

Assignment # 02
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Weather API Integrated App

Weather App

Overview

This Weather App is a versatile web application that offers real-time weather updates, forecasts, and interactive features. It includes both a dashboard and a detailed weather table page, along with an AI-driven chatbot for weather-related queries.

Features

Dashboard (Dashboard.html)

1. **Current Weather Display:** This shows the latest weather conditions for a searched city or your current location.
2. **Dynamic Weather Background:** The background adapts based on the current weather conditions, with specific images for each type of weather.
3. **Temperature Unit Toggle:** Easily switch between Celsius and Fahrenheit.
4. **Weather Charts:**
 - Temperature Forecast
 - Weather Conditions Overview
 - Temperature Trend Line

Weather Tables (Tables.html)

1. **Detailed Forecast Table:** Provides a 5-day weather forecast in table format.
2. **Data Filtering Options:**
 - Sort temperatures in ascending or descending order
 - Filter for rainy conditions only
 - Display the highest recorded temperature
3. **Pagination:** Enables easy navigation through forecast data.
4. **AI Chatbot:** Built with Google's Gemini AI, the chatbot is designed to handle weather-related questions, using an integrated Gemini API key for functionality.

Technologies Used

- HTML5
- Tailwind CSS
- JavaScript
- Chart.js for visualizing data
- OpenWeatherMap API for fetching weather information
- Google Gemini AI API for chatbot integration

Setup and Installation

1. Clone the repository.
2. Open .htmdashboardl in your web browser to access the dashboard.
3. Open Tables.html for the detailed weather tables and AI chatbot.
4. Ensure you have a stable internet connection for API calls.