## UNIVERSITI TEKNOLOGI MARA

# DESIGN AND FABRICATION OF INFRARED AUTO ON/OFF PET WATER FOUNTAIN

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#### **ABSTRACT**

Generally, pet owners will use bowls to feed and give water to the pets for their daily needs. However, some of the cat owners are busy with work life which eventually do not have the time to feed the pets, especially in supplying drinking water. This is very dangerous as the water will get contaminated and affect the pet's health. Due to these reasons, this project will propose to design and fabricate a pet water fountain with an Infrared Sensor which has an Auto On-Off switch that will limit water output automatically. It is very important to limit and provide clean water for pets to prevent the pets from getting various types of diseases. When the pet comes within a certain distance of this auto water fountain, a fountain of water will erupt, and it will turn off and on again when there is no movement. I hope that this design can be helpful to solve the problems for the pet owner's problems in giving their pets drinking water.

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#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background of Study

Water is one of the basic needs for a living thing. Besides humans, animals also need water to survive. Water is needed to maintain pets' bodies and make pets' bodies function properly. Usually pet owners will provide water in an open container. This contaminates the drinking water, has a negative health impact, and causes other health issues. It is important to keep the water provided clean all the time. Furthermore, clean water can keep pets healthy and also hydrated. The risk of dirty water includes various diseases, high medical costs, and animal mortality rates in our country. Additionally, water contain unsafe levels of contaminants can cause disease which can result in death. Based on the factors above, a replacement for the pet's water bowl is needed.

#### 1.2 Problem Statement

Most pet owners work and have no time to fill or give water to pets with the busyness of daily work or go out on vacation for a long period of time. With the presence of this product, the pet's owner has not to worry about leaving pets while not at home.

#### 1.3 Objectives

The main objectives of this project are:

- a) To design an Auto on/off pet water fountain to provide access water for the pets.
- b) To fabricate a unit of Auto on/off pet water fountain.

#### 1.4 Scope of Study

The scope of study for this project are: