**Universiti Teknologi MARA**

**FoodSave: Food Waste Reduction Platform**

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**Thesis submitted in fulfillment of the requirements for Bachelor of Computer Science (Hons.) Netcentric Computing College of Computing, Informatics and Mathematics**

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# SUPERVISOR’S APPROVAL

**WASPADA: CITY TRACK AND LOCATE SAFETY APP USING GEOLOCATION**

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This thesis was prepared under the direction of thesis supervisor, Sir Mohd Hafifi Bin Mohd Supir. It was submitted to the College of Computing, Informatics and Mathematics and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Science (Hons) Netcentric Computing.

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………………………………

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Thesis Supervisor

August 31, 2023

**DECLARATION**

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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**CHAPTER 1**

**INTRODUCTION**

# 1.1 Background of Study

# 1.2 Problem Statement

## 1.2.1 Food Waste and Its Environmental Impact in Malaysia

Food waste is a pervasive issue in Malaysia with extensive environmental repercussions. The discarded food generates greenhouse gas emissions, contributing to climate change, and depletes vital resources in its production and distribution. This wastage is ecologically unsustainable within the Malaysian context and calls for immediate mitigation. More than 50% of Malaysian wasted food daily. Implementing sustainable practices and technologies in food production and distribution, promoting food waste reduction at the consumer level through awareness and education, and supporting food rescue and donation initiatives to ensure that surplus food is redirected to those in need**.**

## 1.2.2 Food Insecurity and Hunger in Malaysia

Concurrently, millions of individuals, including vulnerable populations in Malaysia, struggle with food insecurity and hunger. In 2019, despite experiencing stable global food production, the FAO projected that 687.8 million people (8.9%) or one in every ten people in the world are undernourished, while 750 million people (9.7%) worldwide were experiencing severe food insecurity. The solution is to developing and supporting community-based initiatives to provide access to affordable and nutritious food, investing in local agriculture and food production, and creating efficient distribution channels to ensure that surplus food reaches individuals and communities facing food insecurity.

## 1.2.3 Lack of Geolocation-Based Food Availability Information

The challenge is to find surplus food and share it efficiently with those in need, but we currently lack a simple system to do this in real-time, resulting in missed opportunities to prevent waste and reduce hunger. Many businesses and individuals have extra food to give, but there's no practical way to connect with them immediately. This leads to food waste and ongoing hunger issues. A solution is to create a geolocation-based platform where food donors easily list their surplus food, which can be instantly shared with those in need. This system not only helps locate surplus food but also reduces waste, fights hunger, and encourages community involvement through feedback and reviews.

# 1.3 Objectives

1. To design and develop FoodSaver:Food Waste Reduction Platform using Geolocation.

1. To evaluate the effectiveness of FoodSaver:Food Waste Reduction Platform using

# 1.4 Project scope

# 1.5 Project Significance

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# 1.6 Summary

# REFERENCES