PAPER TITLE :- Automated Plant Watering System **DATE:-**

JOURNAL/CONFERENCE:- Department of Engineering School of Informatics & Engineering Institute of Technology, Blanchardstown Dublin 15.

AUTHOR:- Uzair Kamal

PROBLEM MENTIONED/SOLUTION OBTAINED:-

In daily operation related to watering the plants are the most important cultural practice and the most labour-intensive task. No matter whichever weather it is, either too hot and cold or too dry and wet it is very crucial to control the amount of water reaches to the plants. So, I will be effective to use an idea of automatic plant watering system which waters plants when they need it. An important aspect of this project is that: "when and how much to water". To reduce manual activities for the human to watering plant, an idea of plant watering system is adopted. The method employed to monitor the soil moisture level continuously and to decide whether watering is needed or not, and how much water is needed in plant's soil.

ALGORITHM USED:- system is design and programmed in such way that soil moisture sensor senses the moisture level of plants at particular instance of time, if moisture level of sensor is less than the specified value of threshold which is predefined according to the particular plant's water need then the desired amount of water is supplied till it reaches to the predefined threshold value. System reports its current states and sends the reminder message about watering plants and to add water to the tank. All this notification can be done by using Arduino GSM shield.

TOOLS USED/IMPLEMENTED:-

GSM Module

ATmega328p

DHT11

Grove soil moisture sensor

Hitachi 16x2 LCD

RESULTS AND DISCUSSION:-

Many problems occurred during the project such as lack of digital pins, when the sim card is out of the money and pressure sensor in the water tank. For each problem they found different solutions and got the optimize solution for the problem statement.

KNOWLEDGE AQUIRED:-

While working on the project there are many problems occurred but for every problem they found a new solution and completed the project and tools we used to achieve it

IMPORTANT REFERENCE:-

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