Practice Python Exam : Log-In System

This assignment is entirely optional and designed to give you practice writing code and applying lessons and topics for the Python exam

This practice exam deals with the following topics:
- dictionaries
- file I/O
- unit testing

The Assignment

This Python exam will involve implementing a mini log-in system. You will download the skeleton of the program, then implement the functions. The design of the program has been set up for you.

In this system, users will be able to sign up, log in, change their password, delete their accounts, and display general statistics about sign-ups and log-ins. The program will initially load a collection of usernames and passwords from a .csv file and store them in a dictionary.

Note: We know that storing plaintext passwords in a file is not a good practice in real life applications, but for the sake of this exercise, we'll keep it simple.

Steps

1. Complete the required functions
    a. Implement all of the functions defined in *SystemCreator.py*, *SystemManager.py, and SystemExporter.py*.
        i. Docstrings have already been provided
        ii. You can create any number of helper functions (with docstrings)
        iii. The *main* function has already been implemented for you in login_system.py
        iv. Add brief comments to all non-trivial lines of code
    b. Pass all of the provided tests in *login_system_tests_full.py*
2. Make sure your program and the testing file run without errors!

Unit Testing

To test your code, we have provided you with ALL of the unit tests for this assignment in *login_system_tests_full.py*.