File Share – Secure File Sharing System

Internship: Future Interns – Cyber Security
Task: 03 – Secure File Sharing System
Intern Name: Dhanush G

1. Introduction

This project focuses on building a secure file sharing system that ensures confidentiality of user data. The application allows users to upload files, which are encrypted using AES encryption before being stored on the server.

2. Objective

- To implement secure file upload functionality.
- To protect files using AES encryption.
- To understand secure file handling concepts.

3. Technologies Used

- Python
- Flask Framework
- AES Encryption (PyCryptodome)
- HTML and CSS

4. System Working

The user selects a file through the web interface. Once uploaded, the server encrypts the file using AES encryption and stores the encrypted version. This ensures that files remain unreadable without proper decryption.

5. Security Implementation

- AES symmetric encryption is used to protect files.
- Files are encrypted before being stored on the server.
- Encrypted files are unreadable without the encryption key.

6. Conclusion

This project provided practical exposure to encryption and secure file handling. It helped in understanding how cybersecurity concepts are applied in real-world web applications.