

# USER GUIDE

## REMOTE AGRICULTURE SYSTEM

IoT project designed for smart farming, utilizing sensors to monitor key environmental parameters such as soil moisture, temperature, and light conditions. It enables remote monitoring and control of agricultural conditions, optimizing plant growth and resource usage.

B8 - IOT PROJECT

# User Guide of Remote Agriculture System

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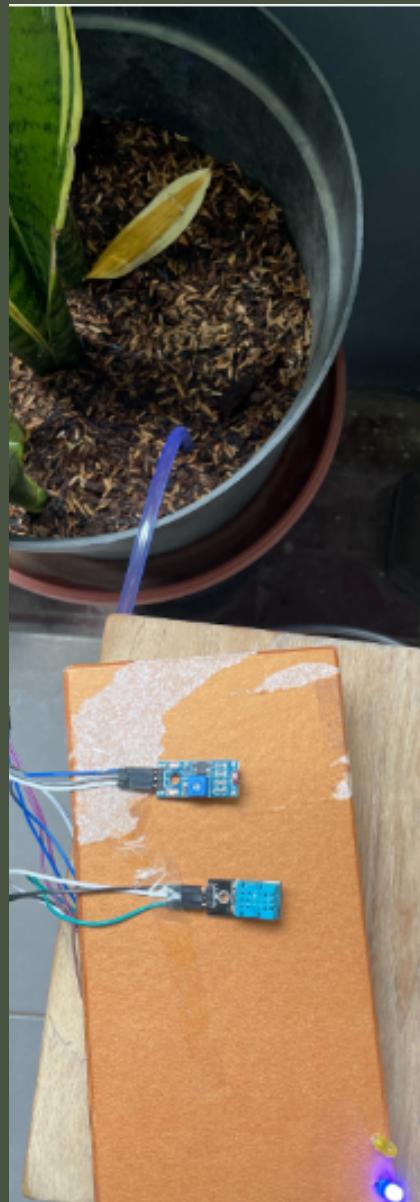
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# INTRODUCTION

The "Remote Agriculture System" is a revolutionary solution designed to address the persistent challenges faced by farmers. This cutting-edge system, centered around the ESP32 microcontroller and an array of sensors, redefines agriculture by providing real-time insights into crucial environmental factors affecting crop growth.

## Key Features:

- Wireless Monitoring: ESP32 enables remote monitoring for flexibility and accessibility.
- Comprehensive Sensors: YL39, DHT11, and LDR sensors deliver real-time data for optimal crop management.
- Visual Indicators: Intuitive LED indicators for quick assessment of environmental conditions.
- Automated Irrigation: Integrated water pump responds to soil moisture levels, optimizing resource usage.
- Cloud Connectivity: Connects to Blynk IoT platform for secure real-time data transmission and remote monitoring.
- User-Friendly Interface: Easy-to-use interface for monitoring, threshold setting, and parameter configuration on both desktop and mobile devices.



# HOW TO GET STARTED?

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## Step One :

Prepare your plants (preferably with a pot)



## Step Two:

Prepare your ESP32 and connect it to a power source. Make sure that it is already turned on!



## Step Three :

Make sure you already have the Blynk app on your phone. You can download it from the App Store or the Play Store.



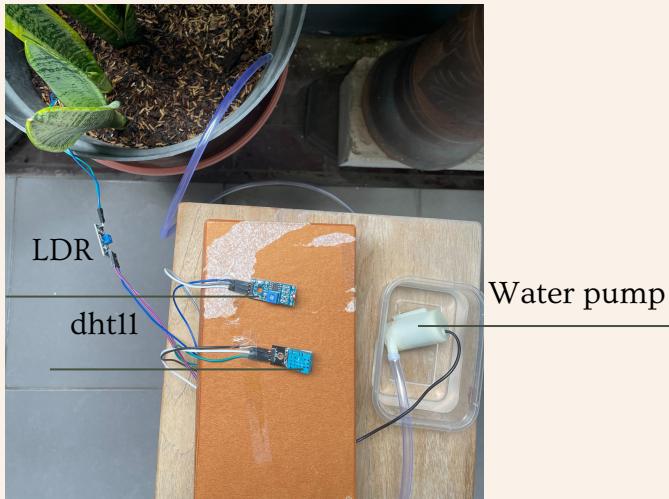
## Step Four:

Fill your container with water and put the water pump inside.



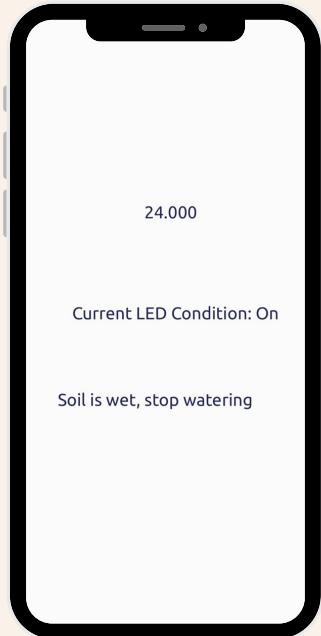
## Step Five:

Set up the device according to your preferences, make sure the sensors are correctly positioned. For example :



## Step Six:

Now, you can monitor your plant's condition even when you're not at home



User's Manual Guide:  
Remote Agriculture System

# SAFETY PRECAUTIONS



## Electrical Safety

- Power off the system before conducting any maintenance or adjustments.
- Use only approved power sources and cables to prevent electrical hazards.
- Disconnect power before cleaning, and use dry methods when necessary.

## Sensor Handling

- Handle sensors with care to prevent damage to delicate components.
- Follow proper installation procedures for sensors to ensure accurate data readings.

## Maintenance and Repair

- Power off the system before attempting any maintenance or repair activities.

## Secure Placement and Ventilation

- Place the system on a stable and level surface to prevent falls or damage.
- Avoid placing heavy objects on top of the system.
- Ensure proper ventilation around the system to prevent overheating.
- Do not block ventilation openings.

## Children and Pets

- Keep the system out of reach of children and pets.
- Educate users about potential hazards associated with the system.

# CONTACT INFORMATION

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