## DEPARTMENT OF ELECTRICAL ENGINEERING MARA UNIVERSITY OF TECHNOLOGY PENANG BRANCH

## FINAL REPORT OF DIPLOMA PROJECT

THE AUTOMATIC CURTAIN

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#### ABSTRACT

Smart Home is a design which we combines ten project into one model that we called a smart home. One of them is our project. Our project is An Automatic Curtain. As we know as, the automatic curtain was having in the market but we will design a circuit that has dual function.

In this thesis, a new circuit of automatic curtain is designed a dual function where did not have only one cycle but this circuit can use two cycle. First is clockwise and then anticlockwise. Here we designed a circuit, when the circuit or the light delay resistor accepted the sunlight the circuit will be function clockwise to pull the curtain for open the window. Then when the LDR accepted the darkness, the circuit will pull the curtain counter-clockwise for closed the window.

The proposed project will provide a more reliable and more practically device. We do some modification to our circuit to upgrade the project. We upgrades our project by designing a Programmable Integrated Circuit, PIC which control all circuit such as timer, the detecting the sunlight or darkness and to control the motor.

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### **CHAPTER 1**

### **INTRODUCTION**

#### 1.1 Background

The automatic curtain is a device that operates automatically close/open the circuit depends on the light at a particular period according to the switch that has been set-up earlier. It is constructed to meet the purpose of pulling the curtain opened during the day as well as closing it in the night. It works completely depends on the availability or absence of light.

The automatic curtain is constructed to meet the purpose of pulling the curtain opened during the day as well as closing it in the night, it works completely depends on the availability or absence of light.

The user will no longer need to pull the curtain opened or closed herself/himself. All they have to do is just let it operates all by itself as long as the battery is able to supply power sufficiently. Otherwise, replace by other new battery.