

A Project Report
on
"Water Overflow Alarm Model "

Submitted by

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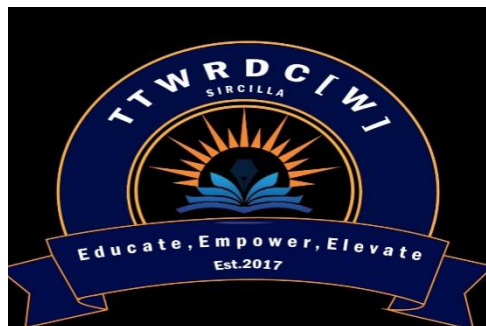
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Under the guidance

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Academic year - 2019-20

DECLARATION

I hereby declare that the project report titled " Verification of Hook's law" have completed successfully towards the partial fulfilment for the award of the degree "BACHELOR OF PHYSICAL SCIENCE from "TELANGANA TRIBAL WELFARE RESIDENTIAL DEGREE COLLEGE FORWOMEN, RAJANNA SIRICILLA .This is the bonafide work undertaken by me which is not submitted to any other university or institution for the award of any degree / diploma.

Date: 24-2-2020

Place:Thangallapally

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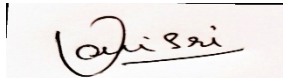
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Thangallapally, Rajanna Sircilla
(Affiliated to Satavahana University)**

CERTIFICATE

This is to certify that the project report title " Water over flow alarm" submitted in partial fulfillment for the award of degree of B.Sc programme of department of Physics was carried out by M.Akhila (180771044680029), L.Vijetha(180771044680024), T.Manasa (180771044680035).This has not been submitted to any other institute or university for the award of any degree.



Signature of the guide

K. Vanisri



Principal

Project report on water over flow alarm

Aim:

To design water overflow alarm.

Objective:

To design a water over flow alarm with low cost.

To save the water without wastage.

Purpose:

The main purpose of a water overflow alarm is to prevent property damage caused by flooding. By alerting home owners or property managers when water levels rise unexpectedly, they can take prompt action to mitigate potential damage to floors, walls, furniture, and other belongings.

Introduction

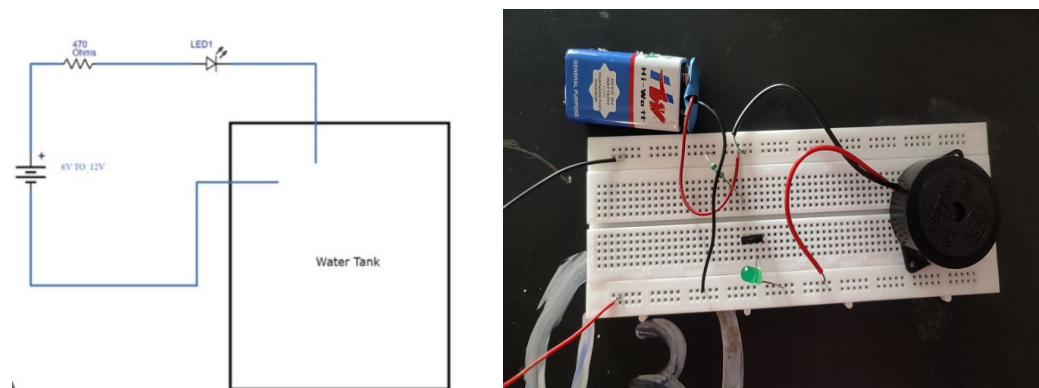
Water tank overflow is a common problem which leads to the wastage of water. Though there are many solutions to it like ball valves which automatically stop the water flow once the tank gets full. But being an electronics enthusiastic we want to prepare a simple and handy DIY water alarm project.

We got this idea when we see water over flow from the tank in my college.

Components Required:

Buzzer, wire, LED, Resistor-470 ohm

Circuit diagram:



Working:

Now as the water starts to rise up the sensors starts to get in contact with the water and the transistors are activated and there is a flow of current in the transistors making the LED's light up. Here in between the transistor and the LED there is a current limiting resistor 470 ohms, the job of the resistor is to checks that the LED does not get over voltage and destroy the LED. The transistor is biased by a 470 ohm resistor with the ground and the sensing part is taken from the collector with a 33 ohms resistor going directly to the tank.

The Buzzer Part :Here you can add any of the normal buzzers that are readily available in the market and if it is not then you can make yourself with a simple 555 IC. We are giving a small circuit diagram, it is really simple to make it with a minimum components. It is a simple audio oscillator. We have also provided a circuit diagram.

The Power Supply:

In place of power supply we used 9 volts battery because we did a small project model. In that we have voltage sensitive LED and transistor.



Applications of this project:

The water overflow alarm system finds various applications in different settings, including:

Residential buildings: It can be installed in water tanks to prevent overflow, especially in areas with irregular water supply or fluctuating water pressure.

Commercial buildings: It can be used in basins or sinks to avoid water wastage and potential damage due to overflow.

Industrial facilities: The alarm system can be incorporated into large storage tanks, ensuring efficient water management and reducing the risk of overflow accidents.

CONCLUSION:

In conclusion, the water overflow alarm project provides a simple yet practical solution for detecting water overflow. By using a metallic wire as a sensor and a buzzer as an alarm, it effectively alerts users about potential overflow situations. This project report highlighted the introduction, working principle, applications, advantages, and conclusion of the water overflow alarm system. By implementing this project, users can significantly reduce water wastage, prevent property damage, and enhance water management in different settings.