

# BLUETOOTH LIGHT CONTROL VIA MOBILE PHONE

AKID BIN AZMAN  
HARRIS IKHWAN BIN HUSMAN

A project report submitted to the Faculty of Electrical Engineering,  
Universiti Teknologi MARA in partial fulfillment of the requirements for the award  
of Diploma of Electrical Engineering.

FACULTY OF ELECTRICAL ENGINEERING  
UNIVERSITI TEKNOLOGI MARA  
MALAYSIA

SEPTEMBER 2015

## **ACKNOWLEDGEMENT**

First and foremost, we would like to take this opportunity to express our deepest grateful appreciation to all wonderful people have continuously giving me support, advices, knowledge, understanding and contribution towards the successful completion of this final year project 2.

Especially, I wish to express our sincere appreciation to our supervisor, Sir Rozi bin Rifin for encouragement, guidance, critics, advices, suggestion and motivation on developing this project.

For our sincere appreciation extends to friends especially member of faculty electrical engineering who have helped us and shared brilliant ideas throughout the project.

Last but not least, we would like to express my sincerest gratitude and deepest thankfulness to our parents Husman bin Husin, Azman bin Basir, Anis Haniza binti Ahmad and Noor Sakinah binti Wahab for their love, support and encouragement that they had given to us.

## **ABSTRACT**

In this project is development of Bluetooth light control via mobile phone. The development of digital information has led the rapid change in human lifestyle. The use of electricity is very important as one of the main source of energy that is vital in today modern life. The objective is to make the light much easier to switch on or off and develop virtual lamp application for mobile phone. So, this project is fine combination of Android mobile technology and Arduino software. User can control lamp using android mobile. An application should be installed on android mobile phone to control lamp. User send command by using application. Wireless controlling technique by using Bluetooth technology. This project consists of a Bluetooth receiver. This Bluetooth device connected to the Arduino software which has a decoder. This decoder sends code for respective command sent by user. Then the lamp connected to the circuit will turn on or off depending on the command given. The project mainly consists of android mobile, Bluetooth receiver unit, and Arduino software as microcontroller. From this project student gain new knowledge of the way to make advance technology. This project focuses more on the light control based on its purpose to help minimize energy of the elderly and handicap. This project using the low cost that provide with application and Bluetooth connection between the home appliances. By using the smartphone it can control from certain distance. Other than that, research has been made already before proceed to make this device. Before the Bluetooth connection were made, there are switching the light by using text message. In era 2015, as can be seen everywhere and everyone use smartphone, everyone having their own smartphone. Why do waste our time moving to a place just to switch on or off the lamp while we can use smartphone as light controller.

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Background Study**

Home automation deals with the specific automation requirements of homes and in the application of automation techniques for the comfort and security of its residents. This can include controlling the lights, climate control, control of doors and windows, security and surveillance systems. There are currently several products on the market that allow home owners to control these devices. This is normally controlled by a handheld remote that communicates with the devices using a wireless network or a wired network. These types of devices require a unique and dedicated device to communicate with the automated products. From this the development of remote controller has been improve to the Bluetooth light control via mobile phone. This project requires a lot of information regarding the process that involves in existing Bluetooth light control via mobile phone. After analysis has been made on this project the implement of software and hardware detect to create this project. Bluetooth light control via mobile phone that eases user's control over their home appliances and further improves their lifestyle. This