Automatic Water Dispenser System

Team Project

ABSTRACT

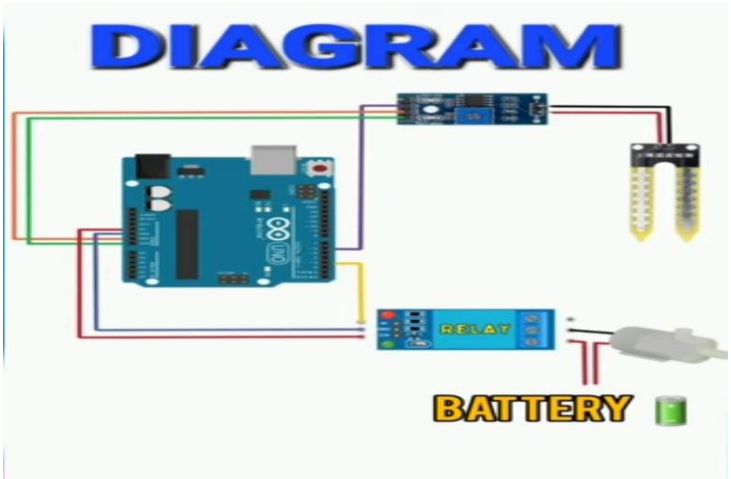
About 71% of earth is covered with water, but sadly only 2.5% of it is drinking water. We as humans waste a lot of drinking water due to our negligence. This can be stopped which lies with an improvement in technology. So in this project we build an Automatic Water Dispenser using Arduino nano and a Moisture Level Detection Sensor, that can be automatically give you water when a plant is in it.

BACKGROUND

Traditionally, water management can be done by operators, further developed an intelligent irrigation system that control water dispensing to the smart irrigation. The moisture sensor detects the soil moisture.

Voice based hot-cold water dispenser system using Raspberry Pi circuit: Completely supported voice based, determines water by person

CIRCUIT DIAGRAM



If we replace all the manual taps with a smart one that opens and closes on its own automatically not only we can save water but also have a healthier lifestyle since we don't have to operate the tap with our dirty hands. So in this project we will build a Automatic Water Dispenser using Arduino.

PROJECT SUMMARY

The concept behind the Automatic Water Dispenser is very simple. We will use Moisture level sensor to check if the plant contain minimum or limited level of water before the dispenser is placed. Arduino in it used to control the flow of water, which is energized the water will flow out and when we de-energized the water will be stopped. So, we will write the Arduino program that initiates the process of dispenser, check the moisture sensor if the plant contains water, then there will be no flow of water if not if supplies water through Arduino using motor pump. As the result, plants can survive more longer than it is leading normally.

ABOUT

TOOLS USED:

- 1 – Channel relay
- Arduino nano
- Moisture level sensor
- Water pump
- 9V battery

CONCLUSION

The Water Dispenser works under process of complete detection, check if any need or wastage of water occurs will changes it state to flow or control the flow of water, also in future this can be developed to huge dispenser to detect more and water more using some AI tools.

REFERENCE

2021 IEEE 12th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON)

2021 Second International Conference on Electronics and Sustainable Communication Systems

2021 Third International Conference on Inventive Research in Computing Applications (ICIRCA)