from tkinter import \*

from tkinter import messagebox

import random

import pyperclip

import json

# --------------------------------- Password Generator ---------------------------------- #

# Password Generator Project

def generate\_password():

letters = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n', 'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z', 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z']

numbers = ['0', '1', '2', '3', '4', '5', '6', '7', '8', '9']

symbols = ['!', '#', '$', '%', '&', '(', ')', '\*', '+']

nr\_letters = random.randint(8, 10)

nr\_symbols = random.randint(2, 4)

nr\_numbers = random.randint(2, 4)

password\_list = []

password\_letters = [random.choice(letters) for \_ in range(nr\_letters)]

password\_symbols = [random.choice(symbols) for \_ in range(nr\_symbols)]

password\_numbers = [random.choice(numbers) for \_ in range(nr\_numbers)]

password\_list = password\_letters + password\_symbols + password\_numbers

random.shuffle(password\_list)

password = "".join(password\_list)

password\_input.insert(0, password)

pyperclip.copy(password)

# --------------------------------- Save Passwords ---------------------------------- #

def save():

website = website\_input.get()

email = email\_input.get()

password = password\_input.get()

new\_data = {

website: {

"email": email,

"password": password,

}

}

if len(website) == 0 or len(email) == 0 or len(password) == 0:

messagebox.showinfo(title="Oops", message="Please don't leave any fields empty!")

else:

try:

with open("data.json", "r") as file:

# Reading old data

data = json.load(file)

except FileNotFoundError:

with open("data.json", "w") as file:

# Updating old data with new data

json.dump(new\_data, file, indent=4)

else:

data.update(new\_data)

with open("data.json", "w") as file:

# Saving updated data

json.dump(data, file, indent=4)

finally:

website\_input.delete(0, END)

email\_input.delete(0, END)

password\_input.delete(0, END)

website\_input.focus()

# --------------------------------- Fine Password ---------------------------------- #

def find\_password():

website = website\_input.get()

try:

with open("data.json") as file:

data = json.load(file)

except FileNotFoundError:

messagebox.showinfo(title="Error", message="No data file found!")

else:

if website in data:

email = data[website]["email"]

password = data[website]["password"]

messagebox.showinfo(title=website,message=f"Email: {email}\n\nPassword: {password}")

else:

messagebox.showinfo(title="Error", message=f"No details for {website} exists!")

# --------------------------------- UI Setup ---------------------------------- #

def validate():

username = username\_check\_input.get()

password = password\_check\_input.get()

if username == "username" and password == "password":

pass

else:

messagebox.showwarning(title="Error", message="Wrong password, try again!")

username\_check\_input.delete(0, END)

password\_check\_input.delete(0, END)

password\_checker\_window = Tk()

password\_checker\_window.title("Login to the password database")

password\_checker\_window.config(padx=50, pady=50, width=500, height=350, bg="#282120")

# canvas = Canvas(width=200, height=200, bg="#282120", highlightthickness=0)

# logo\_image = PhotoImage(file="logo.png")

# canvas.create\_image(100, 100, image=logo\_image)

# canvas.grid(column=1, row=0)

username\_check\_label = Label(text="Username:", bg="#282120", fg="#D4483B")

username\_check\_label.grid(column=0, row=2)

password\_check\_label = Label(text="Password:", bg="#282120", fg="#D4483B")

password\_check\_label.grid(column=0, row=3)

space1 = Label(text=" ", bg="#282120")

space1.grid(column=1, row=1)

username\_check\_input = Entry(width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B")

username\_check\_input.grid(column=1, row=2)

username\_check\_input.focus()

password\_check\_input = Entry(width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B", show="\*")

password\_check\_input.grid(column=1, row=3)

space2 = Label(text=" ", bg="#282120")

space2.grid(column=0, row=4)

enter\_button = Button(text="Enter", width=7, bg="#282120", fg="#D4483B", command=validate)

enter\_button.grid(column=1, row=5, columnspan=2)

while username\_check\_input.get() == "username" and password\_check\_input.get() == "password":

window = Tk()

window.title("Password Generator")

window.config(padx=50, pady=50, bg="#282120")

