A LITERATURE SURVEY OF SMART FARMER - IOT ENABLED SMART FARMING APPLICATION

Title**:**Smart Farmer - IOT Enabled Smart Farming Application

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Project Description:

People who use the internet of things can live and work more intelligently and have total control over their life. IoT is crucial to business in addition to providing smart home automation devices. With the help of IoT, organizations can see in real time how their systems actually function, gaining insights into anything from equipment performance to supply chain and logistics activities.This paper presents an Internet of Things (IoT) based Smart Farmer -IoT Enabled Smart Farming Application.The system is implemented using an ultrasonic sensor which is connected to Arduino UNO as to monitor the water level. In this system, the depth level will be sent via Arduino Ethernet Shield with an Internet connection to the IBM Cloud.

S.NO	TITLE	AUTHOR AND YEAR OF PUBLICATIONS	METHODOLOGY USED	LIMITATIONS
1.	Mobile Integrated Smart Irrigation Management and Monitoring System Using IOT	S. Vaishali et.al, 08 February 2018	In order to control and monitor the irrigation process, smart and automated irrigation system is developed, Implemented and tested. There is a need for automated irrigation system because it is simple and easy to install. This system uses values ON and OFF to control water motor. Python programming language is been used for automation purpose.	In this paper they implemented the automatic ON and OFF to control water motor but the farmer doesn't know about the current state of the motor.
2.	IoT Based Smart	Shweta B. Saraf et.al , 15 January 2018	In this paper proposed system is based on IoT	In this proposed system,there is a

	Irrigation Monitoring And Controlling System		that uses real time input data. Smart farm irrigation system uses android phone for remote monitoring and controlling of drips through wireless sensor network. Zigbee is used for communication between sensor nodes and base station. Real time sensed data handling and demonstration on the server is accomplished using web based java graphical user interface.	need of continuous power supply for monitoring the crop.
3.	Smart Waste Collection Monitoring and Alert System via IoT	Zainal Hisham Che Soh et.al, 24 June 2019	The system is implemented using an ultrasonic sensor which is connected to Arduino UNO as to monitor waste bin garbage level. In this system, waste bin depth level will be sent via Arduino Ethernet Shield with an Internet connection to the Ubidots IoT Cloud. The Ubidots store the collected waste bin level data into IoT database and display the waste bin depth level on online dashboard for real-time visualization. The Ubidots Event manager invoke a notification alert to garbage collector mobile phone via a SMS when the waste bin is nearly filled for immediate waste collection.	Here the paper is based only on collecting the garbage waste when it gets filled by understanding the depth level using Arduino ethernet Shield.

Problem Statement:

Agriculture is the Backbone of Our Country. Traditional methods that are used for irrigation. They results in a lot of wastage of water. About 85% of total available water resources across the world are solely used for the irrigation purpose. In upcoming years this demand is likely to increase because of increasing population. To meet this demand we must adopt new techniques which will conserve need of water for irrigation process. In this paper proposed system is based on IoT that uses real time input data. This Water Level Monitoring Irrigation system the excess availability of water in crop is monitored through sensors and reduces the water consumption. This idea is also to focus on parameters such as temperature and soil moisture. The main objective of this project is to control reduce the water supply,save the crops and monitor the plants. The system is implemented using an ultrasonic sensor which is connected to Arduino UNO as to monitor Farm Field level.In this system, Farm Field depth level will be sent via Arduino Ethernet Shield with an Internet connection to the IBM IoT Cloud. The IBM Cloud store the collected Farm field level data into IoT database and display the Farm Field depth level on online dashboard for real-time visualization. The IBM Event manager invoke a notification alert to the Owner of the farmer mobile phone via a SMS when the farm field is nearly filled and It automatically Switch Off the Water Motor. Therefore, the Irrigation became more effective and systematic.

References:

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2. IoT Based Smart Irrigation Monitoring And Controlling System
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3. Smart Waste Collection Monitoring and Alert System via IoT
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