import tkinter as tk  
from tkinter import messagebox  
from PIL import Image  
import requests  
from bs4 import BeautifulSoup  
  
file = r'icon.png'  
img = Image.open(file)  
img.save('icon.ico', format='ICO', sizes=[(50, 50)])  
  
  
def get\_exchange\_rate():  
 *"""  
 web scrape for exchange rate* ***:return****:  
 """* r = requests.get('https://www.cursbnr.ro/')  
 if r.ok:  
 soup = BeautifulSoup(r.content, 'lxml')  
 currency\_table = soup.find('div', class\_='table-responsive')  
 currency\_data = currency\_table.find\_all('tr')  
 currency, value = [], []  
 for item in currency\_data:  
 if item.find('td'):  
 currency.append(item.find('td').text)  
 values = item.find\_all('td')  
 value.append(values[2].text)  
  
 stuff = dict(zip(currency, value))  
 return stuff  
  
  
rates = get\_exchange\_rate()  
rates['RON'] = 1  
rates\_float = {y: 1 / float(x) for y, x in rates.items()}  
  
  
# function to convert currency  
def convert\_currency():  
 amount = input\_var.get()  
 try:  
 amount = float(amount)  
 from\_currency = from\_var.get()  
 to\_currency = to\_var.get()  
 if from\_currency != to\_currency:  
 converted\_amount = amount / rates\_float[from\_currency] \* rates\_float[to\_currency]  
 output\_var.set("{:.2f} {}".format(converted\_amount, to\_currency))  
 else:  
 output\_var.set("{:.2f} {}".format(amount, from\_currency))  
 except ValueError:  
 messagebox.showerror("Error", "Please enter a valid amount.")  
  
 # Define the conversion rates  
  
  
# create GUI  
root = tk.Tk()  
root.title("Currency Converter")  
root.geometry("400x200")  
root.config(bg="#51a9ff")  
root.iconbitmap(r'C:\Mircea\curs python\proiect final\icon.ico')  
  
# create frames  
input\_frame = tk.Frame(root, bg="#51a9ff")  
output\_frame = tk.Frame(root, bg="#51a9ff")  
input\_frame.pack(pady=20)  
output\_frame.pack(pady=20)  
  
# create input widgets  
input\_var = tk.StringVar()  
from\_var = tk.StringVar(value="RON")  
to\_var = tk.StringVar(value="EUR")  
amount\_entry = tk.Entry(input\_frame, textvariable=input\_var, font=("Arial", 14), width=10)  
from\_menu = tk.OptionMenu(input\_frame, from\_var, "RON", "EUR", "USD", "GBP", "CHF", "BGN")  
from\_menu.config(bg='#ff3333')  
to\_menu = tk.OptionMenu(input\_frame, to\_var, "RON", "EUR", "USD", "GBP", "CHF", "BGN")  
to\_menu.config(bg='#1eff8d')  
convert\_button = tk.Button(input\_frame, text="Convert", command=convert\_currency, bg='#fffe1e')  
  
# create output label  
output\_var = tk.StringVar()  
output\_label = tk.Label(output\_frame, textvariable=output\_var, font=("Arial", 14), bg="#51a9ff")  
  
# add widgets to frames  
amount\_entry.grid(row=0, column=0, padx=10)  
from\_menu.grid(row=0, column=1, padx=10)  
to\_menu.grid(row=0, column=2, padx=10)  
convert\_button.grid(row=0, column=3, padx=10)  
output\_label.pack()  
  
root.mainloop()

IMBUNATATIRI:

* se mai poate adauga butonul “CLEAR”
* de facut un back-up la site-ul BNR pentru atunci cand pagina nu functioneaza si nu poate fi facut web scrapping