

ETS Academy

PROJECT TITLE

LINKEDIN-BOT

Python Development

```
import tkinter as tk

from tkinter import messagebox, Canvas, PhotoImage

from PIL import Image, ImageTk

import mysql.connector

import bcrypt

import json

import os


def get_db_connection():

    connection = mysql.connector.connect(

        host="localhost",

        user="root",

        password="", # Use your MySQL root password here if you have one

        database="linkedin_bot"

    )

    return connection


def signin_user(username, password):

    connection = get_db_connection()

    cursor = connection.cursor(dictionary=True)

    cursor.execute("SELECT * FROM users WHERE username = %s LIMIT 1", (username,))

    user = cursor.fetchone()
```

```
cursor.close()
```

```
connection.close()
```

```
if user and bcrypt.checkpw(password.encode('utf-8'), user['password'].encode('utf-8')):
```

```
    return True
```

```
else:
```

```
    messagebox.showerror("Signin Error", "Invalid username or password.")
```

```
    return False
```

```
def signup_user(username, password):
```

```
    connection = get_db_connection()
```

```
    cursor = connection.cursor()
```

```
    hashed_password = bcrypt.hashpw(password.encode('utf-8'), bcrypt.gensalt())
```

```
    try:
```

```
        cursor.execute("INSERT INTO users (username, password) VALUES (%s, %s)",  
(username, hashed_password))
```

```
        connection.commit()
```

```
        print("User signed up successfully.")
```

```
        return True
```

```
    except mysql.connector.IntegrityError as e:
```

```
        print(f"Error: {e}")
```

```
        messagebox.showerror("Signup Error", "Username already exists.")
```

```
        return False
```

```
    finally:
```

```
        cursor.close()
```

```
        connection.close()
```

```

'''def signin_user(username, password):

    connection = get_db_connection()

    cursor = connection.cursor(dictionary=True)

    cursor.execute("SELECT * FROM users WHERE username = %s LIMIT 1", (username,))

    user = cursor.fetchone() # Fetch the single result

    cursor.close() # Close the cursor after fetching the result

    connection.close() # Close the connection

    if user and bcrypt.checkpw(password.encode('utf-8'), user['password'].encode('utf-8')):

        return True

    else:

        messagebox.showerror("Signin Error", "Invalid username or password.")

        return False'''

# Continue with the rest of your Tkinter application code

# Profile functions

def load_profile(username):

    profile_path = f'profiles/{username}.json'

    if os.path.exists(profile_path):

        with open(profile_path, 'r') as file:

            return json.load(file)

    else:

