

Student Name: Alan Pachkovskiy

WVU ID: 800389304

CYBE 465 - Access Control for MyFacebook

3/31/2025

Status Sheet:

Compilation status: Program compiles and runs successfully with no error

Program has no known issues, it is able to input files and manual input.

Programming Environment

Language: Python

System: Developed and tested in windows

Library: No external library

Program Description

This program implements an access control system for a simulated social media platform, "MyFacebook", where users can manage friends, lists, and picture permissions. Key functionality:

Friend management: Adding friends and setting profile owner

Lists: Users can make lists and add friends to them

Picture management: Upload pictures, set permissions, change ownership

Commenting: Users can read/write comments on pictures based on permission level

Permissions: Pictures have owner, list, public permission using the read/write model

Data Structures

In memory I created a database to store information

- Lists- friend groups and their members

- Pictures- picture metadata (all information regarding the picture)

- Current_friend- checks who is currently logged in

- Profile_owner- checks who profile owner is

File Format

Files: friends.txt, pictures.txt, lists.txt, audit.txt are used for external storage

Friends.txt- newline separated list of friends

Pictures.txt- Each line contains picture details, name, owner, list, permissions

pic1.txt: `megan testing rw rw rw`

Lists.txt- Each line contains a list name followed by friend names

Audit.txt- Logs all actions taken within the program