

# Dr. MAHALINGAM COLLEGE OF ENGINEERING AND TECHNOLOGY

Affiliated to Anna University, Chennai; Approved by AICTE; Accredited by NAAC with Grade 'A++' Accredited by NBA - Tier1 (Mech, Auto, Civil, EEE, ECE, E&I and CSE)

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#### **Department of Electrical & Electronics Engineering**

#### **AUTOMATIC IRRIGATION SYSTEM**

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#### **OBJECTIVES**



- To watering gardens automatically based on moisture content present in the soil.
- To reduce the wastage of water and saving the life of crops from drought factors.

#### INTRODUCTION



- This project is a soil moisture monitoring system, which detects the moisture content present in the soil.
- In this system the irrigation system of plants can be controlled.
- The suffering of plants and crops.
- The simple and easy method to watering the gardens.
- The implementation of this technology has a wide scope in the nearby future

### **BLOCK DIAGRAM**

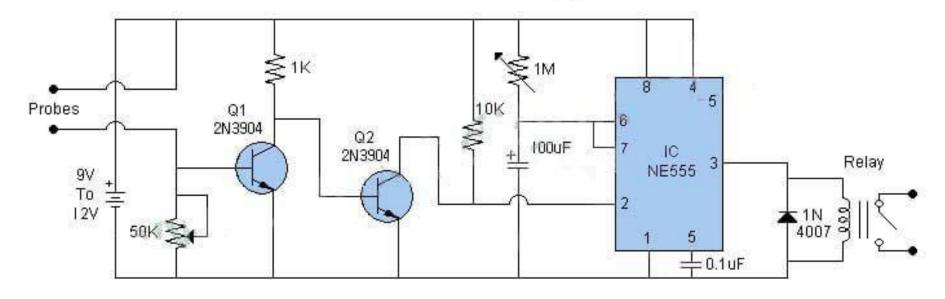


MOISTURE **FIELD** SENSOR INPUT WATER POWER **PUMP** SUPPLY 555 IC RELAY

### **CIRCUIT DIAGRAM**



# **Automatic Plant Irrigator Circuit**



#### **WORKING PRINCIPLE**

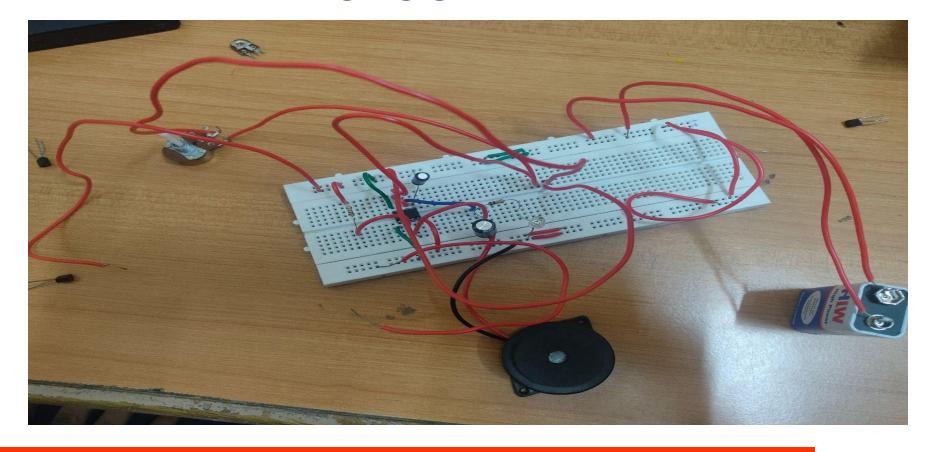


In this system the moisture sensor senses the moisture level of the soil and when the sensor senses a low moisture level it automatically switches the water pump with the help of timer IC. The timer IC works based on charging and discharging of a capacitor.

## HARWARE KIT PHOTOGRAPH

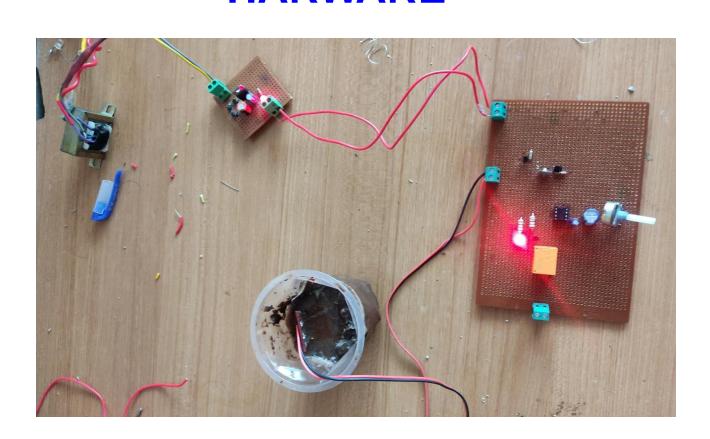


Enlightening Technical Minds



## RESULTS HARWARE







## **THANK YOU**