UNIVERSITI TEKNOLOGI MARA

DESIGNING AND DEVELOPING MOBILE APPLICATION FOR COLLEGE RESIDENT

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STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Currently, UiTM Perlis Branch is using paper – based procedure to record resident attendances to university activity. Unfortunately, some problems occurs while residents using the procedures which are coupon forgery and thieving activity and it is time consuming in managing the record. The purpose of this study was to design and develop activity management mobile application for college residents. The mobile application will be integrated with Near Field Communication (NFC) technology so that residents can record their attendance with ease. There were three objectives for this study which were (1) to design a mobile application that has the ability to record activities that residents joined using NFC tags, (2) to develop a mobile application that can make use of NFC tags to record college resident attendance and (3) to evaluate an activity management application for college resident using User Acceptance Test. Waterfall Model will be used as the methodology for this study. However, only four phases will be involved which are requirement gathering and analysis, system design, implementation and testing. Design of the application will be done in Justinmind. The application will be develop by using Android Studio and all of the data will be stored in Google Firebase Realtime Database. For testing phase, a set of questionnaire was given out to thirty people after they had used the developed application. There were five sections in the questionnaire which are compatibility, content, navigation, interface design and general feedback section. Based on the responses given, most of the respondents agreed that the application had achieved its purposes on recording resident attendances to university activity. Based on the result, the application was believed to have huge impact for both students and staffs of UiTM Perlis Branch.

Keywords: Android application, RFID, NFC, college resident

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