FileGuard

User Manual



Build under CYSpH Initiative

Version 1.0.0

Overview

FileGuard is a file management application designed to provide secure storage, encryption, and sharing of files. It features a user-friendly interface with options to encrypt files using a password, share them securely, and search for files efficiently. This guide will help you understand how to use each feature in FileGuard.

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1. System Requirements

- Operating System: Windows or Linux
- Python: Version 3.6 or later
- Dependencies: The application uses the kivy library for the user interface and cryptography.fernet for encryption.

2. Installation

- 1. Download the FileGuard installer from the <u>official website</u> (link to your website where the .exe file is hosted).
- 2. Run the installer and follow the on-screen instructions.
- 3. Once installed, open FileGuard to begin using the application.

3. Getting Started

- 1. Launch the FileGuard application from your desktop or applications menu.
- 2. You will see the main interface with a search bar at the top, a file explorer in the center, and input fields for encryption and sharing options below.

4. Features

4.1 File Management

• File Explorer: The file chooser in the main window allows you to browse and select files from your system. You can view files in various directories by navigating through the file explorer.

4.2 Search Functionality

• Search Bar: Use the search bar at the top of the interface to quickly find specific files by name. Enter the file name or keywords, and the results will update automatically.

4.3 File Encryption

• Encrypting Files:

- 1. Select the file you wish to encrypt from the file explorer.
- 2. Enter a password in the "Enter password to encrypt" field.
- 3. Click on the "Encrypt and Share" button to encrypt the file.
- 4. The file will be secured with the provided password.

4.4 Sharing Encrypted Files

• Sharing Files Securely:

1. In the "Share with" field, enter the usernames or email addresses of the people you want to share the file with (separated by commas).

- 2. Click the "Encrypt and Share" button to encrypt the file and generate a secure link for sharing.
- 3. Share the generated link with the intended recipients. They will need the password to decrypt the file.

5. Technologies Used

- Programming Language: Python
- UI Framework: Kivy (for building the graphical user interface)
- Encryption Library: Cryptography (Fernet symmetric encryption)
- Other Libraries: Standard Python libraries like os, time, hashlib, and base64 are used for file handling and operations.

6. Future Work

We plan to enhance FileGuard with the following features in future releases:

6.1 File Tracking

- Description: Implement a file tracking system that monitors file access, modifications, and changes in file locations.
- Purpose: To provide users with detailed logs of who accessed or modified files and when these actions occurred.

6.2 Block Access to Specific Files

- Description: Introduce a feature that allows users to block access to specific files, even for authorized users with the correct password.
- Purpose: To add an extra layer of security by restricting file access in sensitive situations, making files inaccessible under predefined conditions.

7. Troubleshooting

- Unable to Encrypt a File: Ensure you have entered a valid password in the encryption field.
- File Search Issues: If the search bar does not return results, double-check the file name or keyword you entered.

8. FAQs

Q1: How do I decrypt a file?

• Decryption is currently handled when the intended recipient accesses the file with the password you provided.

Q2: Can I track file changes or access history?

• File tracking is not yet available in this version of FileGuard. This feature may be added in future updates.

Q3: What should I do if I forget the encryption password?

• Unfortunately, if you forget the password, there is no way to recover the encrypted file due to the secure encryption method used by FileGuard.