AUTOMATIC CAT FEEDER AND WATERER

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In the most name of ALLAH S.W.T
Most Gracious Most Merciful

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ABSTRACT

This paper presents the design of an Automatic Cat Feeder and Waterer (ACFW) using PIC microcontroller. This work covers both software and hardware designs which software being more important. The ACFW is divided into three part i.e. the input devices, microcontroller, and output device. The input consists of push buttons switches and level sensor which interact with the PIC to determine the feeding and watering cycle. The outputs are water and pallet dispenser which are controlled using solenoids. Small LCD display is included for ease of operation. The system automatically provides food and water for cat.

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CHAPTER 1

INTRODUCTION

1.1   BACKGROUND

Pet owners in multi-pet households often find it difficult to ensure that each of their pets eats an adequate, but not excessive, amount of food each day. In addition, in those households where less than all of the pets are on a special diet, and/or where a number of the pets are on different special diets, pet owners must often resort to monitored feedings to ensure that each pet eats only the food which is intended for that pet. Monitored feedings are not only inconvenient and time consuming; they can often lead to behavioral problems in the pet, such as anorexia and competitive eating syndrome.

Cats are considered one of the most popular pet. Free feeding is a popular option with many cat owners. Typically, a bowl of dry food or water is left available at all times and the cat eats on its own schedule. Although this kind of feeding, incur no cost at all but there are several drawbacks namely feed wastage, amount of feed and water is not correct, feed contamination and deterioration and need to replenish.

A feeder designed to store and dispenses common amount for both food and fresh water when the bowl is empty may be a good choice that can be used by all pet owners.