```

```
return None
```

```
def save_profile(username, profile_data):
```

```
    profile_path = f'profiles/{username}.json'
```

```
    with open(profile_path, 'w') as file:
```

```
        json.dump(profile_data, file)
```

```
class LinkedInBotApp:
```

```
    def __init__(self, root):
```

```
        self.root = root
```

```
        self.root.title('LinkedIn Bot')
```

```
        self.root.geometry('800x600')
```

```
        self.root.configure(bg='#f0f0f0')
```

```
        self.username = tk.StringVar()
```

```
        self.password = tk.StringVar()
```

```
        self.create_login_screen()
```

```
def create_login_screen(self):
```

```
    self.clear_screen()
```

```
    self.set_background() # Set the background first
```

```
    # Place labels and entry fields
```

```
    self.create_transparent_label('Username:').place(relx=0.5, rely=0.4, anchor='center')
```

```
    self.create_transparent_entry(self.username).place(relx=0.5, rely=0.45, anchor='center')
```

```
    self.create_transparent_label('Password:').place(relx=0.5, rely=0.5, anchor='center')
```

```
self.create_transparent_entry(self.password, show="*").place(relx=0.5, rely=0.55,  
anchor="center")
```

```
# Place buttons after everything else
```

```
tk.Button(self.root, text="Sign In", font=("Helvetica", 14, "bold"), bg="#007BFF",  
fg="white", command=self.signin).place(relx=0.5, rely=0.65, anchor="center")
```

```
tk.Button(self.root, text="Sign Up", font=("Helvetica", 14, "bold"), bg="#28A745",  
fg="white", command=self.signup).place(relx=0.5, rely=0.7, anchor="center")
```

```
def signin(self):
```

```
    if signin_user(self.username.get(), self.password.get()):
```

```
        self.create_dashboard_screen()
```

```
def signup(self):
```

```
    if signup_user(self.username.get(), self.password.get()):
```

```
        messagebox.showinfo("Signup Success", "Account created successfully.")
```

```
        self.create_login_screen()
```

```
def create_dashboard_screen(self):
```

```
    self.clear_screen()
```

```
    self.set_background()
```

```
    tk.Button(self.root, text="View Profile", font=("Helvetica", 14, "bold"), bg="#007BFF",  
fg="white", command=self.view_profile).place(relx=0.5, rely=0.35, anchor="center")
```

```
    tk.Button(self.root, text="Create/Edit Profile", font=("Helvetica", 14, "bold"),  
bg="#28A745", fg="white", command=self.edit_profile).place(relx=0.5, rely=0.4,  
anchor="center")
```

```
    tk.Button(self.root, text="Connections", font=("Helvetica", 14, "bold"), bg="#17A2B8",  
fg="white", command=self.view_connections).place(relx=0.5, rely=0.45, anchor="center")
```

```
    tk.Button(self.root, text="Job Vacancies", font=("Helvetica", 14, "bold"), bg="#FFC107",  
fg="white", command=self.view_jobs).place(relx=0.5, rely=0.5, anchor="center")
```

```
    tk.Button(self.root, text="About Us", font=("Helvetica", 14, "bold"), bg="#6C757D",  
fg="white", command=self.about_us).place(relx=0.5, rely=0.55, anchor="center")
```

```
tk.Button(self.root, text="Sign Out", font=("Helvetica", 14, "bold"), bg="#DC3545",
fg="white", command=self.signout).place(relx=0.5, rely=0.6, anchor="center")
```

```
def view_profile(self):
```

```
    profile = load_profile(self.username.get())
```

```
    if profile:
```

```
        self.clear_screen()
```

```
        self.set_background()
```

```
        tk.Label(self.root, text=f"Name: {profile['name']}", font=("Helvetica", 14), bg="white",
fg="black").place(relx=0.5, rely=0.35, anchor="center")
```

```
        tk.Label(self.root, text=f"Email: {profile['email']}", font=("Helvetica", 14), bg="white",
fg="black").place(relx=0.5, rely=0.4, anchor="center")
```

```
        tk.Label(self.root, text=f"Headline: {profile['headline']}", font=("Helvetica", 14),
bg="white", fg="black").place(relx=0.5, rely=0.45, anchor="center")
```

```
        tk.Label(self.root, text=f"Summary: {profile['summary']}", font=("Helvetica", 14),
bg="white", fg="black").place(relx=0.5, rely=0.5, anchor="center")
```

```
        tk.Button(self.root, text="Back", font=("Helvetica", 14, "bold"), bg="#DC3545",
