

SWITCH CLAP CIRCUIT

MUHAMMAD SHAHRUL SYAZLEE BIN ALBAKRI

MUHAMMAD FAHMI FAIZ BIN SHAHRIL

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

APPROVAL SHEET

This project report attached here to, entitle '*Switch clap circuit*' by Muhammad Shahrul Syazlee bin Albakri, No.ID:2013878906 and Muhammad Fahmi Faiz bin Mohd Shahril, No.ID:2013253444 in partial fulfillment of the requirements for the Diploma of Electrical Engineering is hereby accepted.

This thesis is approved by:

Date:


.....


.....

Miss Noor Fadzilah Binti Razali
Project Supervisor
Faculty of Electrical Engineering
Universiti Teknologi Mara

ACKNOWLEDGMENT

First of all, we give all thanks to Allah for giving us opportunity to complete our project proposal and finishing all the simulation and coding that lead us to completing the project. We also give a big thanks to our supervisor Miss Fadzilah for her support and guidance in completing our project and make the project is on track and satisfies all the project requirements.

Besides that, we would like to express our gratitude to our lectures for their kindness for sharing some of the project ideas and advices about our project and how to complete our project. Even though that not many lecturers involve in this project but they never give up and selfish to sharing their ideas and all the tips on how to get better and quality project.

Lastly, we would like to give our thanks to all friends and family that never stop giving advices and supporting us to complete our project and some of them give and teach some basic about coding that encourages us to finish our project.

ABSTRACT

The main purpose we developed clap switch circuit is because to ease the people who is disable in doing thing on their own. Not forget to old people and children because sometimes they need help to open certain switch that maybe too far for them to reach. This switch circuit can be applied in especially in home appliances and made up to open or close switch by only clap user hand. This give advantage to old children and for disable people to make them independent because they do not need to ask other people help. The clap switch circuit let the users control home appliances by only using their hand.

We also make an improvement in our project by using servo. With this servo, it will be connected to the door in the room. With helping this servo, it will auto open the door when we clap our hand. Our clap switch circuit will make sure the door is opened after two claps and it will closed after 2 clap is detected by the sound sensor. This opportunity are given for the children because some door in certain house are hard to open by the children because they can reach the door. With this switch clap are clearly and effectively for children to open the door at any time.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	SUPERVISOR'S APPROVAL	iii
	CANDIDATE DECLARATION	iv
	ACKNOWLEDGMENT	v
	ABSTRACT	vi
	TABLE OF CONTENTS	vii
	LIST OF FIGURE	ix
	LIST OF TABLES	xi
1	INTRODUCTION	
	1.1 Background Study	1
	1.2 Problem Statement	1
	1.3 Objectives	2
	1.4 Scope of Study	2
	1.5 Project Contribution	2
2	LITERATURE VIEW	
	2.1 Introduction	3
	2.2 Literature View	3
	2.2.1 Using Arduino	4
	2.2.2 3 Way clap switch	8
	2.2.3 Using Wheatstone	10
	2.2.4 Using Latching	11
	2.2.5 9 Way clap switch	12