# canvas = Canvas(width=200, height=200, bg="#282120", highlightthickness=0)

# logo\_image = PhotoImage(file="logo.png")

# canvas.create\_image(100, 100, image=logo\_image)

# canvas.grid(column=1, row=0)

# Labels

website\_label = Label(text="Website:", bg="#282120", fg="#D4483B")

website\_label.grid(column=0, row=2)

email\_label = Label(text="Email / Username:", bg="#282120", fg="#D4483B")

email\_label.grid(column=0, row=3)

password\_label = Label(text="Password:", bg="#282120", fg="#D4483B")

password\_label.grid(column=0, row=4)

line\_label1 = Label(text=" ", bg="#282120")

line\_label1.grid(column=1, row=1)

line\_label2 = Label(text=" ", bg="#282120")

line\_label2.grid(column=1, row=5)

# Entries

website\_input = Entry(width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B")

website\_input.grid(column=1, row=2)

website\_input.focus()

email\_input = Entry(width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B")

email\_input.grid(column=1, row=3)

# email\_input.insert(0, "anything@gmail.com")

password\_input = Entry(width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B")

password\_input.grid(column=1, row=4)

# Buttons

generate\_password\_button = Button(text="Generate Password", bg="#282120", fg="#D4483B", command=generate\_password)

generate\_password\_button.grid(column=2, row=4)

add\_password = Button(text="Add", width=45, bg="#282120", fg="#D4483B", command=save)

add\_password.grid(column=1, row=6, columnspan=2)

search = Button(text="Search", width=14, bg="#282120", fg="#D4483B", command=find\_password)

search.grid(column=2, row=2)

window.mainloop()

password\_checker\_window.mainloop()

# Class for login window

class loginWindow(Tk):

def \_\_init\_\_(self):

Tk.\_\_init\_\_(self)

self.title("Login to the password database")

self.config(padx=50, pady=50, width=500, height=350, bg="#282120")

# canvas = Canvas(self, width=200, height=200, bg="#282120", highlightthickness=0)

# logo\_image = PhotoImage(file="logo.png")

# canvas.create\_image(100, 100, image=logo\_image)

# canvas.grid(column=1, row=0)

self.username\_check\_label = Label(self, text="Username:", bg="#282120", fg="#D4483B")

self.username\_check\_label.grid(column=0, row=2)

self.password\_check\_label = Label(self, text="Password:", bg="#282120", fg="#D4483B")

self.password\_check\_label.grid(column=0, row=3)

self.space1 = Label(self, text=" ", bg="#282120")

self.space1.grid(column=1, row=1)

self.username\_check\_input = Entry(self, width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B")

self.username\_check\_input.grid(column=1, row=2)

self.username\_check\_input.focus()

self.password\_check\_input = Entry(self, width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B", show="\*")

self.password\_check\_input.grid(column=1, row=3)

self.space2 = Label(self, text=" ", bg="#282120")

self.space2.grid(column=0, row=4)

self.enter\_button = Button(self, text="Enter", width=7, bg="#282120", fg="#D4483B", command=self.validate)

self.enter\_button.grid(column=1, row=5, columnspan=2)

def validate(self):

username = self.username\_check\_input.get()

password = self.password\_check\_input.get()

if username == "username" and password == "password":

self.destroy()

global load\_manager

load\_manager()

else:

messagebox.showwarning(title="Error", message="Wrong password, try again!")

self.username\_check\_input.delete(0, END)

self.password\_check\_input.delete(0, END)

#This function loads the password manager after logging in.

def load\_manager():

app = managerWindow()

app.mainloop()

# Class for managerWindow

class managerWindow(Tk):

def \_\_init\_\_(self):

Tk.\_\_init\_\_(self)

self.title("Password Generator")

self.config(padx=50, pady=50, bg="#282120")

