WELCOME TO MY PRESENTATION

Project Name : Weather Application

SUPERVISED BY

Arjan Ghosh
Lecturer
Dept. of Computer Science & Engineering
NUBTK

INTRODUCTION

Name: Shaik Taz Uddin
ID: 11220320925
Section: 3C
Course code: CSE 2106
Course Title: Software Development I

OUTLINES

1. Description of Project(Purpose, Scopes, Learning Outcome)
2. Working flow(Flow chart & description of the Flow Chart)
3. Code Samples(Attach Screenshots of Runtime output of your Project)
4. Future Scope(What is your plan regarding this project in future or what type of contribution you can add furthermore of this project)
5. Conclusion (your experience about this project)

1. Description of Project:

Purpose: We can use weather app to see up to date weather information at any location.

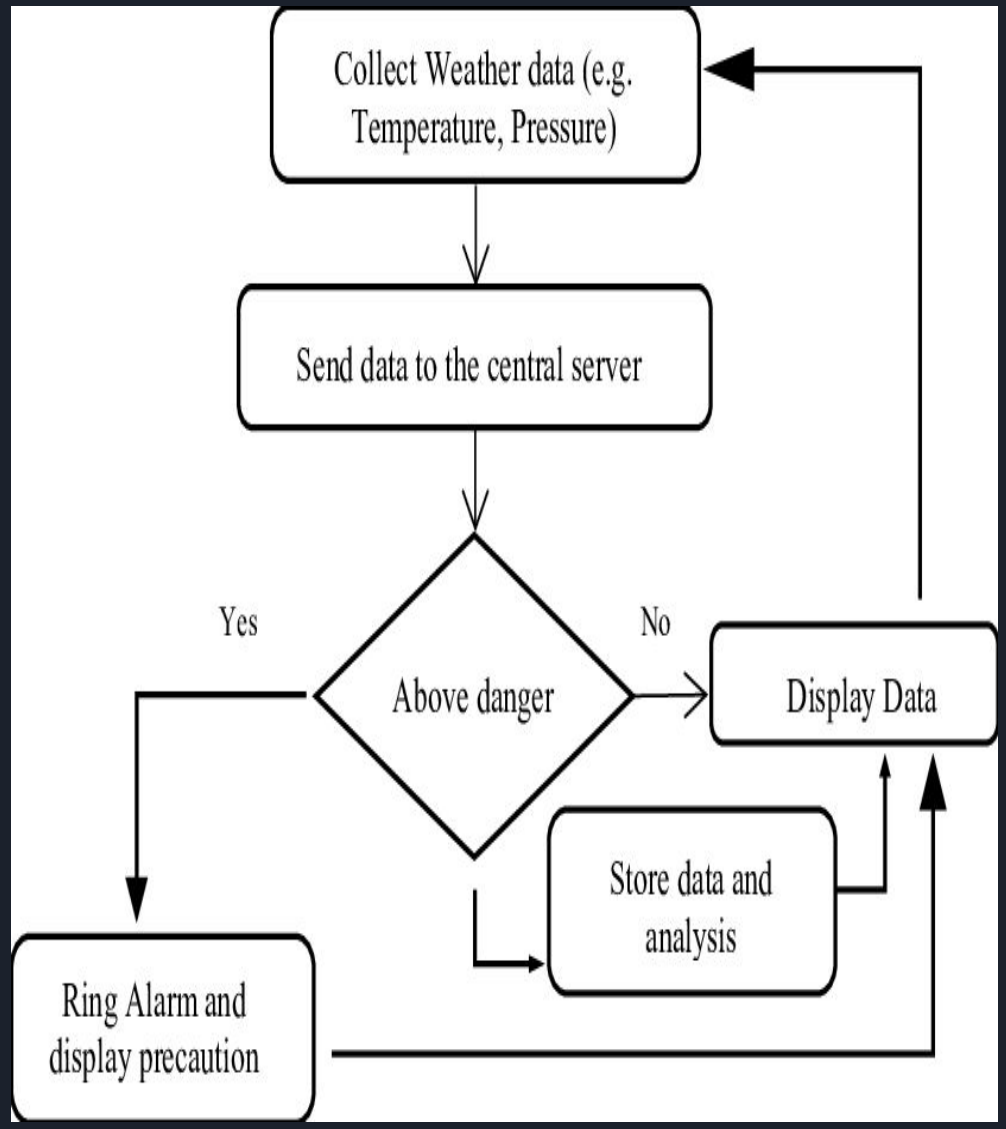
Scopes:
Learning Python : Understand and apply Python programming concepts.
Problem Solving : Develop problem-solving skills through application development.
User Interaction: Implement user input and interaction in a user interface application.

