



WEATHER APP

Minor Project



WHAT IS THE WEATHER APP?

A WEB APPLICATION TO CHECK
CURRENT WEATHER CONDITIONS
FOR ANY CITY WORLDWIDE.

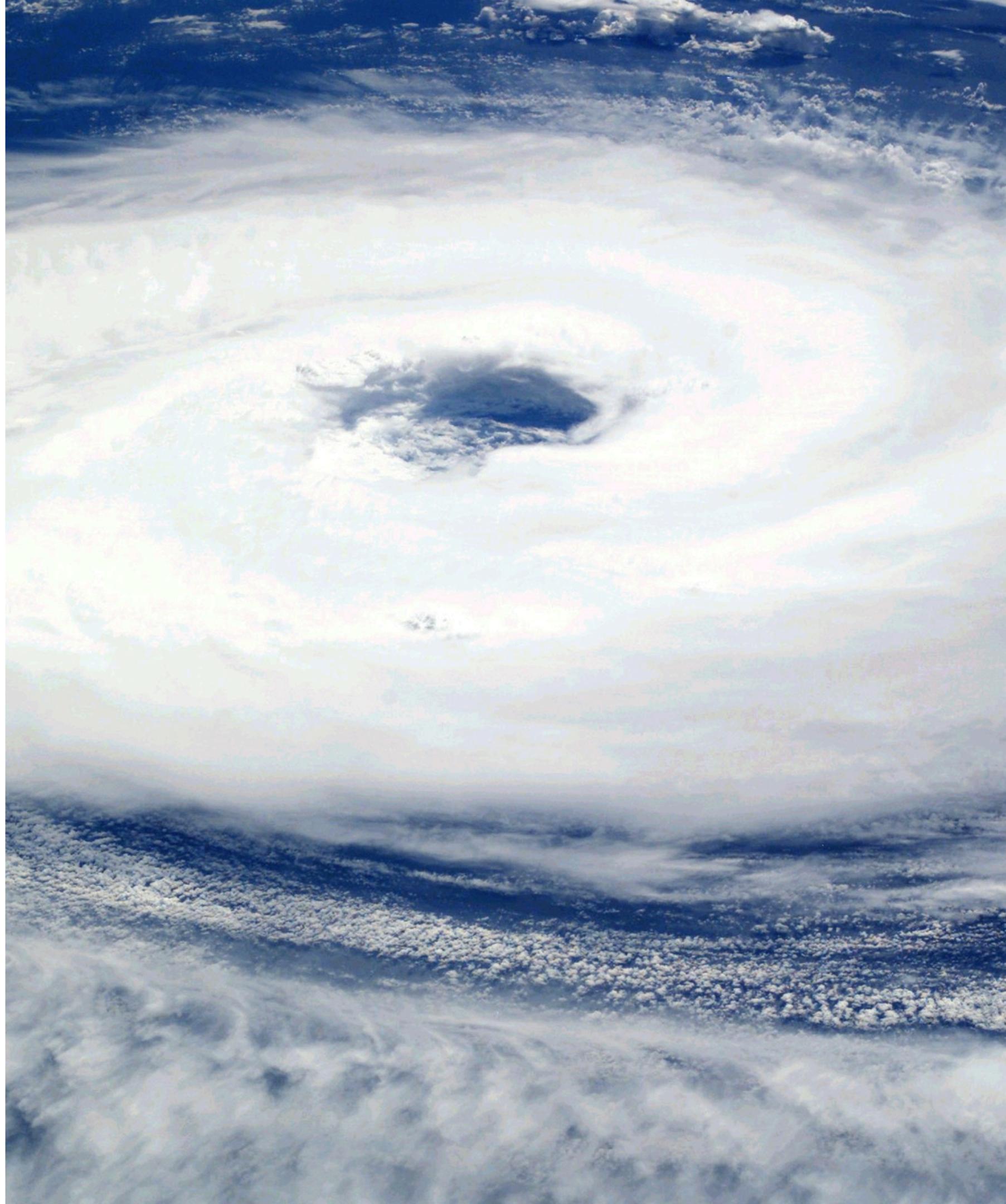
KEY FEATURES:

- SEARCH BY CITY NAME.
- DISPLAY TEMPERATURE IN CELSIUS OR FAHRENHEIT.
- SHOW ADDITIONAL WEATHER DETAILS.
- USER-FRIENDLY INTERFACE WITH RESPONSIVE DESIGN.



