Weather Prediction System

Name: Friyana Amra -A002

Rahul Anvekar- A003

Vighnesha Gharat-A016

* loginabc.py

from tkinter import \*

from tkinter import messagebox

w=Tk()

#w.geometry('350x500')

w.title(' L O G I N ')

w.geometry("900x500+200+100")

w.resizable(False,False)

global message;

message=StringVar()

#Making gradient frame

j=0

r=10

for i in range(100):

c=str(222222+r)

Frame(w,width=10,height=500,bg="#"+c).place(x=j,y=0)

j=j+10

r=r+1

f1=Frame(w,width=300,height=400,bg='white')

f1.place(x=500,y=50)

l1=Label(w,text='Welcome Weather Enthusiast!',bg='white')

l=('Verdana',13)

l1.config(font=l)

l1.place(x=520,y=200)

#e1 entry for username entry

'''e1=Entry(w,width=20,border=0)

l=('Consolas',13)

e1.config(font=l)

e1.place(x=550,y=230)'''

e2=Entry(w,width=20,border=0,textvariable=message)

e2.config(font=l)

e2.place(x=550,y=310)

l2=Label(w,text='Enter your Name:',bg='white')

l=('Consolas',13)

l2.config(font=l)

l2.place(x=550,y=280)

###lineframe on entry

f=Frame(w,width=180,height=2,bg='#141414')

f.place(x=550,y=332)

#Frame(w,width=180,height=2,bg='#141414').place(x=530,y=252)

from PIL import ImageTk,Image

imagea=Image.open("log.png")

imageb= ImageTk.PhotoImage(imagea)

label1 = Label(image=imageb,

border=0,

justify=CENTER)

label1.place(x=585, y=50)

def wet():

w.destroy()

import trial

def db():

w.destroy()

import dataxyz

def cmd():

'''

label1.destroy()

l1.destroy()

e1.destroy()

e2.destroy()

l2.destroy()

myButton1.destroy()

f.destroy()

f1.destroy()

'''

if message.get():

for widgets in f1.winfo\_children():

widgets.destroy()

f.destroy()

f1.destroy()

#Making gradient frame

j=0

r=10

for i in range(100):

c=str(222222+r)

Frame(w,width=10,height=500,bg="#"+c).place(x=j,y=0)

j=j+10

r=r+1

Frame(w,width=600,height=400,bg='white').place(x=150,y=50)

lab1=Label(w,text="",bg='white')

lab=('Verdana',13)

lab1.config(font=lab)

lab1.place(x=520,y=200)

l=message.get()

mes="Hello "+l+"\n Would you like to??"

lab3=('Verdana',20)

lab2=Label(w,text=mes,bg='white')

lab2.config(font=lab3)

lab2.place(x=310,y=100)

def on\_entera(e):

myButton2['background'] = 'white'#ffcc66

myButton2['foreground']= '#994422' #000d33

def on\_leavea(e):

myButton2['background'] = '#994422'

myButton2['foreground']='white'

myButton2 = Button(w,text='C H E C K W E A T H E R',

width=40,

height=2,

fg='white',

border=0,

bg='#994422',

activeforeground='#994422',

activebackground='white',command=wet)

myButton2.bind("<Enter>", on\_entera)

myButton2.bind("<Leave>", on\_leavea)

myButton2.place(x=300,y=250)

def on\_entera1(e):

myButton3['background'] = 'white'#ffcc66

myButton3['foreground']= '#994422' #000d33

def on\_leavea1(e):

myButton3['background'] = '#994422'

myButton3['foreground']='white'

myButton3 = Button(w,text='C O N N E C T D A T A B A S E',

width=40,

height=2,

fg='white',

border=0,

bg='#994422',

activeforeground='#994422',

activebackground='white', command=db)

myButton3.bind("<Enter>", on\_entera1)

myButton3.bind("<Leave>", on\_leavea1)

myButton3.place(x=300,y=300)

else:

messagebox.showwarning(title='Warning', message='Please Enter Name!!!')

