**WEEK 3**

**Create a password strength indicator for a login page of a website**

import tkinter as tk

from tkinter import messagebox

def check\_password\_strength(password):

length = len(password)

has\_lowercase = any(c.islower() for c in password)

has\_uppercase = any(c.isupper() for c in password)

has\_digit = any(c.isdigit() for c in password)

has\_special\_char = any(c in "!@#$%^&\*()\_+-=[]{}|;:'<>,.?/~" for c in password)

if length > 8 and has\_lowercase and has\_uppercase and has\_digit and has\_special\_char:

return "Strong"

elif length > 6:

return "Medium"

else:

return "Weak"

def submit\_password():

password = password\_entry.get()

strength = check\_password\_strength(password)

strength\_label.config(text=f"Password Strength: {strength}", fg="green" if strength == "Strong" else "orange" if strength == "Medium" else "red")

root = tk.Tk()

root.title("Vault of Codes Login Page")

# Password Entry Section

password\_label = tk.Label(root, text="Enter your password:")

password\_label.pack()

password\_entry = tk.Entry(root, show="\*")

password\_entry.pack()

# Strength Indicator Section

strength\_label = tk.Label(root, text="Password Strength:")

strength\_label.pack()

check\_button = tk.Button(root, text="Check Strength", command=submit\_password)

check\_button.pack()

# Login Button

login\_button = tk.Button(root, text="Login", command=lambda: messagebox.showinfo("Login", "You are logged in!"))

login\_button.pack()

root.mainloop()



