Dashboard

# Weather Forecast and Chatbot Integration Project

This project is a weather forecast and chatbot integration application. It uses OpenWeatherMap API to fetch weather data for a user's current location or a city entered by the user. The project includes interactive features such as temperature unit toggling (Celsius/Fahrenheit), charts for visualizing weather conditions, and animations for weather updates.

# Instructions to Run Locally

1. Clone the repository to your local machine.  
2. Open the project in your code editor of choice.  
3. Ensure you have an API key from OpenWeatherMap (replace 'API\_KEY' in the code).  
4. Open the index.html file in your browser to launch the weather application.

# Code Overview

The following sections provide a breakdown of the key features of the project.

## 1. Geolocation

The function `getLocation()` retrieves the user's current geographical location using the navigator's geolocation API. If successful, it fetches weather data using coordinates; otherwise, it displays an error.

## 2. Weather Data Fetching

The `getWeather()` function is used to fetch current weather data and a 5-day forecast for the city entered by the user. It uses the OpenWeatherMap API and supports both Celsius and Fahrenheit units.

## 3. Charts and Visualizations

This project includes multiple charts to visualize temperature and weather conditions:   
- Bar Chart for temperature over 5 days.  
- Doughnut Chart for distribution of weather conditions.  
- Line Chart for 5-day temperature trends.

# Code Example

const API\_KEY = '031bb10685bdb53d0b947e5eb8bc5c5e';  
let forecastData = [];  
let currentPage = 1;  
let barChart, doughnutChart, lineChart;  
let currentUnit = 'metric'; // Default to Celsius (metric system)  
  
function getLocation() {  
 if (navigator.geolocation) {  
 navigator.geolocation.getCurrentPosition(showPosition, showError);  
 } else {  
 alert('Geolocation is not supported by this browser.');  
 }  
}  
// More code ...