

IoT Based Moisture Control and Temperature Monitoring In Smart Farming

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Abstract. The Internet of Things (IoT) has made a revolution in all the fields of human life by making the work be smart and effective. The IoT devices like sensors, controller, Wi-Fi module and the cloud play a significant part in smart farming which acquires yield in the field of farming and lessens the wastage. The goal of this paper is to propose the IoT based framework for the farmers by analyzing the live information like (moisture, temperature) in the cloud. The agrarian device is equipped with Arduino innovation and can be received through web servers with different sensors and live information transmissions through Thingspeak.com. The smart agriculture stick is proposed through this paper which is integrated with controller, sensor and live data that can be monitored through the cloud.

Keywords: IoT; Wi-Fi Module; Microcontroller; Agriculture; Sensors; Moisture; Temperature.

1. Introduction

A greenhouse is a building or a house for plant growth. The dimensions of this structure range from small sheds to industrial buildings, depending on the unit requirements. The heat sink is a miniature house or a mini greenhouse. The greenhouses offer better control over the growing climate of the plants due to their smaller size. They allow the user to change or use them for small research purposes. Adjustable key factors, depending on the technical specifications of the greenhouse, include temperature, sun, shade, intensity, drainage, fertilizer and soil, and humidity. Greenhouses are valuable for solving scarcity or low productivity due to crop characteristics which include limited growing seasons and poor light, thereby increasing peripheral food production and saving time. Cash management technology is rapidly demanding precise, accurate and reliably quantifiable details outlined with the advancement of greenhouse gardening. In some nations, cable contact was used in most of the current cash management schemes, and the management states were also in the process of replacing other cables. This included high costs as well as problems with installation and maintenance,



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