UNIVERSITI TEKNOLOGI MARA

CAWANGAN PULAU PINANG

OUTLET ENTRANCE S.O.P (STANDARD OPERATING PROCEDURE) SYSTEM

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DIPLOMA IN ELECTRICAL ENGINEERING

Feb 2022

This report is submitted to the College of Engineering,

Universiti Teknologi MARA.

In partial fulfilment of the requirement for the award of Diploma in Electrical Engineering.

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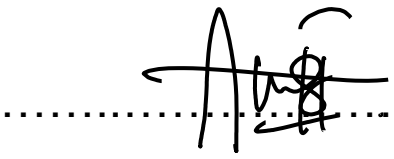

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Date: 18/02/2022

ABSTRACT

COVID pandemic has influenced human life in various sectors. Various attempts were taken to reduce the spread of the virus. Most of the available hand sanitizers and doors do not operate automatically. It leads to the spread of viruses between customers. This project aims to make a better system where the temperature sensor will detect the customer's temperature. If the temperature is greater than 37.5C, hand sanitizer will not pump and the door will remain closed. If the temperature is lower than 37.5C and the IR sensor detects the presence of the hand, it will pump the hand sanitizer and open the door before close it back. On the other hand, the system is also equipped with hand sanitizer's level notifications. When the hand sanitizer is lower than 15cm, the GSM module will notify the janitor that the hand sanitizer level is low. The system consists of infrared sensor, ultrasonic sensor, temperature sensor and buzzer, servo motors, GSM and Arduino UNO R3 were designed and simulated by using Proteus. Prior to completion of prototype on a strip board, the constructed system is tested through a series of prototype's testing and the average accuracy is 100% and average time taken to complete the process is 10.53. The Entrance SOP system has many advantages and its auto features deemed to minimize the risk of COVID-19 spread.

ACKNOWLEDGEMENTS

First of all, Alhamdulillah and praise to Allah S.W.T for showing us the kindness and attention as well as strength to complete this project which is the title is "Outlet Entrance S.O.P (Standard Operating Procedure) System".

Moreover, we are deeply thankful to our supervisor Miss Anis Diyana Rosli for being supportive since the start of this project. We are sincerely grateful for her time and patience in guiding us with her intellectual input, advice and support. Her determination in managing our project very well to ensure everything goes according to schedule smoothly. Thank you for being part of this learning process and for always encouraging us to do better.

In addition, we would like to thank the EEE368 coordinators, namely Puan Aida and Puan Fadzilah, who are helping us in various aspects and have explained to us about this course which is EEE368.

Last but not least, we would also like to take this opportunity to express our gratitude to our family for their moral support during our project or study and to our friends, for always being by our side, and for their willingness to spend some time discussing how to complete this study. Above all, we wish everyone happiness and prosperity in their life. May Allah bless our lives with loved ones in this world and the hereafter.

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