**Assignment 0**

Registration and Login system with Python, file handling

STAGE -- 1

Registration

When the user chooses to Register

---> email/username should have "@" and followed by "."

      eg:- sherlock@gmail.com

            nothing@yahoo.in

---> it should not be like this

       eg:- @gmail.com

            there should not be any "." immediate next to "@"

            my@.in

            it should not start with special characters and numbers

---> password (5 < password length > 16)

              Must have minimum one special character,

              one digit,

              one uppercase,

              one lowercase character

Stage 2

  Once the username and password are validated, store those values in a file

Stage 3

Login

 When the user chooses to Login, check whether his/her credentials exist in the file or not based on the user input

If doesn’t exist ask them to go for Registration or

If they have chosen forget password you should be able to retrieve their original password based on their username provided in the user input

If nothing matches in your file you should ask them to Register

import re

import pandas as pd

import numpy as np

from openpyxl import Workbook

from openpyxl.styles import PatternFill

import xlrd

pattern = "^[a-z]+[\.\_]?[a-z 0-9]+[@]\w+[.]\w{2,3}$"

def email\_validation(Email):

if re.search(pattern, Email):

return 1

else:

return 0

def password\_valiadtion(flag, Password):

if not re.search('[a-z]', Password):

flag = 0

if not re.search('[0-9]', Password):

flag = 0

if not re.search('[A-Z]', Password):

flag = 0

if not re.search('[$@#!]', Password):

flag = 0

if (len(Password) < 5 or len(Password) > 16):

flag = 0

if flag == 1:

return 1

else:

return 0

def login(email, password):

if(email\_validation(email)):

file1 = open("sample.txt", "r")

flag = 0

index = 0

temp = 0

temp1 = 0

for line in file1:

index += 1

if email in line:

flag = 1

temp = 1

break

if(temp == 0):

print("username doesnt exists")

if(flag == 1):

str = email+','+password

for line in file1:

index += 1

if str in line:

print("Login Successfulll")

temp1 = 1

break

if(temp1 == 0):

print("invalid password")

else:

print("Entered username doesn't met the requirements,please enter a valid email")

def registration(email, password):

if(email\_validation(email)):

if(password\_valiadtion(flag1, passwd)):

file1 = open("sample.txt", "r")

flag = 0

index = 0

for line in file1:

index += 1

if email in line:

flag = 1

break

if(flag == 0):

new\_line = f"Username:{email},Password:{passwd}\n"

with open("sample.txt", "a") as a\_file:

# a\_file.write("\n")

a\_file.write(new\_line)

file1.close()

print("Your registration is Successfull")

else:

print("username already exist")

else:

print(

" Entered password doesn't met the requirements,please enter a valid password")

else:

print("Entered username doesn't met the requirements,please enter a valid email")

def forgot\_password(email):

if(email\_validation(email)):

file1 = open("sample.txt", "r")

flag = 0

index = 0

temp = 0

temp1 = 0

for line in file1:

index += 1

if email in line:

print(line)

flag = 1

temp = 1

break

if(temp == 0):

print("username doesnt exists")

if(flag == 1):

print("The above password exist with the the entered username")

dec = input(

"Do you want to use the above password or want to set new password?[Y/N")

if(dec == 'Y' or dec == "y"):

print("Thank You")

else:

new\_pass = input("Please enter new password")

if(password\_valiadtion(flag1, new\_pass)):

new\_line = f"Username:{email},Password:{new\_pass}\n"

with open("sample.txt", "a") as a\_file:

# a\_file.write("\n")

a\_file.write(new\_line)

file1.close()

print("New Password Created successfully")

else:

print("password doesn't met the requirements,please enter a valid password")

else:

print("username doesn't met the requiremets please enter a valid mail id")

if \_\_name\_\_ == '\_\_main\_\_':

flag1 = 1

user\_input = int(

input("Enter Your choice\n1.Registration\n2.Login\n3.forgot password\n"))

if(user\_input == 1):

email = input("Enter ur email id\n")

passwd = input("Enter ur password\n")

registration(email, passwd)

elif(user\_input == 2):

email = input("Enter ur email id\n")

passwd = input("Enter ur password")

login(email, passwd)

elif(user\_input == 3):

email = input("please enter the mail id")

forgot\_password(email)

else:

print("invalid choice")