FACULTY OF ELECTRICAL ENGINEERING

UNIVERSITI TEKNOLOGI MARA

PULAU PINANG

FINAL REPORT:

"RAIN WATER DETECTOR ALARM WITH AUTOMATIC SLIDING WINDOW"

MUHAMMAD MUIZZUDDIN BIN MAT ISA

(2014246124)

MOHAMAD ZULHAIKAL BIN MOHD SOFI

(2014805586)

SUPERVISOR:

CIK SHAHIDAH SADIMIN

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ABSTRACT

The rain sensor were design to detect rain by short the circuit at the rain sensor, exactly the rain sensor was created with a coil of wire put together. Like this the water can short the coil together and the circuit will break if the rain droplet have dry. In this case, we substitute the condition push off switch to put a stop for the siren and motor to avoid any unwanted scene. The project aim is to shutoff window automatically when alert by rain to prevent the rain water enter the house. Aside of that to alert the resident when there are raining outside so they can plan their activity. The calculated parameters have been optimized using Proteus 7 software and Proteus ARES software. The software are responsible for simulation test and PCB design. The design prototype has been fabricated on a breadboard to see how it work. We having problem to adjust the resistor that hold the important role to the movement of the motor and the buzzer. The problem finally has been taken care of using Proteus simulation test

Contents

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

Water is basic need in every one's life. Saving and proper usage of water is very important. Here is an easy project which will give the alarm when there is rain, so that we can make some actions and save the rain water. As a result, we can increase the water levels of our own tank in our house to use in daily usage.

Rain water detector will detect the rain and make an alert, then the motor at the window will respond and closing the window.

We are interested in doing this project due to one reason, as we know the rain is intermittent and seasonally varies it is a blessing from god .As a result it is important to handle and utilize the incoming rain from the sky for irrigation and home application.

Today around the world rain water harvesting is enjoying renaissance and systems are being extensively installed for domestic, commercial and industrial use. One of the most important resources we have is clean water. In many part of the world including the major parts of Ethiopia, water shortage pose serious problems.