FEATURES

- Search for Current Weather by City Name
- Display Temperature in Celsius
- Weather Description
- User-Friendly Interface



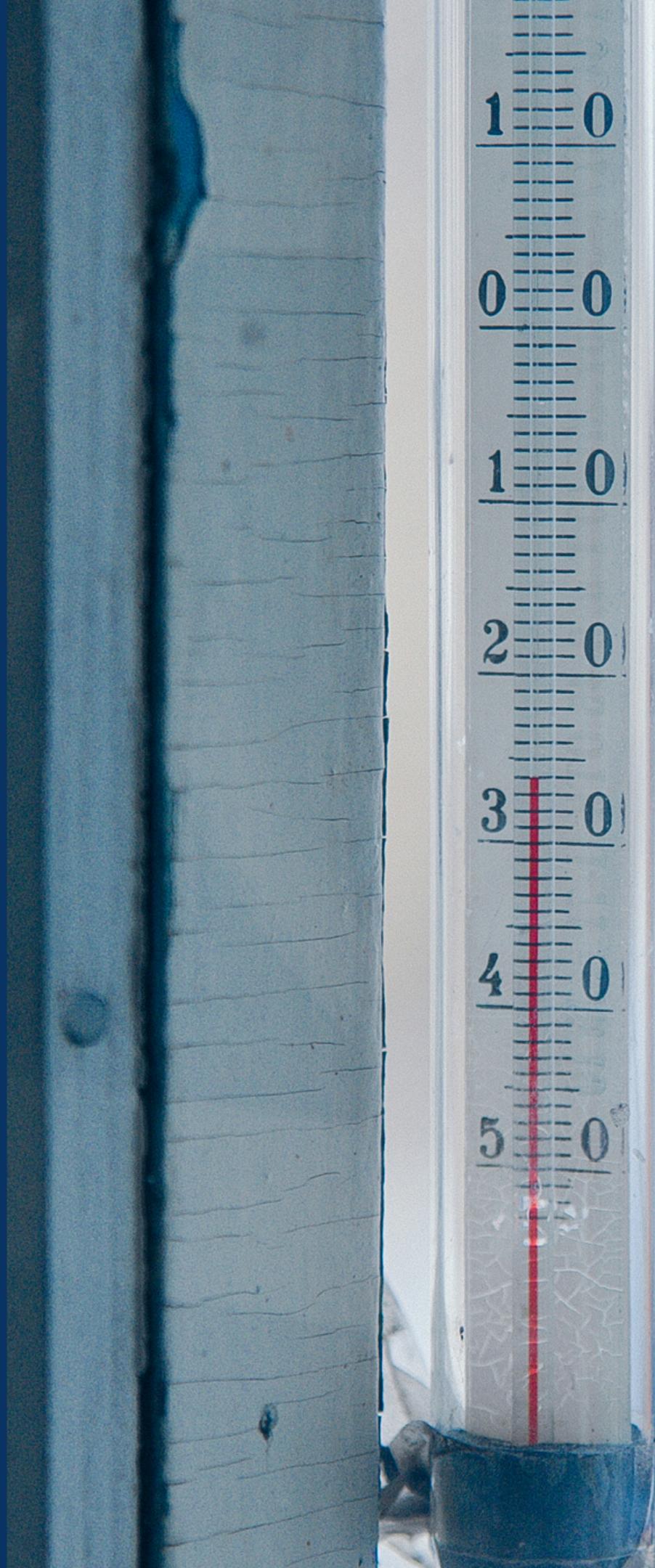
TECHNOLOGIES USED

- **HTML: STRUCTURING WEB PAGES.**
- **CSS: STYLING AND RESPONSIVE LAYOUT.**
- **JAVASCRIPT: HANDLING USER INTERACTIONS AND FETCHING DATA.**
- **OPENWEATHERMAP API: RETRIEVING REAL-TIME WEATHER DATA.**



