IOT based Liquid Level Monitoring System Using Arduino Abstract

This project IOT Liquid Level observance system could be a very innovative system that will inform the users regarding the amount of liquid and can stop it from overflowing. To demonstrate this system makes use of four containers. For this, the system uses ultrasonic sensors placed over the containers to observe the liquid level and compare it with the container’s depth. The system makes use of AVR family microcontroller, LCD screen, wireless local area network electronic equipment for causing knowledge and a buzzer. The system is steam-powered by a 12V electrical device. The liquid crystal display LCD digital display alphanumeric display screen is employed to display the standing of the amount of liquid within the containers. Whereas an online page is made to indicate the standing to the user observance it. The net page provides a graphical read of the containers and highlights the liquid level in color order to indicate the amount of the liquid. The liquid crystal display screen shows the standing of the liquid level. The system puts on the buzzer once the amount of liquid collected crosses the set limit. So this method helps to stop the wastage of water by informing regarding the liquid levels of the containers by providing a graphical image of the containers via an internet page.

Block Diagram

block diagram of IOT based Liquid Level Monitoring System Using Arduino

Block Diagram Descriptions

The ultrasonic sensor is using to find the level of the liquid.

In this ESP8266 module is collected the data’s in sensor and the data are uploading to the Gecko website

The gecko website showed the sensor value in real-time based.

Form this method we can monitor the accuracy of liquid in this project.

Hardware Requirements

Arduino UNO

Nodemcu ESP8266

Ultrasonic Sensor

Software Requirements

Arduino IDE

Embedded C