fg="white", command=self.create_dashboard_screen).place(relx=0.5, rely=0.6,
anchor="center")
```

```
    else:
```

```
        messagebox.showinfo("Profile", "Profile not found.")
```

```
def edit_profile(self):
```

```
    self.clear_screen()
```

```
    self.set_background()
```

```
    profile = load_profile(self.username.get())
```

```
    name_var = tk.StringVar(value=profile['name'] if profile else "")
```

```
    email_var = tk.StringVar(value=profile['email'] if profile else "")
```

```
    headline_var = tk.StringVar(value=profile['headline'] if profile else "")
```

```
    summary_var = tk.StringVar(value=profile['summary'] if profile else "")
```

```
self.create_transparent_label("Name:").place(relx=0.5, rely=0.35, anchor="center")
```

```
self.create_transparent_entry(name_var).place(relx=0.5, rely=0.4, anchor="center")
```

```
self.create_transparent_label("Email:").place(relx=0.5, rely=0.45, anchor="center")
```

```
self.create_transparent_entry(email_var).place(relx=0.5, rely=0.5, anchor="center")
```

```
self.create_transparent_label("Headline:").place(relx=0.5, rely=0.55, anchor="center")
```

```
self.create_transparent_entry(headline_var).place(relx=0.5, rely=0.6, anchor="center")
```

```
self.create_transparent_label("Summary:").place(relx=0.5, rely=0.65, anchor="center")
```

```
self.create_transparent_entry(summary_var).place(relx=0.5, rely=0.7, anchor="center")
```

```
def save():
```

```
    profile_data = {
```

```
        "name": name_var.get(),
```

```
        "email": email_var.get(),
```

```
        "headline": headline_var.get(),
```

```
        "summary": summary_var.get()
```

```
    }
```

```
    save_profile(self.username.get(), profile_data)
```

```
    self.create_dashboard_screen()
```

```
tk.Button(self.root, text="Save Profile", font=("Helvetica", 14, "bold"), bg="#28A745",  
fg="white", command=save).place(relx=0.5, rely=0.75, anchor="center")
```

```
tk.Button(self.root, text="Back", font=("Helvetica", 14, "bold"), bg="#DC3545",  
fg="white", command=self.create_dashboard_screen).place(relx=0.5, rely=0.8,  
anchor="center")
```

```
def view_connections(self):
```

```
self.clear_screen()
```

```
self.set_background()
```

```
connections = [
```

```
    "John Doe",
```

```
    "Jane Smith",
```

```
    "Robert Johnson",
```

```
    "Emily Davis",
```

```
    "Michael Brown"
```

```
]
```

```
for idx, name in enumerate(connections):
```

```
    connection_button = tk.Button(self.root, text=name, font=("Helvetica", 16),  
bg="#007BFF", fg="white",
```

```
        command=lambda n=name: self.connect_person(n))
```

```
    connection_button.place(relx=0.5, rely=0.3 + idx * 0.1, anchor="center")
```

```
    tk.Button(self.root, text="Back", font=("Helvetica", 14, "bold"), bg="#DC3545",  
fg="white", command=self.create_dashboard_screen).place(relx=0.5, rely=0.8,  
anchor="center")
```

```
# Continue with the rest of your Tkinter application code
```

```
def connect_person(self, name):
```

```
    messagebox.showinfo("Connection", f"Connection successful with {name}!")
```



```

def view_jobs(self):

    self.clear_screen()

    self.set_background()


    jobs = [

        {"company": "Company A", "title": "Software Engineer"},

        {"company": "Company B", "title": "Data Scientist"},

        {"company": "Company C", "title": "Product Manager"},

        {"company": "Company D", "title": "UX Designer"},

        {"company": "Company E", "title": "DevOps Engineer"}

    ]


    for idx, job in enumerate(jobs):

        company_label = tk.Label(self.root, text=f'{job["company"]}', font=("Helvetica", 16),
bg="white", fg="black")

        title_label = tk.Label(self.root, text=f'{job["title"]}', font=("Helvetica", 14), bg="white",
fg="black")


        company_label.place(relx=0.4, rely=0.3 + idx * 0.1, anchor="center")

        title_label.place(relx=0.6, rely=0.3 + idx * 0.1, anchor="center")


        tk.Button(self.root, text="Back", font=("Helvetica", 14, "bold"), bg="#DC3545",
fg="white", command=self.create_dashboard_screen).place(relx=0.5, rely=0.8,
anchor="center")


def about_us(self):

    self.clear_screen()

    self.set_background()

