Screenshots:

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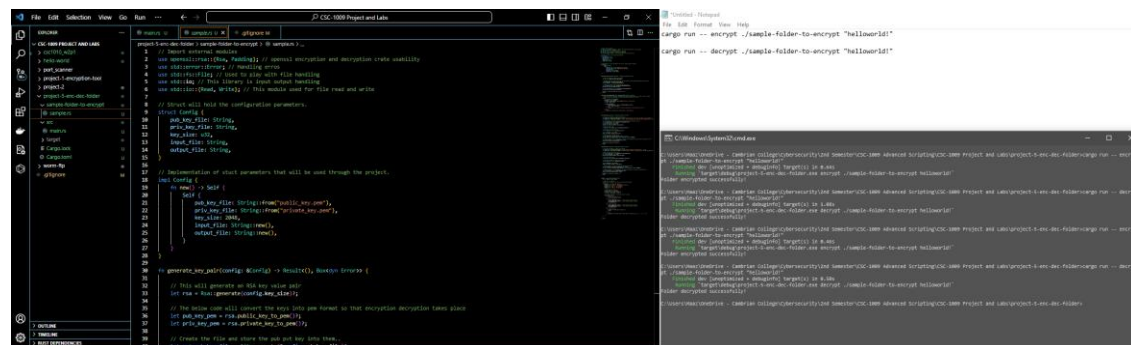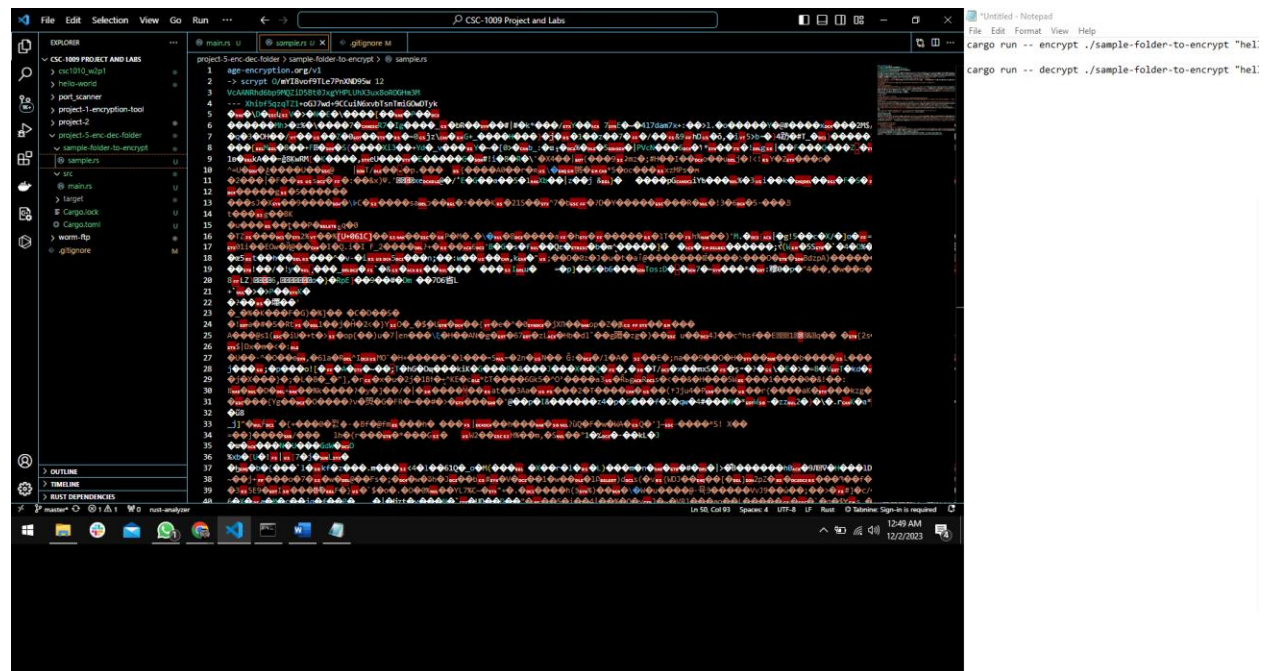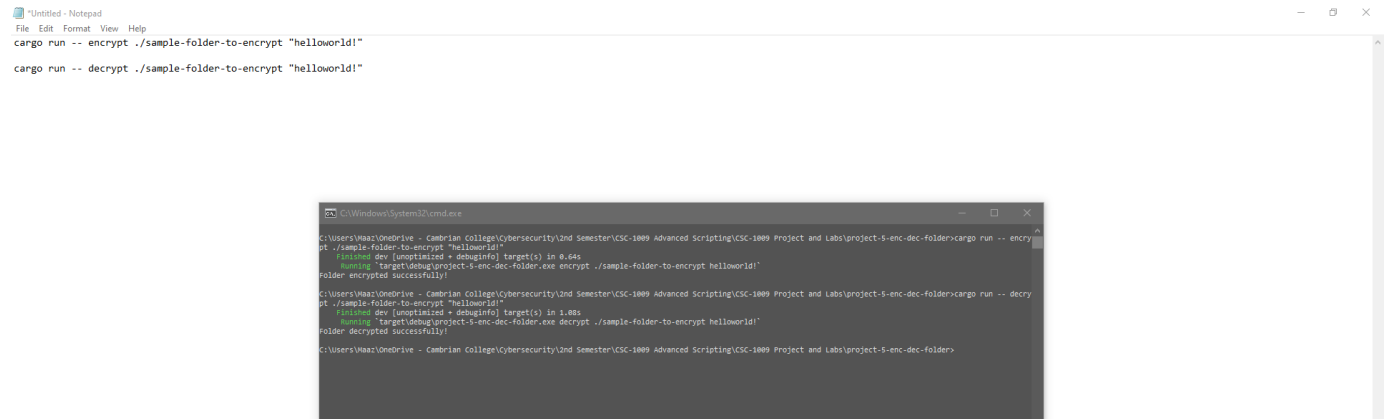
Folder Encryption CLI Application Documentation

Overview

The Folder Encryption CLI Application is a command-line tool developed in Rust for encrypting and decrypting files within a folder. It provides a simple and secure way to protect sensitive data.

Functionality

- ### Encryption

  The application encrypts all files in a specified folder.

  Each file's content is encrypted using a user-provided passphrase.

  The original files are replaced with their encrypted versions.

- ### Decryption

  The application decrypts all files in a specified folder.

  Decryption requires the same passphrase that was used for encryption.

  The encrypted files are replaced with their decrypted versions.

Design

- ### Command-Line Interface
  - The application operates entirely through the command line.
  - It uses clap for parsing command-line arguments.
  - Users can choose between two operations: encrypt or decrypt.

- ### File Processing
  - walkdir is used to traverse the directory and process each file.

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- Files are read and written using standard Rust file handling (std::fs::File).
- The application skips directories and only processes files.

• Dependencies

- clap: For creating a user-friendly command-line interface.
- age: For performing encryption and decryption operations.
- walkdir: For iterating over files in a directory.
- secrecy: For securely handling sensitive information like passphrases.

Usage Instructions

cargo run -- encrypt [path] [passphrase]

cargo run -- decrypt [path] [passphrase]

For Example:

As explained in the video.

cargo run -- encrypt ./sample-folder-to-encrypt "helloworld!"

cargo run -- decrypt ./sample-folder-to-encrypt "helloworld!"

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