# self.canvas = Canvas(self, width=200, height=200, bg="#282120", highlightthickness=0)

# self.logo\_image = PhotoImage(file="logo.png")

# self.canvas.create\_image(100, 100, image=logo\_image)

# self.canvas.grid(column=1, row=0)

# Labels

self.website\_label = Label(self, text="Website:", bg="#282120", fg="#D4483B")

self.website\_label.grid(column=0, row=2)

self.email\_label = Label(self, text="Email / Username:", bg="#282120", fg="#D4483B")

self.email\_label.grid(column=0, row=3)

self.password\_label = Label(self, text="Password:", bg="#282120", fg="#D4483B")

self.password\_label.grid(column=0, row=4)

self.line\_label1 = Label(self, text=" ", bg="#282120")

self.line\_label1.grid(column=1, row=1)

self.line\_label2 = Label(self, text=" ", bg="#282120")

self.line\_label2.grid(column=1, row=5)

# Entries

self.website\_input = Entry(self, width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B")

self.website\_input.grid(column=1, row=2)

self.website\_input.focus()

self.email\_input = Entry(self, width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B")

self.email\_input.grid(column=1, row=3)

# self.email\_input.insert(0, "anything@gmail.com")

self.password\_input = Entry(self, width=32, bg="#282120", fg="#D4483B", insertbackground="#D4483B")

self.password\_input.grid(column=1, row=4)

# Buttons

self.generate\_password\_button = Button(self, text="Generate Password", bg="#282120", fg="#D4483B", command=self.generate\_password)

self.generate\_password\_button.grid(column=2, row=4)

self.add\_password = Button(self, text="Add", width=45, bg="#282120", fg="#D4483B", command=self.save)

self.add\_password.grid(column=1, row=6, columnspan=2)

self.search = Button(self, text="Search", width=14, bg="#282120", fg="#D4483B", command=self.find\_password)

self.search.grid(column=2, row=2)

def generate\_password(self):

letters = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n', 'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z', 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z']

numbers = ['0', '1', '2', '3', '4', '5', '6', '7', '8', '9']

symbols = ['!', '#', '$', '%', '&', '(', ')', '\*', '+']

nr\_letters = random.randint(8, 10)

nr\_symbols = random.randint(2, 4)

nr\_numbers = random.randint(2, 4)

password\_list = []

password\_letters = [random.choice(letters) for \_ in range(nr\_letters)]

password\_symbols = [random.choice(symbols) for \_ in range(nr\_symbols)]

password\_numbers = [random.choice(numbers) for \_ in range(nr\_numbers)]

password\_list = password\_letters + password\_symbols + password\_numbers

random.shuffle(password\_list)

password = "".join(password\_list)

self.password\_input.delete(0,"end") #Clear the password input before inserting

self.password\_input.insert(0, password)

pyperclip.copy(password)

def save(self):

website = self.website\_input.get()

email = self.email\_input.get()

password = self.password\_input.get()

new\_data = {

website: {

"email": email,

"password": password,

}

}

if len(website) == 0 or len(email) == 0 or len(password) == 0:

messagebox.showinfo(title="Oops", message="Please don't leave any fields empty!")

else:

try:

with open("data.json", "r") as file:

# Reading old data

data = json.load(file)

except FileNotFoundError:

with open("data.json", "w") as file:

# Updating old data with new data

json.dump(new\_data, file, indent=4)

else:

data.update(new\_data)

with open("data.json", "w") as file:

# Saving updated data

json.dump(data, file, indent=4)

finally:

self.website\_input.delete(0, END)

self.email\_input.delete(0, END)

self.password\_input.delete(0, END)

self.website\_input.focus()

def find\_password(self):

website = self.website\_input.get()

try:

with open("data.json") as file:

data = json.load(file)

except FileNotFoundError:

messagebox.showinfo(title="Error", message="No data file found!")

else:

if website in data:

email = data[website]["email"]

password = data[website]["password"]

messagebox.showinfo(title=website,message=f"Email: {email}\n\nPassword: {password}")

else:

messagebox.showinfo(title="Error", message=f"No details for {website} exists!")

app = loginWindow()

app.mainloop()