```

```

about_text = (

    "Welcome to LinkedIn Bot!\n\n"

    "This application is designed to mimic some of the features of LinkedIn, "

    "allowing users to sign up, create profiles, connect with others, and explore job
vacancies. "

    "It's built using Python's Tkinter library for the user interface and MySQL for data
storage.\n\n"

    "Features:\n"

    "- Sign up and Sign in securely.\n"

    "- Create and edit your professional profile.\n"

    "- Connect with other users.\n"

    "- Browse job vacancies from top companies.\n\n"

    "This project is an educational tool to demonstrate how one might build a simple, "

    "desktop-based application with a database backend.\n\n"

    "Thank you for using LinkedIn Bot!"

)

```

```

about_label = tk.Label(self.root, text=about_text, font=("Helvetica", 14), bg="white",
fg="black", justify="left", wraplength=600)

```

```

about_label.place(relx=0.5, rely=0.4, anchor="center")

```

```

tk.Button(self.root, text="Back", font=("Helvetica", 14, "bold"), bg="#DC3545",
fg="white", command=self.create_dashboard_screen).place(relx=0.5, rely=0.9,
anchor="center")

```

```

def signout(self):

```

```

    self.username.set("")

```

```

    self.password.set("")

```

```

    self.create_login_screen()

```

```

def clear_screen(self):

    for widget in self.root.winfo_children():

        widget.destroy()


def set_background(self):

    canvas = Canvas(self.root, width=800, height=600)

    canvas.pack(fill="both", expand=True)

    background_image = Image.open("C:/Users/LENOVO/Pictures/premium_photo-1676070096487-32dd955e09e0.jpg")

    background_image = ImageTk.PhotoImage(background_image)

    canvas.create_image(0, 0, anchor=tk.NW, image=background_image)

    canvas.image = background_image


def create_transparent_label(self, text):

    label = tk.Label(self.root, text=text, font=("Helvetica", 16), fg="black", bg="white", bd=0,
highlightthickness=0)

    return label


def create_transparent_entry(self, variable, show=None):

    entry = tk.Entry(self.root, textvariable=variable, font=("Helvetica", 14), fg="black", bd=0,
highlightthickness=0, bg="white", show=show)

    return entry


if __name__ == "__main__":

    if not os.path.exists('profiles'):

        os.makedirs('profiles')

    root = tk.Tk()

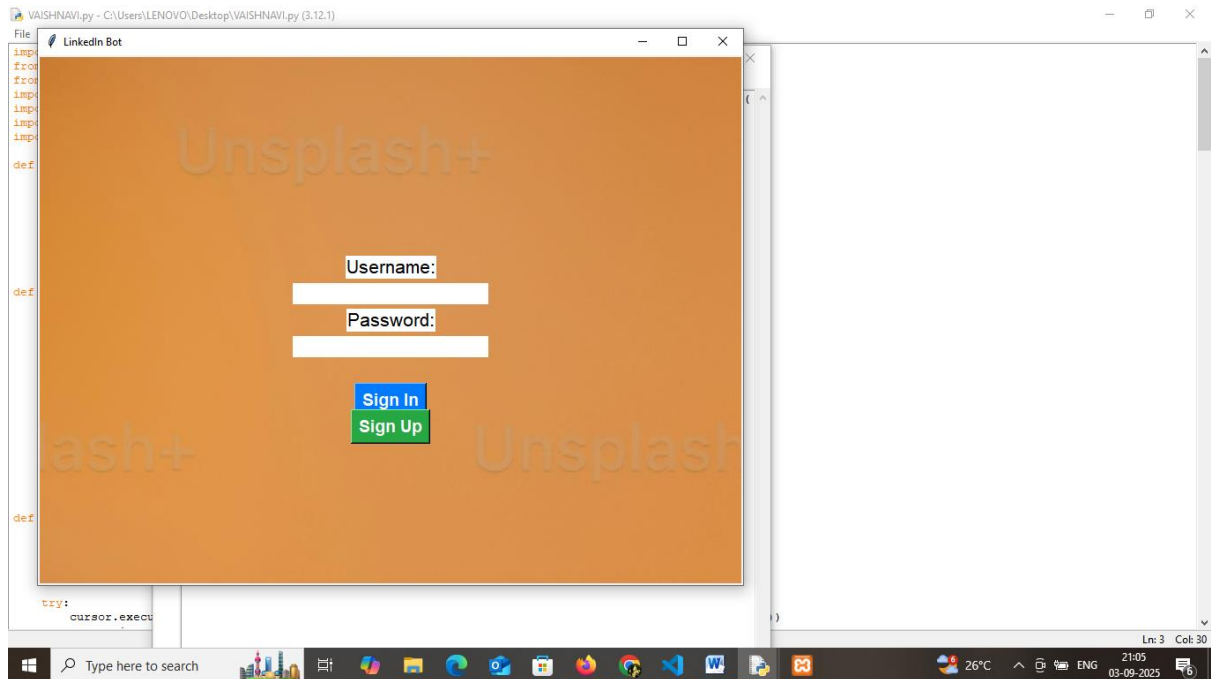
    app = LinkedInBotApp(root)

```

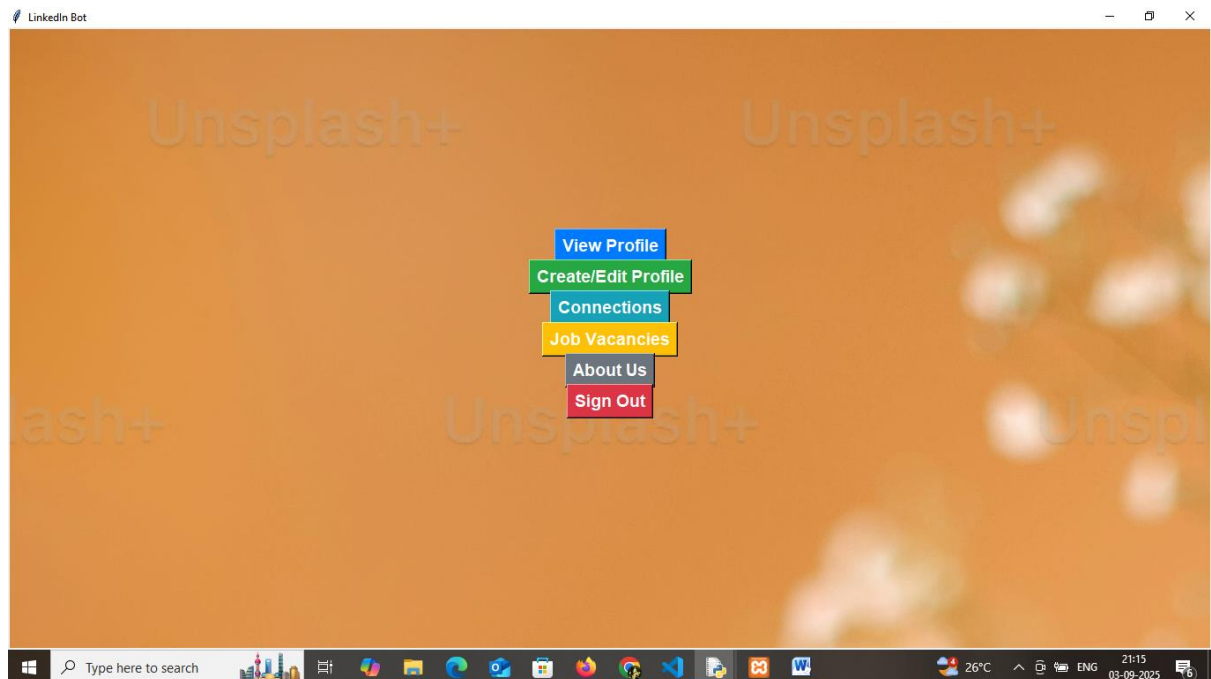
root.mainloop()

