**Project Report: Weather App**

Introduction:

The Weather App is a simple desktop application designed to provide users with real-time weather information for a specified location. This application utilizes the OpenWeatherMap API to fetch weather data based on the user's input location. Users can input the name of a country or city, and the app will retrieve and display various weather parameters such as temperature, description, pressure, sunrise, sunset, and wind speed.

Objective:

The main objective of developing the Weather App is to create a user-friendly interface that allows users to quickly access current weather information for any location worldwide. By providing an intuitive and visually appealing application, users can stay informed about weather conditions with ease.

Features:

Input box for users to enter the name of a country or city.

Display of weather parameters including temperature, description, pressure, sunrise, sunset, and wind speed.

Buttons to fetch and display weather data, save tasks, and load saved tasks.

Use of attractive fonts, colors, and icons to enhance the visual appeal of the application.

Error handling for cases such as invalid input or failure to retrieve weather data.

Ability to save and load tasks to maintain a to-do list within the application.

Technologies Used:

Python: The backend programming language used to develop the application logic.

Tkinter: A standard Python library for creating graphical user interfaces.

OpenWeatherMap API: An API used to retrieve weather data based on location input.

PIL (Python Imaging Library): A library used for image processing and manipulation.

Pickle: A module used for serializing and deserializing Python objects, utilized for saving and loading tasks.

Implementation:

The Weather App is implemented using Python's Tkinter library to create the graphical user interface. The main window is designed with labels, entry boxes, listboxes, and buttons to facilitate user interaction. Upon entering a location and clicking the "DISPLAY" button, the application fetches weather data using the OpenWeatherMap API and displays it on the interface.

Conclusion:

The Weather App provides a convenient solution for users to access real-time weather information for any location. Its intuitive design, coupled with attractive fonts, colors, and icons, enhances the user experience and makes weather tracking a seamless process. With further refinement and potential feature additions, the Weather App has the potential to become a widely used tool for staying updated on weather conditions worldwide.