

WEATHER NINA USER GUIDE

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INTRODUCTION

WeatherNinja is an IoT-based weather monitoring system that collects real-time data from various sensors, including temperature, humidity, rain and pressure sensors. This guide will help users understand how to operate the WeatherNinja system, access weather data, and interpret the results displayed through the application.



SYSTEM OVERVIEW

The WeatherNinja system uses Raspberry Pi and sensors to gather real-time weather data. This data is displayed on an LCD, stored in the cloud, and made available through a web interface for remote access. Users are also notified of important weather updates via email or text messages.



HOW TO USE:

NOTE: For further details, click https://github.com/CodeTitans2/IOT

POWERING THE SYSTEM:

- 1. Ensure that the Raspberry Pi is properly connected to a power source using a suitable power supply.
- 2. Verify that the sensors (DHT11 for temperature and humidity, the pressure and rain sensor) are connected properly to the Raspberry Pi.

VIEWING REAL-TIME DATA:

- 1. Once powered, the system will automatically start collecting data from the connected sensors.
- 2. The real-time temperature, humidity, rain and pressure data will be displayed on the LCD in graphical user interface.
- 3. You can monitor the current weather conditions directly from the LCD screen.



HOW TO USE:

ACCESSING THE WEB APPLICATION:

- 1. The collected data is uploaded to the cloud, and users can access it remotely through the web application.
- 2. Open your web browser and navigate to the web interface provided by the WeatherNinja system.
- 3. Log in using your credentials to view real-time and historical weather data in graphical format.

• RECEIVING WEATHER NOTIFICATIONS:

WeatherNinja is designed to send email or message notifications when certain weather thresholds are met (e.g., drastic changes in temperature, pressure and rain). You will receive alerts based on the weather conditions detected by the system. when the temperature exceeds from 35 user get notify by email and SMS message. When the rain gets started so user get notify by email and SMS message.



HOW TO USE:

• TROUBLESHOOTING:

- 1. No Data on the LCD Screen: Ensure the sensors are properly connected and the Raspberry Pi is receiving power.
- 2. Unable to Access the Web Application: Verify that the Raspberry Pi is connected to the internet via Ethernet or Wi-Fi, and ensure that the web server is running.

• CONCLUSION:

WeatherNinja offers an easy-to-use solution for real-time weather monitoring. By following this guide, users can effectively view and analyze weather data, both locally on the LCD screen and remotely through the web interface.



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