TECHNO WATERING SYSTEM

SITI NUR AIN BINTI NAZRI

NUR FATIN NADHIRAH BINTI NORAZLAN

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

In the name of Allah the most Gracious and the most Merciful. May His blessing be upon the Prophet Muhammad s.a.w.

Our gratitude goes to all individual and group of people that involved directly and indirectly in this project especially to our supervisor Miss Mastura Binti Omar for her patient, guidance, opinions and valuable advice. Without her, we may not be able to complete this project properly.

And lastly we would like to thank our family for their support and encouragement throughout the project progression

ABSTRACT

This project is about the technology that use to upgrade the farming industry for produce and also improve the quality of the product. This is because most of the gardener uses manual system to water the plant and the system is inefficient because when manually watering the plant, the possibility of over watering is high. By using this project the problem of cost and worker can be solve.This is because the system automatically function when the button is on, the temperature sensor measure the environment and soil moisture sensor detect the condition of the soil, it output will be show on LCD display. LED will turn red when the probe do not detect moisture in the soil while the buzzer on.Besides, the dc servo motor and water pump will on to spray the water. But If the the moisture more than 50%, LED turn green and end the system.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND STUDY

Nowadays Malaysia had a crisis with the changing of weather and environment, which will bring effect to the geograpical structure. On 2014, Malaysia had the problem with high temperature. Due of this problem the quantity and quality of the plant become decrease and it effect the environment temperature. As the solution, many effort have to be done to control and overcome this situation.

The most important element in life is water. Without it,human cannot survive and from the observation, most of the gardener uses manual system to water their plant in the garden. This system is inefficient because when manually watering the plant, the possibility of over watering is high. Some plant can drown due excessive of water supply. Techno watering system can be the answer to this problem where automatic watering system and soil moisture detector are apply in this system. Sensors such as temperature sensor is also used to control the watering system for the farm.

A good plants can transpire a lot of water, this will increase the humidity. But, a high relative humidity where it 80% above should be avoided because it can increase the incidence of disease and reduce plant transpiration. Since the relative humidity alone does not tell us anything about the absolute water holding capacity of