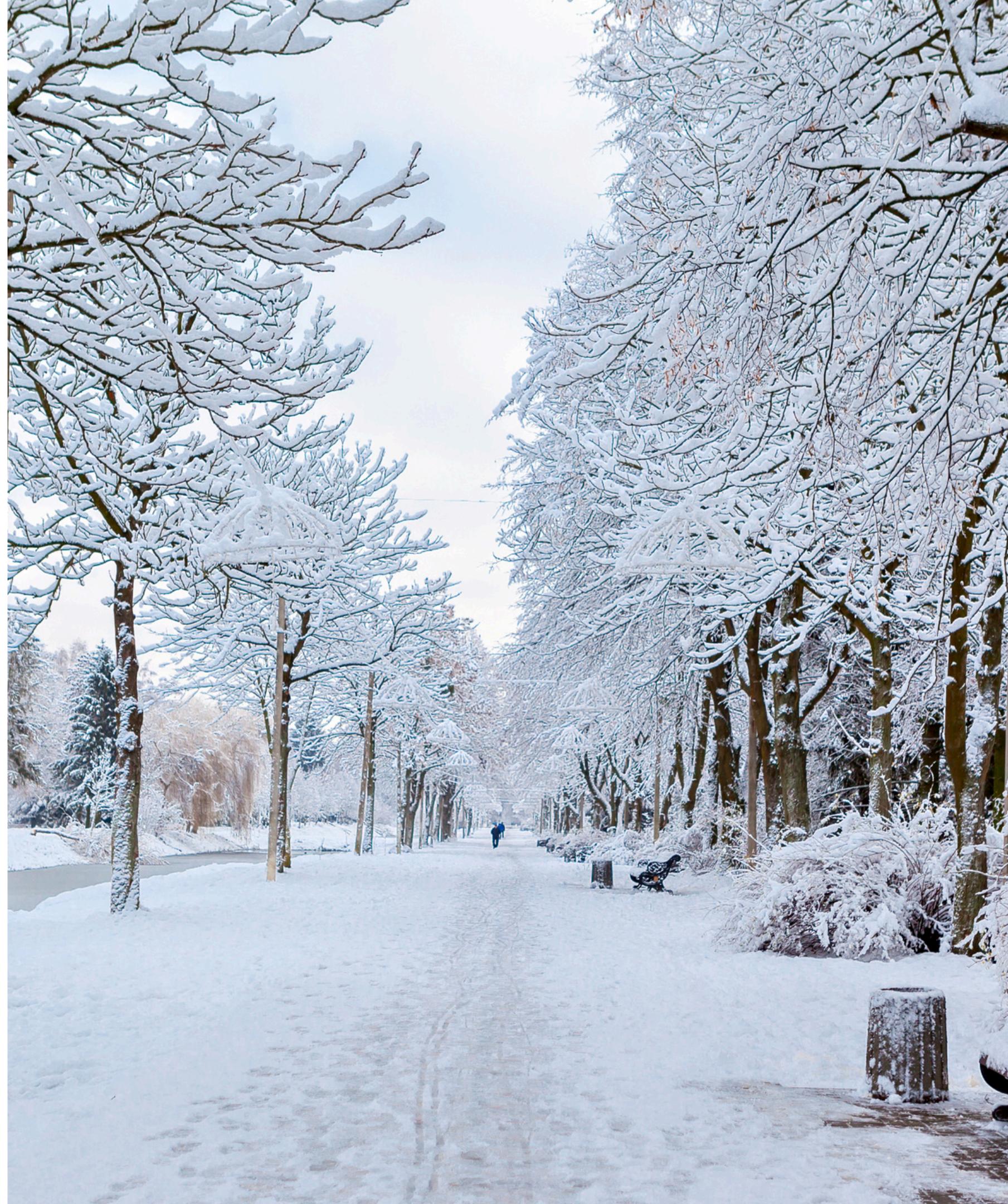
PREREQUISITES

- Web Browser: Chrome, Firefox, etc.
- API Key: Sign up for free at [OpenWeatherMap](https://openweathermap.org).



INSTALLATION

- Clone the Repository:
git clone <https://github.com/rishavraj021/weather-app.git> cd weather-app cd weather-app
- Open the Project:
In your preferred code editor.
- Set Up Your API Key:
Replace YOUR_API_KEY in script.js.
- Run the Application:
Open index.html in your web browser.



USAGE

1. Enter a City Name in the search bar.
2. Click on the "Get Weather" Button.
3. View Weather Information displayed below the search bar.



FUTURE INVENTIONS AND TECHNOLOGIES FOR THE WEATHER APP

- AI-Driven Predictive Models:
 - Faster, more accurate forecasts.
 - Reduced computational costs.
- High-Resolution Satellite Imaging:
 - Detailed weather monitoring.
 - Better spatial resolution.
- Enhanced Radar Technology:
 - Real-time updates.
 - Better detection of severe weather.



LIMITATIONS OF CURRENT TECHNOLOGIES

- Data Acquisition and Integration:
 - Delays in data processing.
 - Less accurate, timely forecasts.
- Predictability of Weather Systems:
 - Inherent limits in long-term forecasts.
 - Reduced reliability beyond 14 days.
- Initial Conditions and Errors:
 - Errors in initial conditions.
 - Cumulative errors in forecasts.
- Handling Rare and Extreme Events:
 - AI struggles with rare events.
 - Inadequate preparation for extreme weather.





**THANK
YOU!**