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THE DEVELOPMENT OF MOBILE APPLICATION FOR TELECOMMUNICATION TOWERS

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SCHOOL OF GEOMATICS SCIENCE AND NATURAL RESOURCES

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Thesis submitted to the Universiti Teknologi MARA Malaysia
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DECLARATION

I declare that the work on this project/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). This project/dissertation is original and it is the result of my work, unless otherwise indicated or acknowledged as referenced work.

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ABSTRACT

Mobile Geographic Information System (GIS) is a fusion of modern technology and spatial data analysis which have transformed and engaged with spatial data and have developed into a vital tool for many different fields and applications. In Malaysia, proper access and management of urban utility services is very lacking. The goal of this project is to develop cutting-edge mobile applications that give users immediate access to telecommunication infrastructure information. This study will create a user-friendly mobile application for Android using cloud-based computing resources. The data will be processed and then stored in a database. The design and development of the mobile application will be made using Flutter which is a user-interface (UI) toolkit that allows you to create natively complied applications for mobile, web and desktop from a single codebase. The result shows a fully developed mobile application for telecommunication infrastructure that will contribute to benefit professionals in the field in terms of data management and decision-making and thus benefitting urban residents. A survey was conducted by 33 respondents from a surveying company. Overall, most respondents accepted that the mobile application is user-friendly and easy to use, suitable for professionals to use onsite.

Keywords: Mobile Application, Mobile Geographic Information System (GIS), Flutter, Urban, Telecommunication.

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