# Universiti Teknologi MARA

## Home Service Finder with Location-Based Matching Techniques

Aina Amanina Binti Azman

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### **ABSTRACT**

The service sector contributes a significant number of Malaysia's gross domestic product, which shows the relevance of developing an e-service platform. This project focuses on creating a mobile home service finder application specifically for use in Machang, Kelantan. The current approach relies on verbal communication to find home-related services, is unreliable as it lacks transparency in terms of pricing. Therefore, this project aims to bridge the gap between customers who seek home services with local service providers by developing a mobile-based Home Service Finder application, supported by a web-based admin panel to provide comprehensive details of the service which allows customers to easily browse available services, compare prices, and select the most suitable service providers based on their preferences. Key features include location-based matching, which detects the user's location using GPS to find a service provider nearby. Dynamic pricing is also implemented which supports multiple pricing types such as hourly rate, flat rate, per unit, and per area. Next, the waterfall methodology is used to develop this mobile application as it provides a straightforward and sequential process. The user requirements are defined. Then, the interface along with the database is designed and developed thoroughly to ensure the mobile application can run smoothly. For testing, usability testing and user acceptance test is conducted to ensure this project is functional and meets the user's needs. By addressing the increasing need for home services in Machang, this project seeks to contribute to the local economy and improve the transparency of service delivery, enhancing the quality of life for customers in the area. The home service finder mobile application is expected to provide the transparency market for home services in Machang. In the future, this platform could be improved by adding more service categories beyond the present four, offering support for iOS devices, incorporating real-time communication between users and providers, and allowing offline access for areas with limited connectivity. These enhancements would enhance the system's inclusivity, adaptability, and scalability for wider use throughout Malaysia.

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### **CHAPTER 1**

### INTRODUCTION

This chapter will discuss the background of the study related to Home Service Finder in Machang. It also includes the problem statement to explain the concerns of the customers and service providers, research questions, research objectives, scope, significance, expected outcome, and project limitations.

### 1.1 Background

The service sector is a part of the sector known as tertiary sector, which provides services to individuals or businesses. According to Kamarudin and Shamsudin (2021), examples of this sector include housekeeping, maintenance, repairs, and lawn mower services. This service sector is essential in contributing to Malaysia's economic growth. According to Statista (2024), based on Figure 1.1, the data illustrates the contribution of various economic sectors to the gross domestic product (GDP) in Malaysia between 2012 and 2022. In 2022, the service sector represented 50.93 percent of Malaysia's gross domestic product, followed by industry which is 39.1 percent and agriculture is the lowest which is 8.92 percent. This highlights the importance of the service sector in Malaysia.