#Button\_with hover effect

def on\_entera(e):

myButton1['background'] = 'white'#ffcc66

myButton1['foreground']= '#994422' #000d33

def on\_leavea(e):

myButton1['background'] = '#994422'

myButton1['foreground']='white'

myButton1 = Button(w,text='L O G I N',

width=20,

height=2,

fg='white',

border=0,

bg='#994422',

activeforeground='#994422',

activebackground='white',

command=cmd)

myButton1.bind("<Enter>", on\_entera)

myButton1.bind("<Leave>", on\_leavea)

myButton1.place(x=570,y=375)

w.mainloop()

* trial.py

from tkinter import \*

import tkinter as tk

from geopy.geocoders import Nominatim

from tkinter import ttk,messagebox

from timezonefinder import TimezoneFinder

from datetime import datetime

import requests

import pytz

import sqlite3

connection= sqlite3.connect("weather.db")

cursor= connection.cursor()

#cursor.execute("drop table trial")

q1= '''CREATE TABLE if not exists trial(

Time text,

City text,

Temperature text,

pressure text,

humidity text,

wind text,

description text);'''

cursor.execute(q1)

root = Tk()

root.title("Weather Application")

root.geometry("900x500+200+100")

root.resizable(False,False)

def getWeather():

city=textfield.get().lower()

geolocator=Nominatim(user\_agent="geoapiExercises")

location = geolocator.geocode(city)

obj = TimezoneFinder()

result = obj.timezone\_at(lng=location.longitude,lat=location.latitude)

home=pytz.timezone(result)

local\_time=datetime.now(home)

current\_time = local\_time.strftime("%I:%M %p")

clock.config(text=current\_time)

name.config(text="CURRENT WEATHER")

#weather

api = "https://api.openweathermap.org/data/2.5/weather?q="+city+"&appid=4647637b5be210234574483616f9c3da"

json\_data = requests.get(api).json()

condition = json\_data["weather"][0]['main']

description = json\_data["weather"][0]['description']

temp=int(json\_data['main']['temp']-273.15)

pressure = json\_data['main']['pressure']

humidity = json\_data['main']['humidity']

wind = json\_data['wind']['speed']

t.config(text=(temp,"°",))

c.config(text=(condition,"|","FEELS","LIKE",temp,"°"))

w.config(text= wind)

h.config(text= humidity)

d.config(text= description)

p.config(text= pressure)

cursor.execute("INSERT into trial VALUES(\'{}\',\'{}\',\'{}\',\'{}\',\'{}\',\'{}\',\'{}\')".format(current\_time, city, temp,pressure,humidity,wind,description))

connection.commit()

l = Label(root,text="Weather Prediction System",justify="center",font=("poppins",25,"bold"))

l.place(x=230,y=20)

#search box

Search\_image=PhotoImage(file="search.png")

myimage = Label(image = Search\_image)

myimage.place(x=210,y=80)

textfield=tk.Entry(root,justify="center",width=17,font=("poppins",25,"bold"),bg="#404040",border=0,fg="white")

textfield.place(x=250,y=100)

textfield.focus()

Search\_icon=PhotoImage(file="search\_icon.png")

myimage\_icon = Button(image = Search\_icon,borderwidth=0,cursor="hand2",bg="#404040",command=getWeather)

myimage\_icon.place(x=590,y=93)

#logo

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

logo = Label(image = Logo\_image)

logo.place(x=30,y=150)

#Bottom box

Frame\_image=PhotoImage(file="box.png")

frame\_myimage = Label(image = Frame\_image)

frame\_myimage.pack(padx=5,pady=5,side=BOTTOM)

#time

name=Label(root,font=("arial",15,"bold"))

name.place(x=300,y=170)

clock=Label(root,font=("Helvetica",20))

clock.place(x=300,y=210)

#label

label1=Label(root,text="WIND",font=("Helvetica",15,"bold"),fg="white",bg="#1ab5ef")

label1.place(x=120,y=400)

label2=Label(root,text="HUMIDITY",font=("Helvetica",15,"bold"),fg="white",bg="#1ab5ef")

label2.place(x=250,y=400)

label3=Label(root,text="DESCRIPTION",font=("Helvetica",15,"bold"),fg="white",bg="#1ab5ef")

label3.place(x=400,y=400)

label4=Label(root,text="PRESSURE",font=("Helvetica",15,"bold"),fg="white",bg="#1ab5ef")

label4.place(x=650,y=400)

t= Label(font=("arial",70,"bold"),fg="#ee666d")

t.place(x=600,y=250)

c=Label(font=("arial",15,"bold"))

c.place(x=600,y=350)

w=Label(text="...",font=("arial",20,"bold"),bg="#1ab5ef")

w.place(x=120,y=430)

h=Label(text="...",font=("arial",20,"bold"),bg="#1ab5ef")

h.place(x=250,y=430)

d=Label(text="...",font=("arial",20,"bold"),bg="#1ab5ef")

