

system is built for monitoring the crop field with the help of sensors (light, humidity, temperature, soil moisture, PIR Sensor) and automating the irrigation system. The farmers can monitor

SMART FARMER -IoT ENABLED SMART FARMING APPLICATION

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**SCENARIO**

**Testing and Analysing water**

# Requirement

# Project Flow

# Working

# Benefits

# Outcome

**Purpose**

**Techniques**

**Data Transfer**

**Process**

**Areas**

## Steps

With the evaluated values the people can take steps to improve the quality of water and make it better

An application is used to monitorand analyse the sensed values via cloud and update to user

The measured values are compared with the standard values

It is low powered and has high mobility

Informs about the quality of water

It detects the presence of contaminants

The farmers can monitor the field conditions from anywhere

Monitoring the crop field with the help of sensors and automating the irrigation system

A system is build for monitor the crop field with the help of sensor anautomatic

With IoT and remote sensing techniques measuring and analyzing water

senses the local agricultural parameters, identify the location of sensor, transfer the data crop fields and crop monitoring. The Received updated information

Real-time data access can be done using IoT and monitoring techniques

## Interactions

It can be developed as an efficient water management system of local area

Alert messages is sent to the user when values of the parameters are abnormal

It helps people aware of water quality and importance safe water

The details can be viewed on the screen

It monitors and analyze the data from the remote locations

They will compare the growth and production before and after the use of application

Customers want a system to detect the physical and chemical parameters of water

## Goals & motivations

The presence of contaminants should be detected by the sensors

The customers require cost efficient system

Using that data users evaluate the quality of water

The collected data is stored in the cloud

Earlier the water samples have to be collected and tested manually

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## Positive moments

The project achieved to monitor the parameters of water and update to the user

It was developed as low cost water quality monitoring system and covers larger area

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They will be aware of many new techniques in farming

It was attributed to its durability and flexibility

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## Negative moments

At first they will find the app costly and will have trust issues

Replacement of sensors in case of improper function

Damage to the system by external environment

Feel that cost of maintenance is high

To detect other parameters other sensors need to be added

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## Areas of opportunity

This application can be used in terrace gardening

Developing a real time, low cost water quality monitoring system

Customers can view the data and make changes to the system

It reduces the time and effort put when the task is done manually

Track the working of sensors

Now people can identify the presence of toxic substances in water and can improve its quality for safe drinking water