



اُونِيُوَرَسِيْتِي تِي كُونُو لُو كِي مَارَا
UNIVERSITI
TEKNOLOGI
MARA

ELECTRONIC TOILET

WAN MOHAMMAD FAISAL BIN WAN MOHAMMED

ZULHUSNI BIN ROSLEE

PUTERI IZYAN IZZATI BINTI HASSAN

A project report submitted in partial fulfillment of the requirements for the award of the degree of Diploma of Electrical Engineering (Electronics / Telecommunications / Instrumentations / Computer)

Faculty of Electrical Engineering
Universiti Teknologi MARA


MARCH 2013

“I declare that this report entitled “*Electronic Toilet*” is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.”

Signature : 


Name : WAN MOHAMMAD FAISAL BIN WAN MOHAMMED

Date : 7/4/2013

Signature : 

Name : ZULHUSNI BIN ROSLEE

Date : 7/4/2013

Signature : 

Name : PUTERI IZYAN IZZATI BINTI HASSAN

Date : 7/4/2013

ACKNOWLEDGEMENT

In the name of ALLAH S.W.T, Most gracious and Most merciful

Before proceeding further, first of all we all felt very grateful and thankful to our Creator, ALLAH S.W.T for showing us the ways and helping us to complete our final year project although we were almost failed completing this project due to all the obstacles that we had gone through. We were no finished saying thank you just like that, apart from that we also want to show our gratitude by also saying thank you very much to those people and each of every person that involved in making this project a great success. Those people that involved in our project are Sir Mohd Saiful Najib Bin Ismail @ Marzuki, our very considerate supervisor, who had guided us into successful project. Without help from him, we cannot proceed until this stage. Madame Siti Aishah Binti Che Kar, our Final Year Project coordinator was also a big contributor throughout this project successfulness.

Furthermore, we also want to take this opportunity by showing our gratitude towards our parents who were endlessly supporting us and giving us strength and courage to continue our project until the end. Without them, we may not be able to complete our task in time and requirements.

Our acknowledgment continued by thanking all the lectures and staff from Faculty of Electrical Engineering that involved directly and indirectly in this project. Their cooperation and encouragement help us during the progress of this project.

Last but not least, special thanks to our friends whether from this faculty or not, who is willing to help us during this project. By sharing ideas with our friends, we can develop and generate more ways to overcome most of the problems that we encountered throughout the time given to us that we required to complete this project. Without the help from all of the people we mentioned before, we cannot achieve what we had achieved during the Final exhibition. Besides that, not to forget, we want to show our last gratitude by saying thank you to ourselves and other group members that patiently giving cooperation to each other. There is no success without teamwork in this group.

ABSTRACT

This 'Electronic Toilet' has its own function to control the cleanliness inside the toilet especially public toilet. Some of the circuit that involve are motion detector circuit, water level circuit and timer circuit. Other stuff that is used for this project is solenoid.

In this circuit, motion detector circuit is the main circuit for this project. Its function is to sense movement inside the toilet to activate the whole circuit so that all of the circuit would functional.

Moreover, water level circuit is used to detect the level of water when it reaches the level and the door will automatically open.

Lastly, timer is used to control the machine so that it would stop and start the machine. In this project, timer is connected to the sensor. So that when the sensor detects motion, light and fan would switch ON. This timer circuit would make the light and fan to switch ON much longer within the given time.

While solenoid is use for the door, it would act as magnet. So that when the door is not open it would close.

TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE
	DECLARATION	ii
	ACKNOWLEDGEMENTS	iii
	ABSTRACT	iv
	ABSTRAK	v
	TABLE OF CONTENTS	vi
	LIST OF FIGURES	viii
	LIST OF SYMBOLS	ix
	LIST OF ABBREVIATIONS	x
	LIST OF APPENDIXES	xi
1	INTRODUCTION	
	1.0 Introduction	
	1.1 Objective	2
	1.2 Scope	3
	1.3 Problem Statement	4
2	LITERATURE REVIEW	
	2.1 Basic Components	
	1. IC 555	5-7
	2. LM 78L05	8
	3. SPDT Relay	9