d.place(x=400,y=430)

p=Label(text="...",font=("arial",20,"bold"),bg="#1ab5ef")

p.place(x=650,y=430)

def on\_entera(e):

myButton2['background'] = 'white'#ffcc66

myButton2['foreground']= '#F1C40F'

def on\_leavea(e):

myButton2['background'] = '#F1C40F'

myButton2['foreground']='white'

def wet1():

root.destroy()

import loginabc

myButton2 = Button(root,text='B A C K',

width=15,

height=2,

fg='white',

border=0,

bg='#F1C40F',

activeforeground='#994422',

activebackground='white',command= wet1)

myButton2.bind("<Enter>", on\_entera)

myButton2.bind("<Leave>", on\_leavea)

myButton2.place(x=700,y=100)

connection.commit()

root.mainloop()

* dataxyz.py

from tkinter import \*

from tkinter import ttk

import tkinter as tk

from tkinter.scrolledtext import ScrolledText #need to import this for ScrolledText

from geopy.geocoders import Nominatim

from tkinter import ttk,messagebox

from timezonefinder import TimezoneFinder

from datetime import datetime

import requests

import pytz

import sqlite3

connection= sqlite3.connect("weather.db")

cursor= connection.cursor()

root = Tk()

root.title("Database")

root.geometry("900x500+200+100")

root.resizable(False,False)

def lg():

root.destroy()

#import loginabc

l = Label(root,text="Weather Database",justify="center",font=("poppins",25,"bold"))

l.place(x=50,y=20)

a= "Time\t City\t Temperature Pressure Humidity Wind\tDescription "

l1=Label(root,text= a,bg='white')

l=('Verdana',13)

l1.config(font=l)

l1.place(x=40,y=80)

i= 10

f1= tk.Frame(root, width= 810, height= 310)

f1.place(x=40, y=120)

st2= ScrolledText(f1, height=19, width= 98)

st2.place(x=0, y=0)

cursor.execute("SELECT \* FROM trial")

for row in cursor:

b= row[0]+"\t "+row[1]+"\t\t "+row[2]+"\t "+row[3]+"\t "+row[4]+"\t "+row[5]+"\t\t\t "+row[6]+"\n"

'''

l2 = Label(f1,text=b)

l=('Verdana',13)

l2.config(font=l)

l2.place(x=1,y=i)

i= i+30

'''

st2.insert(tk.INSERT, b)

#l=('Verdana',13)

#st2.config(font=l)

#st2.place(x=1,y=i)

#i= i+30

st2.configure(state ='disabled')

def get1():

i= 10

city=textfield.get().lower()

for widgets in f1.winfo\_children():

widgets.destroy()

st3= ScrolledText(f1, height=19, width= 98)

st3.place(x=0, y=0)

cursor.execute("SELECT \* FROM trial where City= ?",(city,))

for row in cursor:

b= row[0]+"\t "+row[1]+"\t\t "+row[2]+"\t "+row[3]+"\t "+row[4]+"\t "+row[5]+"\t\t\t "+row[6]+"\n"

'''

l2 = Label(f1,text=b)

#l=('Verdana',13)

l2.config(font=l)

l2.place(x=1,y=i)

i= i+30

'''

st3.insert(tk.INSERT, b)

st3.configure(state ='disabled')

Search\_image=PhotoImage(file="search.png")

myimage = Label(image = Search\_image)

myimage.place(x=400,y=0)

textfield=tk.Entry(root,justify="center",width=17,font=("poppins",25,"bold"),bg="#404040",border=0,fg="white")

textfield.place(x=440,y=20)

textfield.focus()

Search\_icon=PhotoImage(file="search\_icon.png")

myimage\_icon = Button(image = Search\_icon,borderwidth=0,cursor="hand2",bg="#404040",command=get1)

myimage\_icon.place(x=780,y=13)

def on\_entera(e):

myButton2['background'] = 'white'#ffcc66

myButton2['foreground']= '#F1C40F'

def on\_leavea(e):

myButton2['background'] = '#F1C40F'

myButton2['foreground']='white'

myButton2 = Button(root,text='E X I T',

width=15,

height=2,

fg='white',

border=0,

bg='#F1C40F',

activeforeground='#994422',

activebackground='white',command= lg)

myButton2.bind("<Enter>", on\_entera)

myButton2.bind("<Leave>", on\_leavea)

myButton2.place(x=400,y=450)

connection.commit()

root.mainloop()

* Output:-















