



SYNOPSIS

ON

WEATHER APP

Submitted By:

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Submitted To:

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Title of the Project: Weather App

Objective:

The weather application will provide users with real-time weather information, forecasts, and other weather-related data, which can help them make better decisions about their day-to-day activities.

Scope:

Weather Forecasting is crucial since it helps to determine future climate changes. With the use of latitude, we can determine the probability of snow and hail reaching the surface. We are able to identify the thermal energy from the sun that is exposed to a region.

Methodology:

Technologies – HTML, CSS, JAVASCRIPT, OpenWeatherMap API

Tool – Visual Studio Code

Proposed System:

1. User Interface:

- Clean and user-friendly design.
- A location search bar for users to enter their desired location.
- Current weather information displayed prominently, including temperature, weather condition, and location.

2. Location Services:

- Ability to use GPS to automatically detect the user's current location.
- Option to save and manage multiple locations for quick access.

3. Weather Data:

- Real-time weather data from reliable sources.
- Detailed information such as temperature, humidity, wind speed, and UV index.
- Historical weather data for reference.

4. Forecasting:

- Hourly and daily forecasts, including precipitation, wind, and UV index.
- Interactive graphs or charts to visualize temperature trends.

5. Accessibility:

- Support for accessibility features to ensure the app is usable by everyone.

6. API Integration:

- Integration with weather data APIs for reliable and up-to-date information.

Features:

The weather app also provides atmospheric pressure, weather conditions, visibility distance, relative humidity, precipitation in different unites, dew point, wind speed and direction, in addition to ten days in future and hourly weather forecast.

Implementation Plan:

Step 1: Now go to <https://openweathermap.org/> and create an account and get your API KEY.

Step 2: After that, you can create a folder and add a file, for example, index.html and script.js file.

Step 3: We can fetch geographical coordinates using the following approaches:

- Calling API by geographical coordinates- latitude and longitude
- Calling API by city ID

Resources Required:

1. OpenWeatherMap API
2. Visual Studio Code

References:

Creating a Weather App Using HTML, CSS and JavaScript –
<https://youtu.be/pFvWwFua6mw?feature=shared>

How To Make Weather App Using JavaScript Step By Step Explained –
<https://youtu.be/MIYQR-Ybrn4?feature=shared>

Expected Outcomes:

A browser based application of weather app showing the weather and its properties of a city

Project Supervisor:

Mr. Amir Khan

Conclusion:

The future of weather applications is promising, with the increasing demand for real-time and accurate weather information. One potential development is the improvement in accuracy through the use of advanced data collection and analysis techniques, as well as sophisticated algorithms.