OUTPUT

1.



2.



3.

LinkedIn Bot

Unsplash+ Unsplash+

Name:

Email:

Headline:

Summary:

[Save Profile](#)

[Back](#)

Type here to search

26°C 21:15 03-09-2025

4.

LinkedIn Bot

Unsplash+ Unsplash+

[John Doe](#)

[Jane Smith](#)

[Robert Johnson](#)

[Emily Davis](#)

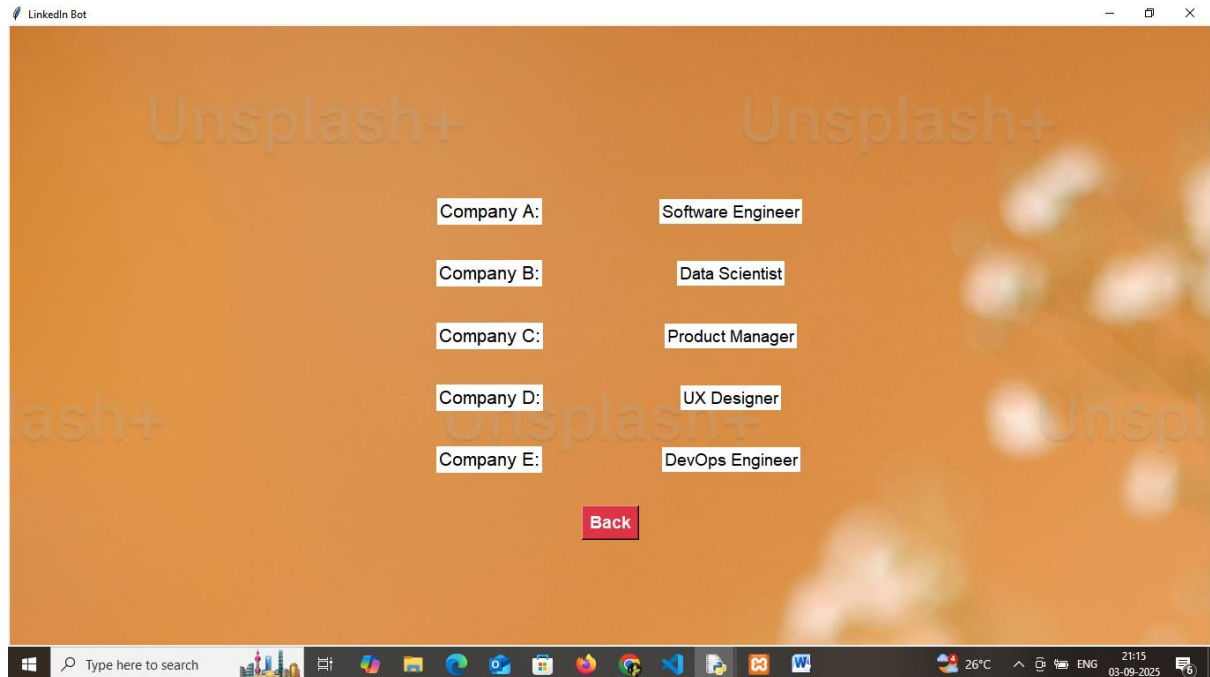
[Michael Brown](#)

[Back](#)

Type here to search

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5.



6.

