UNIVERSITI TEKNOLOGI MARA

JOMNAIK: VOLUNTEER BASED E-HAILING MOBILE APPLICATION FOR UITM SHAH ALAM

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ABSTRACT

Having efficient public transportation can make life easier and better. There are a few problems that have been identified: the long waiting time for the UiTM bus have consumed a lot of time, resulting in student in attending class late. This project aims to develop the JomNaik: Volunteer Based E-Hailing Mobile Application for UiTM Shah Alam students. There are two mobile apps that provide services, one for students to book a ride online and one a platform for the students to volunteer to be the rider. The significance of this project is to help students to move around campus without requiring any payment. The objective of this project is to identify requirements, to design and to develop JomNaik Volunteer Based E-Hailing Mobile Application. The project's scope focuses within the UiTM Shah Alam campus and the rider consists of motorcyclists, which are students who volunteer to give a ride to those in need of transportation. The methodology adopted is Mobile Application Development Life Cycle (MADLC), which is conducted from the identification phase up to the testing phase. The features and functions for this mobile apps are online booking rides, GPS to track current user location, and push notifications to notify the driver when receiving new ride requests. In addition, the booking process between the rider and passenger are paired based on gender to make the apps Muslim friendly. Furthermore, the rider and passenger can view the pickup and drop-off location weather. There are eight users that have been chosen to test the functionality of the application. The System Usability Scale has been conducted through Google Form to evaluate the usability of the application. The result of the SUS final Score is 79.06 score which is categorized as a good based SUS adjective rating. For future work, it is proposed to provide an estimated arrival time and provide a route on the map to show the direction between the pickup location and drop-off location.

Keyword: E-hailing, Volunteer based, Motorcycle based, Gender-based, Online booking, Mobile Application Development Life Cycle (MADLC), Android platform

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CHAPTER ONE INTRODUCTION

Chapter Overview

The problem statement, project aim, scope, limitation, and significance of the project are all identified in this chapter. The project background would provide readers with an overview of what this chapter is all about. Furthermore, the problem statement relates to the present problems that have been recognized as conformity to the project's requirement. Moreover, the project's goal and objectives indicated the project's target and result. Finally, the project's scope is justified, its limitations are recognized, and its importance is addressed.

1.1 Project Background

Traditionally, public transportation has been characterized as any mode of transportation that can be hired for a service charge. In other words, any mode of transportation that the general public can use. Not only does public transportation involve buses and trains, but also taxis and e-hailing services (Preston, 2020). Taxis serve as a vital mobility factor of a city's transport system. As compared to other types of public transportation (He & Shen, 2015). Although taxis offer many advantages to customers, there are still many weaknesses traditional taxis have compared to e-hailing services. Passengers must hail taxis on the side of the road in the conventional style of taxi service. As a result, taxis are often challenging to find during peak hours, bad weather, even on holidays, and passengers may be turned away by taxi drivers (Su & Fang, 2018). The advent of the internet sparked a transformation in everyday life, and it has had a significant impact on the business world. The days of physical meetings between the seller and the consumer are long gone, and business has moved online. The internet's widespread access allows us to connect from everywhere, and it has opened up new opportunities in the fields of transportation and tourism. The common man no longer has to focus on public transportation and may now pick his departure and arrival time to the desired destination (Stalmašeková, Genzorová, Čorejová, & Gašperová, 2017).