

## **Tech At Farm**

Upgrade Farming to a new Level...





## **INSPIRATION**

Understanding the water shortage problem it is very important to utilize it effectively, so here we present an Automated Irrigation System, which is an amazing blend of software technology with Internet of Things (IoT), that would help the farming community to irrigate the lands effectively. Further we also intend to suggest them the best conditions for their crops also with the ideal fertilizer/pesticide requirements.

## **Functional Aspects:**

- Automated Irrigation with remote/local access
- Crop Search
- Farmer Search
- Complaint/Feedback System
- Blogspot
- Additional language support in over 100 languages
- Security (of course!!)





## **Future Prospects:**

- Mineral/pH testing
- Integration of chips to reduce cost and easy handling
- Application of ML/Al to predict requirements
- Adding weather/sunlight data from satellites
- Using solar power to increase battery life

Do not want to signup?

Glance at our

**Informative Blogs** 

you want to contact.

Web Server:

Amazon Web Services (AWS)

Search for relevant farmers



# Login for already registered farmers

**Translate** 

Easily





Register yourself absolutely free



**Manage** Irrigation

Enter your credentials. Only one username and password required for all lands!

**Users** 

**Pending** 

Irrigation

Requests



Manage system easily, once installed.

Crops

Get IoT System installed on land.

Add

Land

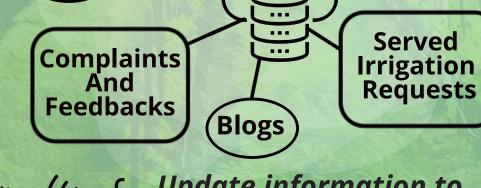
**Request** 

Recommendation system for crops, their soil type, season, optimum moisture, fertilizers, pesticides, etc.

## **IoT System Outline:**

C/C++ HTML/CSS/JS



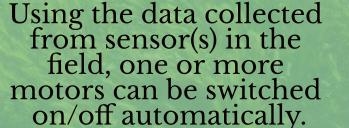


**Update** information to server with internet.

## When connected to the internet:

Lands

- Data about the system can be sent to the server after every few minutes.
- Also, other computers on the same network can be used to manage the device manually.









App 2: admin (for staff interaction) App Server:

App 1: dbms

**Django 2.2 (Python 3.7.3)** 

(for user interaction)

**Database Server:** SQLite3

See adjacent database diagram for details

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