

# **File Encryption and Decryption Tool**

The "File Encryption/Decryption Tool" project aims to develop a secure and user-friendly software application that allows users to encrypt and decrypt files to protect sensitive data from unauthorized access. This tool offers a reliable solution for individuals and organizations seeking to safeguard their confidential information stored in digital files.

The tool will have a simple and intuitive graphical user interface (GUI) that enables users to perform encryption and decryption operations seamlessly. Users can select files they wish to encrypt and choose a strong encryption algorithm, such as Advanced Encryption Standard (AES) or Rivest-Shamir-Adleman (RSA), to protect the data. The application will generate a secure encryption key, which can be either provided by the user or generated automatically by the tool.

## **Modules**

- Encryption Module
- Decryption Module
- Key Management Module