2. Flow Chart:

Initialization: The app will attempt to fetch weather information from OpenWeatherMap.

Working Process:

- **Fetch weather data from weather api.**
- **get require weather information.**
- **Store it in a variable.**
- **Display it .**



Code Samples :

```
import tkinter as tk
import requests
import time


def getWeather(canvas):
    city = textField.get()
    api =
"https://api.openweathermap.org/data/2.5/weather?q="+city+"&appid=06c921750b9a82d8f5d1294e1586276f"

        try:
            json_data = requests.get(api).json()
            condition = json_data['weather'][0]['main']
            temp = int(json_data['main']['temp'] - 273.15)
            min_temp = int(json_data['main']['temp_min'] - 273.15)
            max_temp = int(json_data['main']['temp_max'] - 273.15)
            pressure = json_data['main']['pressure']
            humidity = json_data['main']['humidity']
            wind = json_data['wind']['speed']
```

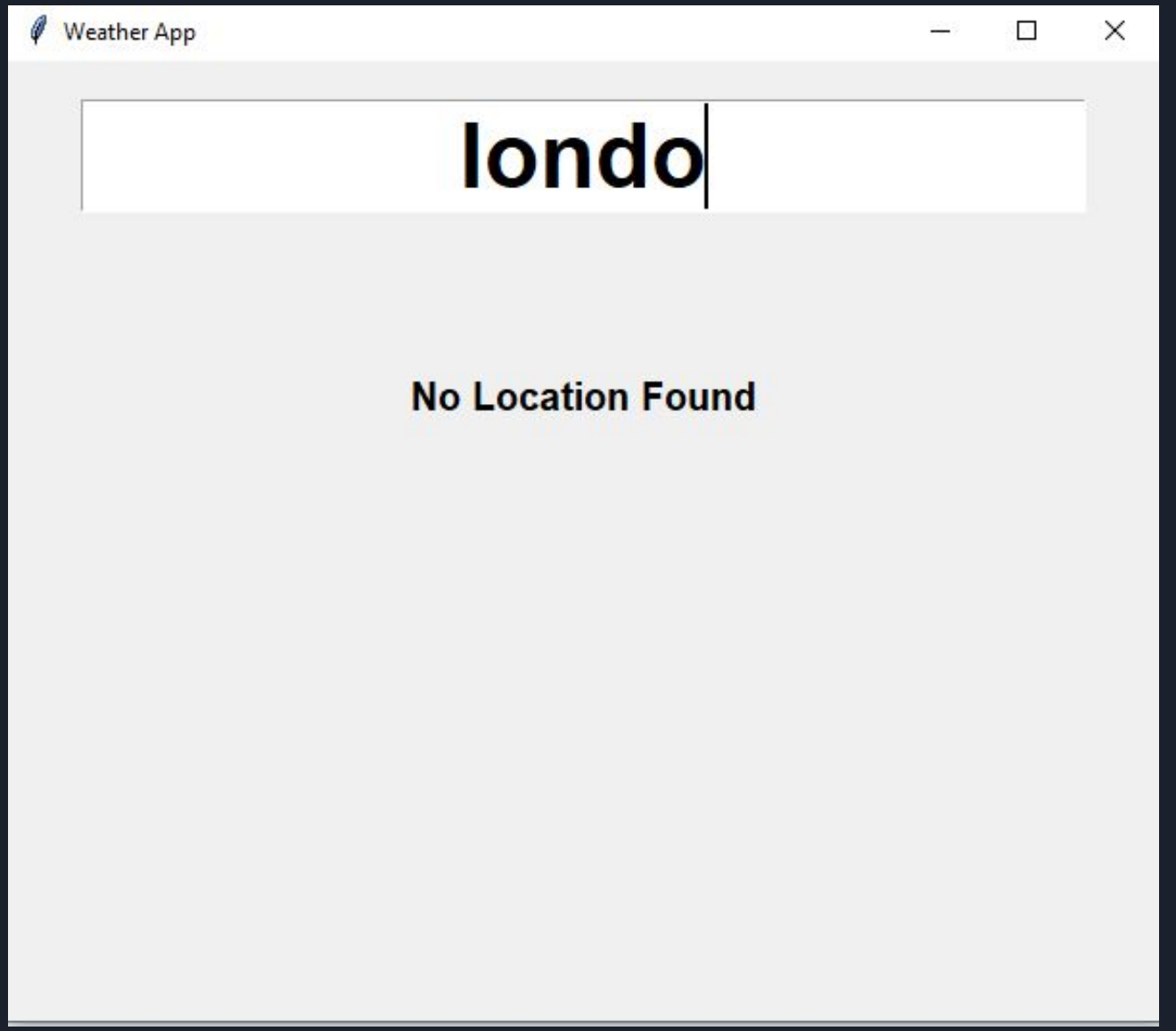
Code Samples :

```
        sunrise = time.strftime('%I:%M:%S', time.gmtime(json_data['sys']['sunrise'] - 21600))
        sunset = time.strftime('%I:%M:%S', time.gmtime(json_data['sys']['sunset'] - 21600))

    final_info = condition + "\n" + str(temp) + "°C"
        final_data = "\n"+ "Min Temp: " + str(min_temp) + "°C" + "\n" + "Max Temp: " + str(max_temp) + "°C" +"\n" +
"Pressure: " + str(pressure) + "\n" +"Humidity: " + str(humidity) + "\n" +"Wind Speed: " + str(wind) + "\n" + "Sunrise: " +
sunrise + "\n" + "Sunset: " + sunset

        label1.config(text=final_info)
        label2.config(text=final_data)

        if temp > 50 or temp < 10:
            messagebox.showwarning("Today weather is very Hot", "Today Weather is very Cold")

except Exception as e:
        label1.config(text="")
        label2.config(text="No Location Found")
```

