

Smart Farming



Prepared By: Arora Nikhil (12002040701119)

Bhavsar Devanshi (12002040701028)

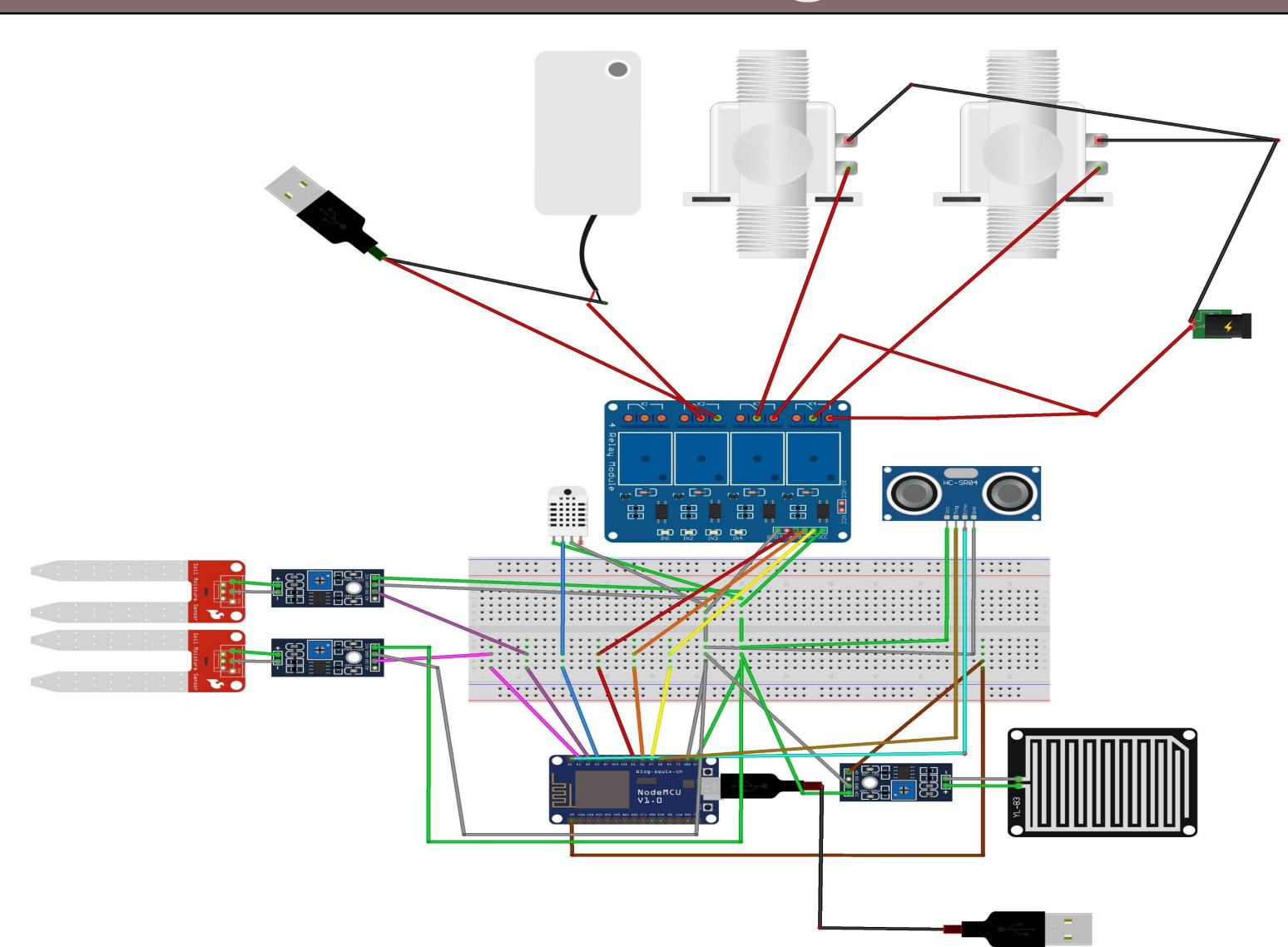
Guided By: Prof. Shital Bhatt
Department of Information Technology

Introduction

- •Smart farming enables farmers to access real-time data, such as soil moisture, humidity levels, crop health and more, through devices such as drones and sensors. The generated data allow farmers to take the right actions with their crops to enable better growth and cultivation.
- •Most of the farmers use large portions of farming land and it becomes very difficult to reach and track each corner of large lands.

Rain

Circuit Diagram



Flow diagram

Start Read all sensor values Moisture in Moisture in Ultrasonic Farm 2 Farm 1 NodeMCU WiFi Moisture 1 Moisture 2 threshold threshold Relay Output in Relay 2,4 ON module OFF Blynk

Pump and

Solenoid 2

ON

Output



Features

Precision agriculture

Relay 2,3 ON

Pump and

Solenoid 1

ON

- Remote control and monitoring
- Weather-based irrigation scheduling
- Smartphone control
- Water management
- Customization

DHT

Even distribution using sprinklers

Conclusion

The smart farming is feasible and cost effective for optimizing water resources for agricultural production.

End

This Farming system allows cultivation in places with water scarcity thereby improving sustainability.