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FINAL YAER PROJECT REPORT

SMART IRRIGATION SYSTEM

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APPROVAL FOR SUBMISSION

We certify that the project report entitled **"SMART IRRIGATION SYSTEM"** was prepared by Zafran Zafar, Tahseen Aslam, Haleema Nadia, Nuzaif Ather and S.M.Daimuddin Nusrati has met the required standard for submission in partial fulfillment of the requirements for the award of the Degree of Bachelor of Computer Science (Honors) at Bahria University.

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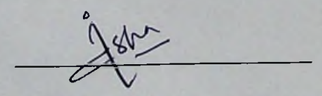
Signature : 

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SMART IRRIGATION SYSTEM

ABSTRACT

An automatic irrigation system is designed to provide water to the farms based on soil moisture, humidity and temperature conditions moreover water level is also measured. An algorithm is developed such that soil moisture sensor and humidity sensor values are continuously fed to Arduino Mega micro controller. The sensor information is compared with the threshold values. The system sends message to the user whenever sensors reach their threshold value. The user can provide commands to the system. The system may also be controlled by the user manually. The system is equipped with the photovoltaic panels and dual communication is established based on cellular-internet interface for continuous monitoring of data by the user. A website is designed to provide interface to the user. This system is preferable at water scarcity locations like agricultural areas because of its energy sovereignty, low cost and relatively more amounts of underground water saving.

Table of Contents