

ARDUINO-BASED AUTOMATED IRRIGATION SYSTEM

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Abstract: In India, the vast majority of the population lives in villages and relies on agricultural farming for a living. These days, designing or farm watering exercises are the most common social activity and the most time-consuming mission. Whatever the weather conditions are, whether hot, dry, shady, or wet, you must be able to regulate the amount of water that reaches your plants. Watering systems that are currently in use could be used to efficiently water plants when they are in need. Nonetheless, this manual watering system necessitates the consideration of two major factors: when and how much water. A programmed automated irrigation system is created to replace manual tasks and make work easier. It makes use of the production to determine the dampness level of the soil and water the plant naturally when no dampness is detected in the dirt. This device can be used on large agricultural farms as well.

Keywords: Arduino Uno, Bluetooth, Irrigation, Soil Moisture Sensor, Relay

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