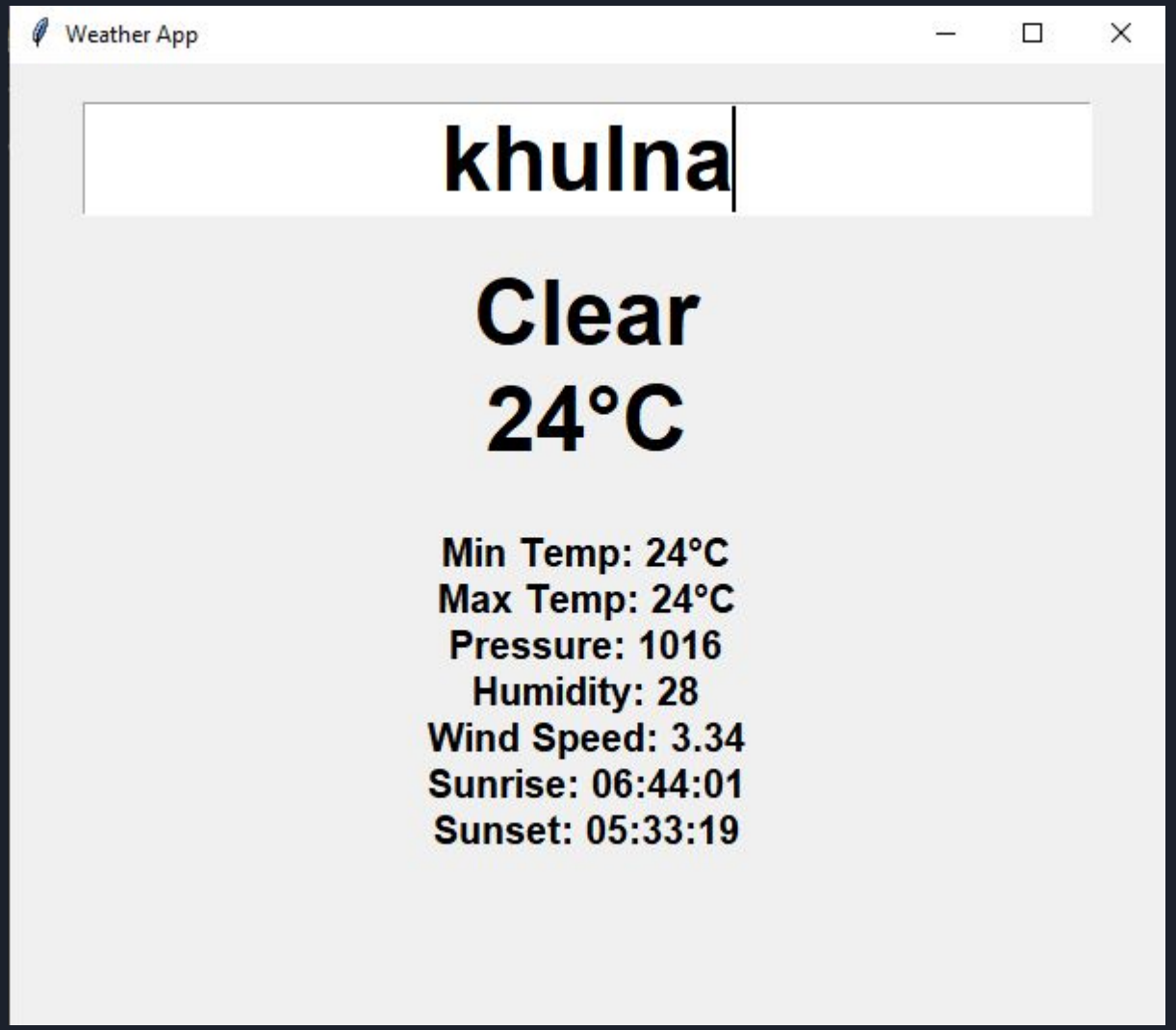
Code Samples :

```
canvas = tk.Tk()
canvas.geometry("600x500")
canvas.title("Weather App")
f = ("poppins", 15, "bold")
t = ("poppins", 35, "bold")

textField = tk.Entry(canvas, justify='center', width = 20, font = t)
textField.pack(pady = 20)
textField.focus()
textField.bind('<Return>', getWeather)

label1 = tk.Label(canvas, font=t)
label1.pack()
label2 = tk.Label(canvas, font=f)
label2.pack()
canvas.mainloop()
```

Output:



Output:


Weather App
khulna
Clear
24°C
Min Temp: 24°C
Max Temp: 24°C
Pressure: 1016
Humidity: 28
Wind Speed: 3.34
Sunrise: 06:44:01
Sunset: 05:33:19

Future Scope:

Multiplayer Mode: Add functionality for multiplayer interaction.

Graphical Interface: Develop a graphical user interface for a more engaging experience.

Community Involvement: Encourage contributions from the programming community.
Bug Fixes and Optimization: Regular updates for bug fixes and performance improvements.

Conclusion:

Project Experience:

Challenges Faced: Overcoming challenges in some logic and user interaction.

Skill Enhancement: Improved logical and problem-solving skills.

Future Plans: Excited about future project expansions and community involvement.

THANK YOU