

# **SHIELDNET**

## **SECURE HYBRID WEB-BASED FILE TRANSFER SYSTEM**

**TEAM : CYBERWARRIORS**

**Team Members:**

**Vishal Prajapati(team leader)**

**Shubham Kumar**

**Krishna Kumar**

**Suman Verma**

**Yuvraj Patel**

**Department of CSE(AI & ML)  
Innotech 2025**

# 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.**

# THANK YOU