



THE AKATSUKI

AGRO-Z-MINE

THE GESTURE FOR FARMERS!!



WHAT'S AGRO-Z-MINE

Say goodbye to labor-intensive irrigation methods! Our innovative solution combines cutting-edge AI technology with cost-effectiveness to revolutionize farming practices.

Our AI-driven system utilizes IoT data analysis to craft the perfect irrigation schedule. Imagine a system so smart, it knows exactly when your plants need water, without you lifting a finger!





TECH SPECS

1

DEEP LEARNING & AI

Unleash the power of artificial intelligence with Agro Z Mine's advanced algorithms.

2

INTERNET OF THINGS (IOT)

Through IoT, Agro Z Mine becomes your farm's vigilant eye, ensuring every drop of water counts.

3


FLUTTER FLOW

Farmers can conveniently monitor and control their irrigation systems from the palm of their hands

4

AMAZON WEB SERVICES (AWS)

Experience the reliability and scalability of cloud computing with AWS, the backbone of Agro Z Mine's data processing and storage infrastructure.



WHY AGRO-Z-MINE



ADAPTABLE AND ADVENTUROUS

- Agro Z Mine isn't just another irrigation system—it's a versatile companion that adapts to the ever-changing landscape of agriculture.
- Whether you're using surface, sprinkler, drip, or subsurface irrigation methods, Agro Z Mine seamlessly integrates with your farming practices, ensuring consistent and efficient water distribution.



HARVESTING SUCCESS

- By reducing labor costs and optimizing water usage, our system unlocks the potential for significant cost savings and increased yields.
- Even with just 10% adoption by farmers, Agro Z Mine has the power to cultivate millions in revenue and drive positive change across the agricultural sector.

SENSORY SLEUTHS

AIR HUMIDITY SENSOR

Water applied from above using sprinklers, resembling rainfall. Preferred by 59.5% of nursery producers.



SOIL MOISTURE SENSOR

Various irrigation techniques not specified, accounting for 18.7% of usage.

PH SENSOR

Direct water delivery to plant roots through valves, tubing, and emitters. Used by 37.5% of producers for efficient water use.



TEMPERATURE SENSOR

Water delivered from below, benefiting 4.6% of producers. Achieved via elevated water tables or capillary mats.



HOW IT WORKS

SENSORS

Smart sensors collect data on soil moisture, temperature, and other key factors essential for plant health.

DATA PROCESSING

Collected data is analyzed and processed in real-time using advanced algorithms to make informed decisions.

CONTROL SYSTEM

A sophisticated control system adjusts water flow and distribution based on the analyzed data, ensuring optimal irrigation.

COMMUNICATION PROTOCOLS


Seamless communication between components ensures timely and accurate data exchange for effective irrigation management.

WEATHER DATA INTEGRATION

Integration with weather data providers allows Agro Z Mine to adapt irrigation schedules based on forecasted weather conditions.

SECURITY MEASURES

Robust security measures safeguard the system against cyber threats, ensuring data integrity and system reliability.



OUR ZILLENNIAL TEAM



ABHIJEET SWAMI

Backend Developer



RISHIKA MISHRA

Presentator



ASHISH KUMAR

Tester



MANASVI A.

Designer & Presentator



THANK YOU

WE ARE ALL SET FOR YOUR
QUERIES!!