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FINAL REPORT:

AUTOMATIC WASHROOM LIGHT

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ABSTRACT

The project of automatic washroom light is being produce because to encounter the problem that we face in the world today. It have been say by someone that the world may be rise in electricity tariff rate. Today it also expected that the electricity cost of every household and building will also. There are many cases where people forgot to turn OFF the light when they exits the washroom. When this happen, the people will lack in energy saving awareness. There also a case were children involved in accidents due to lack awareness of electricity safety. So this project mainly to teach people to save more energy so it can help the earth. The project will use a component that will make the user easier in life. For example like limit switch. The function of limit switch is similar to the ordinary switch but the different is how it being use. The automatic washroom light will 1st being construct on the breadboard and in the simulation proteus. The circuit that will be test whether it can produce the real project that being decide. If the circuit have no correction to do or modifying, then it will transfer to the PCB. In the process of making this project success, the data or result will be taken every time. This is to ensure that our project get the actual output that being set by in the simulation. If there is a slight problem in the circuit, this automatic washroom light will not be a successfully project. So to overcome this problem, it only take a small action which is troubleshooting on every component and connection. Circuit testing and troubleshooting can be described as process of inspecting a problem or errors occurred when our project is carried out. This is important because it will determine whether the project become success or failure. If there is an error that happen in our circuit, it can be eliminate by doing some troubleshooting. Troubleshooting can be done by inspecting the voltage and current flow in the circuit.

CHAPTER 1

INTRODUCTION

1.1 Background in study

In today's life, electricity becomes a prior need to people as to enjoy their social activities thus they need enough electricity to carry out their activities. Lighting is very significant to people as it is important to us; day or night. Early in 2014, government had introduced new electricity tariff due to transpire Subsidy Rationalisation Programme made by the government as to stop the energy subsidies gradually. Due to increase of electrical energy production price, it is becoming more significant in conserving and saving electrical energy consumption.

Automatic control is used in various control system that it can minimize the involvement of labor works and also it can be used in saving the energy consumption. This is because the automatic control uses the technique of self-moving processes. Household is the place where a numbers of occupant live in together. There is a variety household appliances used by them such as air- conditioner, personal computer and light system. Lighting system is one of the huge usages in the household where it has been placed in every section of places especially in every room.

Through the idea of designing an automatic washroom light, it is hoped that the product will be a great way for people to save their energy consumption. The project can provide an applicable applicable for both home utilization and for commercial building purposes. The designing of the automatic washroom light comes with the application where the light could be turned on or off according to the occupancy in the washroom.

Another purpose for this project is to control and reduce energy consumption especially for home utilization. The occupant of a household of a household usually consists of a variety range of ages such as children, teenagers and adults. There are many cases where these people come out from the washroom and they forgot to turn off the light unintentionally; these cases can lead to the cause of electricity wastages at home. Thus, by having this product, it is aimed to reduce the electricity utilization as well as to save the household spending.