PASSWORD STRENGTH CHECKER TOOL

The Password Strength Checker is a simple yet powerful desktop application built using Python and Tkinter. This tool allows users to evaluate the security strength of their passwords based on a set of standard criteria, including length, use of uppercase and lowercase letters, numbers, and special characters. It provides real-time feedback on the password's strength, classifying it as Weak, Moderate, or Strong.

# KEY FEATURES

* User-friendly graphical interface using Tkinter
* Real-time password strength evaluation

Checks for:

• Minimum password length (8 characters)

• Uppercase letters

• Lowercase letters

• Numerical digits

• Special characters

## SOURCE CODE

import tkinter as tk  
import re  
  
def check\_strength(password):  
 strength = 0  
 remarks = ""  
  
 if len(password) >= 8:  
 strength += 1  
 if re.search(r"[A-Z]", password):  
 strength += 1  
 if re.search(r"[a-z]", password):  
 strength += 1  
 if re.search(r"[0-9]", password):  
 strength += 1  
 if re.search(r"[\W\_]", password):  
 strength += 1  
  
 if strength <= 2:  
 remarks = "Weak "  
 elif strength == 3 or strength == 4:  
 remarks = "Moderate "  
 else:  
 remarks = "Strong "  
  
 return f"Strength: {remarks}"  
  
def on\_check():  
 password = entry.get()  
 result = check\_strength(password)  
 result\_label.config(text=result)  
  
root = tk.Tk()  
root.title("Password Strength Checker")  
root.geometry("300x200")  
root.resizable(False, False)  
  
tk.Label(root, text="Enter Password:", font=('Arial', 12)).pack(pady=10)  
entry = tk.Entry(root, show="\*", width=25, font=('Arial', 12))  
entry.pack()  
  
tk.Button(root, text="Check Strength", command=on\_check, font=('Arial', 12)).pack(pady=10)  
  
result\_label = tk.Label(root, text="", font=('Arial', 12, 'bold'))  
result\_label.pack(pady=5)  
  
root.mainloop()

## CONCLUSION

This tool serves as a practical utility for individuals and developers who want to quickly test the robustness of passwords. With an intuitive interface and simple logic, it can be easily extended or integrated into other security-related projects.