UNIVERSITI TEKNOLOGI MARA

DESIGN AND FABRICATION OF AUTOMATIC CAT FEEDER

MUHAMMAD HISYAMUDDIN BIN MUHAMMAD RAZIF
(2021884814)

Dissertation submitted in partial fulfilment
of the requirements for the degree of
Diploma in Mechanical Engineering

College of Engineering

January 2024

ABSTRACT

This Automatic Cat Feeder was created to make taking care of pets easier. The primary issue was that owners were not home to give their pets enough food, and the cat food would always get stuck in the space between the tank and the container. Pet owners can use a smartphone app to customize feeding food with the Automatic Cat Feeder. Food getting stuck in automatic cat feeders is still an issue, despite the variety of designs available. Food will not become trapped between the tank and the container with this automatic cat feeder. We're using an automatic system in this project, which the user can operate from a distance with a phone. This project's primary component is the ESP8266, which is related to other components such as Transmission Control Protocol/Internet Protocol (TCP/IP) network software and a WiFi microchip. The cat feeder and phone are typically connected via an ESP8266. The food will drop when the owner simply presses the "FOOD" button on the phone. Thus, flexible control is possible with the Automatic Cat Feeder.

ACKNOWLEDGEMENT

First, I want to express my gratitude to God for providing me with the chance to pursue my diploma and for helping me to successfully finish this difficult and drawn-out process. I would like to express my appreciation to my supervisor, Madam Norhashidah Binti Manap. She gave me great advice that improved my learning and greatly assisted me in finishing this final year project.

Next, I would like to express my gratitude to my amazing family—my parents in particular. They never stopped motivating me to stick with it and complete my senior year project. Their expenditure on the parts for my project was also substantial.

Ultimately, I'm willing to take any chances because I have a long way to go, and I hope that this energy and behaviour will continue. I dedicate this dissertation to my parents for their vision and unwavering commitment to my education. I dedicate this small victory to you both. Thank God.

TABLE OF CONTENTS