in one system.**
- **Manual control over transfer mode.**
- **Token & OTP verification in web-based interface.**
- **Zero installation – browser only.**
- **Privacy-first design – no external server dependency in LAN mode.**
- **(You can add: “No existing public site offers this functionality.”)**

COMPARISON

● Feature

● Bluetooth

● ShareIt

● Cloud

● ShieldNet (Hybrid)

Internet
Needed



Optional

Speed

⚡ Slow

⚡ Medium

⚡ Medium

🚀 Very Fast

Quality

Reduced

Reduced

May Reduced

✓ Original

Security

Low

Medium

Medium

🔒 High

Multi-User



Limited

Limited

✓ Yes

BENEFITS

- ✓ **Very Fast LAN Transfer**
- ✓ **No Internet Dependency**
- ✓ **Secure via OTP / Tokenc**
- ✓ **Multi-User Parallel Sessions**
- ✓ **Preserves File Quality**
- ✓ **Works on All Devices**
- ✓ **Auto-Deletes After Session end**

FUTURE ENHANCEMENTS

- **AI-based Auto Mode Detection**
- **Mobile App Development**
- **Transfer Analytics Dashboard**
- **Resume-on-Failure for Large Files**
- **Encrypted Chat Integration**

CONCLUSION

- **ShieldNet merges speed, security, and convenience into one unified system.**
- **Offers LAN-level speed + cloud flexibility with end-to-end protection.**
- **Demonstrates innovation in web-based hybrid file transfer technology.**
- **A step toward privacy-focused digital communication.**

The background features a dark blue gradient with abstract, glowing wireframe structures. On the left, a series of interconnected triangles and polygons form a jagged, upward-pointing shape in a lighter blue hue. On the right, a more complex, multi-faceted structure resembling a cluster of crystals or a molecular model is rendered in a teal or cyan color. Two horizontal, glowing white lines intersect behind the central text, adding a sense of depth and focus.

THANK YOU