# UNIVERSITI TEKNOLOGI MARA

# CHILD TRACKER WITH GPS AND IOT NOTIFICATION

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Thesis submitted in fulfillment of the requirements for the degree of **Diploma of Electrical Engineering** 

Centre for Electrical Engineering Studies College of Engineering

FEB 2022

#### ACKNOWLEDGEMENT

### "In the Name of ALLAH, the Most Gracious and the Most Merciful"

Before anything else, I want to express my gratitude to Allah for His steady guidance during the composition of my thesis. I would like to express my sincere appreciation to my hardworking supervisor, Dr. Khairul Kamarudin bin Hasan, for his companionship, advice, and support. I have gained a great deal of knowledge, and without his help, none of it would have been possible.

I also would like to thank all lectures in the Faculty of Electrical Engineering for co-operation, assistance, and knowledge-sharing during the project. On the other hand, special thanks to my father, Ungku Shaharudin bin Ungku Chiek Abd. Jamal. I am eternally grateful for all his motivation and support. All of the information supplied will be really useful to me in completing this great and usefull project

Finally, I would also like to thank all my colleague, especially this one particular person who helped me through fixing my project and come out with the best idea, Muhammad Syahrul Nizam bin Abdl Manah, for his contribution in always giving me moral support throughout my project development period. I express my gratitude to my family members for their unwavering love, support, comfort, encouragement, and direction along this journey. I will always be aware of the emotions and work I have invested in this effort. Despite the setbacks, disappointments, and successes, I am even more appreciative and glad to show my creation, "Child Tracker with GPS IoT Notification" to you.

#### ABSTRACT

Child safety is a prevalent global concern, particularly in relation to risks such as abduction and missing children. The primary objective of this project is to establish effective communication between parents and children through a device equipped with a GPS tracker, thereby enabling the tracking of the child's location. This device leverages the capabilities of a WIFI module and IoT technology to facilitate seamless connectivity between parents and children. Through the implementation of the IoTbased Child Tracker using Proteus and the Telegram platform, parents can issue commands to a Telegram bot, eliciting real-time coordinates of the child and activating a buzzer at the child's end to alert the surrounding environment. Even when they aren't there in person, parents can make sure their kids are secure by occasionally checking the data kept on the gadget. Other than that, the collected data is securely stored in a cloud-based system, allowing for the maintenance of comprehensive records for future reference. Additionally, the device also has sensors that, in reaction to predetermined actions, activate automatically, enhancing its monitoring capabilities.

#### Keywords: - Child Safety, WIFI module, IoT, GPS tracking

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### **CHAPTER 1**

#### **INTRODUCTION**

This chapter will provide basic information on how the idea for this project came to be. Background research, objectives, problem statement, scope of work, project significant or contribution, and summary are all included in this chapter.

#### **1.1 Introduction**

In a world with an unpredictable matter and filled with uncertainties, the future is still beyond our ability to predict or control some situations. We are impotent to determine what may straighten out in the next few seconds of our lives. Equivalently, we cannot foresee the precise moment when we might become the target of nefarious individuals. However, we have the ability to take precautions to lessen these hazards. For conscientious parents, their enormous concern must include the well-being andsafety of their children. From the time a kid born and enters this world, parents embark on a journey of safeguarding them by nurturing and protection. Children hold a special place in one's life, enriching it with joy and purpose. At the same time, parents cannot be recurrently present to supervise their children's every action and move. The disadvantage of the capability to witness their child's actions or accurately anticipate their future experiences, parents find themselves plagued with worry about their child's present hazard every passing second. Children in today's global society are more vulnerable to outside influences, especially from their peer group, and might become the victims of deception or kidnapping by strangers. It is in response to this pressing