Lab 4: Databased Admin Tool Continued

Objective: In the previous lab, you developed an admin tool for username and password management. You accomplished the tasks with Dictionary or List. Here, use class to design your own data structure to accomplish a similar task.

The **UD.txt** datafile:

FIRST NAME, LAST NAME,USERNAME,PASSWORD

Sam,Ddal,sdd233,Pad231

Dave,Dcon,dcf987,BHYW4fw

Dell,Grant,dgr803,Sb83d2d

Mike,Kress,mkr212,UNNHS322

Lisa,Kate,lki065,dgw6234

Paul,Edward,ped332,9891ds

Youyou,Tranten,ytr876,dsid21kk

Nomi,Mhanken,nmh223,3282jd3d2

Write a program that imports the database from **UD.txt**, your program can search for users’ password.

Give the following options:

A: Search by last name

B: Search by username

C: Insert a user

E. Display all users

1. Create a **Userdata** class based on the “**UD.txt**”. Create private data fields for **FIRST NAME, LAST NAME,USERNAME,PASSWORD**. Create an **\_\_init\_\_** method to initialize each user object. Create 8 class methods. A **set** and a **get** method for each of the four data fields (since FIRST NAME, LAST NAME,USERNAME,PASSWORD are all private, you need to use class methods to access them). Write a class print method to print out the user information so it can be used for option E.
2. Save your class object in a **list** (you need to use a LIST). (Ex: each person/object is considered as 1 element in this list)
3. When user select A, prompt the user “Enter user’s name in the form: Lastname”

If the user is found, display the user’s password, and return the user to menu.

If user not found, display “Not found”, and return the user to menu

1. When user select B, prompt the user “Enter user’s username:”

If the user is found, display the user’s password, and return the user to menu.

If user not found, display “Not found”, and return the user to menu.

1. For C, prompt the user “Enter user info in the following format: First name, last name, username, password”, process the string and save the information into the UD.txt.
2. For D, display all user data fields.

Draw the **UML diagram** for the class and upload with your .py file. Save your code in the following format: CS132\_Labnumber\_Last name.py.

**Execution example:**

A: Search by last name

B: Search by username

C: Insert a user

E. Display all users

*G #user input*

Enter a valid option

A: Search by last name

B: Search by username

C: Insert a user

E. Display all users

*A #user input*

Enter user’s name in the form: Lastname

*Ford #user input*

Not found

A: Search by last name

B: Search by username

C: Insert a user

E. Display all users

*A #user input*

Enter user’s name in the form: Lastname

Dell #user input

Password is Sb83d2d

A: Search by last name

B: Search by username

C: Insert a user

E. Display all users

B #user input

Enter user’s username:

*mkr212 #user input*

Password is UNNHS322

A: Search by last name

B: Search by username

C: Insert a user

E. Display all users

*C #user input*

Enter user info in the following format: First name, last name, username, password

*Tom, Waits, TWS123, 123456 #userinput*

A: Search by last name

B: Search by username

C: Insert a user

E. Display all users

*E #user input*

FIRST NAME LAST NAME USERNAME PASSWORD

Sam Ddal sdd233 Pad231

Dave Dcon dcf987 BHYW4fw

Dell Grant dgr803 Sb83d2d

Mike Kress mkr212 UNNHS322

Lisa Kate, lki065 dgw6234

Paul Edward ped332 9891ds

Youyou Tranten ytr876 dsid21kk

Nomi Mhanken nmh223 3282jd3d2

Tom Waits TWS123 123456