



**SMART ELECTRONIC PET CAGE**

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## **ABSTRACT**

The construction of this invention is intended to produce a smart electronic pet cage which is have the system automatically refill the drinking water for pet using ic555 timer. We have implements the water level controller circuit to succeed this construction. It is the main controller which is placed in the pet cage. The objective of this system is to solve the problems that occur as factor pet drinking that are not systematically and create a tool which is more practical and systematic. Development of this project involves electronics, electrical and hardware working. To control the water level, electronic device such as ic555 timer, relay to trigger the motor pump, probe as the sensor and LED as indicator of the water level in the drinking bottle of pets. This system will be able to help problems faced by the people who adopt a pet in managing it. Pet adopter does not need to worry about drinking water of their pets when have implementation this system at the pet cage. The results of test conducted, this project has been functioning well and has achieved the objectives of the construction of this invention. Thus, this project is able in solving some of the problems faced nowadays by pet adopter.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background of Study

This smart electronic pet cage is a smart cage that is designed to replace a conventional pet cage that has a lot of weakness. We must manage our pet cage regularly such as refilling the water and feeding the pet. In order to solve this problem, this smart electronic pet cage is fully featured with automatic refilling water system.

This projects we decide to do because of we want to attract more people outside there to adopt a pets whatever they like to have. They will success to take care of their pets by using this smart electronic pet cage and did not have to worry about it anymore.

A water level controller system is commonly used in many process control applications. Water enter the container (bottle) using a pump, and it may be pumped continuously to the bottle until it reaches certain set point(level), and it can also leave the bottle after undergone some processing within the bottle . It is required for the system to control the rate of water delivered by the pump so that the level of water within the bottle is at desired level.

The schematic of a typical water level controller system is shown in Figure 1.1. The system consist of a container, a water pump, and a level sensor (probe).