

## SOLAR PET FEEDER

SHAIKH MUHAMMAD AZIM BIN SHAIKH BADULLAH

AZMI ZULHASNI BIN NOR KHAIRI AZMI

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**

Alhamdulillah, praise to Allah for giving us the chance to gain our experience and professional skills from this final year project which is usually called as FYP. This final year project is meant a lot for us so that we could see how an electronic project does actually. Would like to thank the Universiti Teknologi Mara (UiTM) for having this final year project to us to improve our practical and skills for the future ahead.

Next, would like to thank the lecturers who have been helping us before and until the end of the final year project end. Lecturers have helped us on the form and flow project that would be present for the final presentation. They also giving us advise so that we could make a suitable and correct project for this final year project. With the help of the lecturers the project we could done correctly and properly by according to the flow.

Besides that, we also would like to thank our parents and siblings for support us from the start of the final year project until the end of it. They always had been there when we needed them. They have been motivating us to always focus and patient while doing the project.

Furthermore, would like to thank my friends which have helped us to make a correction while doing the report and hardware which is for the final presentation. We had made a good teamwork to complete all of the work and settle it before the deadline.

## **ABSTRACT**

This project is to state the solar pet feeder that could give the owner pets food and water automatically. The purpose of this project is that when the owner is travel or working which did not have time for spent time and giving food for the pets so this project could help from pets gets some food to eat. This project is made to fulfill our objectives to construct an automatic indicator by using a microcontroller, to serve an efficient away of feeding pet especially when owner not around and finally is to understand the simulation and determine faults if any.

The microcontroller, servo motor, and sensor motion detector is the main component of this project which will be discussed thoroughly in the next chapter. Besides that, this project is very helpful especially to the owner which so busy even did not have time to give its pet food and it is very effectives

## TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	<b>APPROVAL SHEET</b>	iii
	<b>DECLARATION OF ORIGINAL WORK</b>	iv
	<b>ACKNOWLEDGEMENTS</b>	v
	<b>ABSTRACT</b>	vi
	<b>TABLE OF CONTENTS</b>	vii-viii
	<b>LIST OF FIGURES</b>	ix-x
	<b>LIST OF TABLES</b>	x1
<b>1</b>	<b>INTRODUCTION</b>	
	1.1 Introduction	1
	1.2 Background study	1
	1.3 Problem statement	2
	1.4 Objective	2

	1.5	Scope of study	2
	1.6	Project contribution	3
<b>2</b>		<b>LITERATURE REVIEW</b>	4-8
<b>3</b>		<b>METHODOLOGY</b>	9-15
	3.1	Block diagram	9-10
	3.2	Flow chart	11
	3.3	Component use	13-15
<b>4</b>		<b>RESULTS AND DISCUSSION</b>	16-35
	4.1	Results	16-22
	4.1.1	Schematic diagram	16-17
	4.1.2	Hardware	18
	4.1.3	Table of result	19-20
	4.1.4	Graph of result	21-22
	4.2	Discussion	23-35
<b>5</b>		<b>CONCLUSION</b>	36-37
<b>6</b>		<b>PROJECT PLANNING</b>	38
		<b>REFERENCE</b>	39-40
		<b>APPENDIX A</b>	41-43