Universiti Teknologi MARA

Car Workshop Locator using GPS

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**Thesis submitted in fulfilment of the requirements
for Bachelor of Information Technology (Hons.)
Faculty of Computer and Mathematical Sciences**

December 2019

ACKNOWLEDGEMENT

Alhamdulillah, thank and praise to Allah because of His Almighty for giving me the health and wellbeing to finish this project report within the time duration give. Firstly, my special thanks go to Dr. Rogayah binti Abdul Majid for her advice, information, support, patience, and encouragement throughout completion my proposal report. Her guidance and astute supervision made me to be more erudite and well-informed about the research. I also would like to express my sincere thanks and appreciation to Dr. Aziah binti Daud for her ideas and counsel toward examining my proposal report.

My special appreciation also goes to my beloved parents, my father Zaini bin Dani and my mother   for being supportive and prays for me.

Last but not least, I would like to give my gratitude to all my friends that supporting me through the time. Finally, for those who have been involve directly and indirectly, thank you

ABSTRACT

Car workshop is a one-stop shop for all automotive repairs. Car workshop also a place if you have any questions about your car's performance, if you need advice about motoring matters, if you know that there is something wrong with your car and you need it fixed or if your vehicle is due a service. This project is developed an application to help car's user to find the nearest car workshop. myBengkel is a car workshop locator application using global positioning system (GPS) to find the nearest car workshop within Shah Alam, Selangor area. This project needs to accomplish three objectives; to identify user requirement, to design and develop myBengkel mobile application. myBengkel application focused on locating the nearest car workshop. This application limited to Shah Alam, Selangor area and for Android devices (smartphone). More than that, myBengkel application can navigate the car's user to the selected car workshop. The method of interview and observation were used for collecting the requirements of this project. The research paper and article also help to find more knowledge about this project. This project used mobile application development life cycle (MADLC) model which has identification phase, design phase, development phase, prototyping phase and testing phase. It will describe and explain about the finding on the literature review, functional and non-functional requirements and software tools used in develop the mobile application. As conclusion, this project acts as a platform to car's user to find the nearest car workshop based on car's user current location.

Keyword: car workshop, global positioning system (GPS), mobile application, android, mobile application development life cycle (MADLC)

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CHAPTER 1

INTRODUCTION OF PROJECT

This chapter provides the overview of the project and discuss about the background of study, the problem statement of this project, objectives, project scope and project significant.

1.1 Background of Study

A car workshop is a one-stop shop for all automotive repairs. With the huge number of cars on the roads, it is unsurprising that most car workshop are very busy places (autobutler, 2015). Repairing or replacing flat tyre, replacing chipped windscreens, replacing key engine parts and carrying out annual services are all part of the everyday services which car workshop offer to customers. For efficient and proper running of vehicle, it is necessary that vehicle should be properly maintained and repaired. Satisfactory repair works reasonably charges, qualified and experienced technical staff providing prompt attention and good workmanship help a car workshop to get reputed and popularize in the market (Michell, 2015). Mechanics needs to be very knowledgeable about models of cars and an in depth understanding of how they work (autobutler, 2015). Currently, people asking around to find a car workshop. They seek recommendations from those who have a similar vehicle to yours (ConsumerReport, 2017).

Mobile phones nowadays have mobile map-based application feature embedded in it. With this feature, user commonly have access to a wide range of functionality, including browsing maps, planning routes and viewing information regarding points of interest (Tonder & Wesson, 2013). More companies are finally aware of the importance of mobile applications for their business. As a result, with the increasingly sophisticated technology, mobile phones equipped with Global