Secure File Transfer - User Guide

1. Installation & Setup

## Prerequisites

Before running the application, ensure you have the following installed:

* **Python 3.x**
* **VSCode or any other IDE**
* **FastAPI** (for the backend)
* **TTKBootstrap** (for a modern UI)
* **Requests** (for API communication)
* **Docker** (optional, for containerized deployment)

## Install Dependencies

Run the following command to install the required packages:

**pip install fastapi uvicorn requests ttkbootstrap**

1. Running the Application

## Start the Backend

1. Navigate to the directory
2. **docker-compose up --build**
3. The backend should now be running on [**http://127.0.0.1:8000**](http://127.0.0.1:8000/).

## Start the Frontend

1. After starting the backend, open the command prompt
2. Navigate to the directory **cd Secure-File-Transfer**
3. Navigate to frontend: **cd frontend**
4. Run the application : **py secure\_transfer\_gui.py** or **python secure\_transfer\_gui.py**
5. Using the Application

## Login & Token Generation

1. Enter your **username** and **password**.
2. Click **Login** to authenticate.
3. A **token** will be generated, which will be required for encryption/decryption.
4. User will be taken to Encryption Screen

## File Encryption

1. Click **Select File** and choose the file you want to encrypt.
2. Click **Encrypt** to secure the file.
3. Once encrypted, you can **download** the encrypted file.

## File Decryption

1. Click **Select Encrypted File** and choose the encrypted file.
2. Click **Decrypt & Download** to restore the original file.