Universiti Teknologi MARA

Dobby2U: Laundry Services Mobile Application

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ABSTRACT

Generally, doing laundry is one of the important things for students when staying in college to get clean clothes to wear go to the class every day. By providing laundry booking and delivery services through a mobile app, can ease the difficulties of most college residence in UiTM Shah Alam that are busy with their study life doing an assignment, research, and the washing machine that provided by the college are limited and sometimes is not functioning. This project is to develop a laundry services mobile application for college residence in UiTM Shah Alam and laundry owner. The objective of this project is to identify the requirement, design, and develop the Dobby2U application. Fortunately, the limitation of this project is it not included a payment gateway as it must be made through runner using cash only. The target user of this project would be the college residences in UiTM Shah Alam who uses a mobile application to book laundry services and the laundry's owner that utilized a mobile application platform to advertise their services to students that staying at college in UiTM Shah Alam. Mobile Application Development Life Cycle (MADLC) model is the methodology used for this project. However, this project will only develop until the testing phase. This project allows the user to book laundry services through the mobile application and the laundry's owner can provide their services and can receive orders from the user and update order status through the mobile application. Thus, when the order is completed, a push notification will appear. The Global Positioning System (GPS) will be used by the user to locate the laundry store and the laundry owner can share the location with the runner and with the address runner can easily go to the location were provided by the user. This project will be using Java programming language and android studio for the app development and Firebase Realtime Database that lets users store and sync data between users in real-time. This project will benefit the college residence in UiTM Shah Alam where it helps them to get a specific application for laundry services and the laundry owners can advertise their laundry services and make more profit from this mobile application. This project should include a payment gateway and runner as the user in the Dobby2U mobile app in the future recommendation. In conclusion, Dobby2U mobile application can help college residence in UiTM Shah Alam to get laundry services.

Keywords: Laundry Services, Mobile Application, Mobile Application Development Life Cycle, Global Positioning System, Push Notification, Firebase Realtime Database.

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CHAPTER ONE

INTRODUCTION

This chapter provides the background and rationale for the study. It also gives details of the significance of privacy over the Internet, the issue and problems that led to this research.

1.1 Project Background

Laundry is an important aspect of everyday life for students. However, washing clothes by hand takes both time and effort. In their spare time, most students did laundry. The time was incredibly consistent, and if the student used the coin-inserting laundry machine, or had their laundry done in an off-campus drying cleaning store, they have to wait a long time. In general, college students want a lifestyle that can provide flexibility and convenience and also save time so that they might well spend more energy on studies. Intelligent control has been steadily increased in many laundry service platforms with the rising popularity and implementation of mobile smartphones, which have developed intelligent laundry service. With a smart mobile application as the operating platform, the self-service laundry service model is not only feasible for the public, but can also fulfil the laundry needs of college students based on their current lifestyle (Hesen & Ying, 2019).

According to high demand nowadays, we are all surrounded by numerous on-demand (Gupta et al., 2018). The working technique of the traditional washing machine specifically consists of washing, rinsing, and dehydration (Wu et al., 2020). Furthermore, the traditional system of laundry service has not been able to meet customer needs. It is now necessary to improve business laundry services to meet development requirements by improving the quality of science and