

UNIVERSITI TEKNOLOGI MARA

**ALERT NOTIFICATION SERVICE
(ANS) ON EVENT FOR UITM KJM**

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STUDENT DECLARATION

I certify that this report and the project to which it refers are 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

Alert Notification Service (ANS) on event helps user from UiTM KJM to know events by notifying through their mobile device. With the era of technology of internet, notification alert is need to alert user about surrounding events that is happening in the campus. The objective of this project is to design push notification alert using Firebase Cloud Messaging, to develop Android application that can support push notification from Firebase Cloud Messaging and to evaluate functionality testing and statistical testing on latency of efficiency on event notification for user. This objective made due to the problems of students and lecturers still receiving event alerts manually. The scope of this project is where UiTM KJM was chose as place to implement this project for students and lecturers by implementing Firebase Cloud Messaging technology via mobile application to push notification to device. It also gives the significance of Mobile Application, the technique of push technology and comparison between current mobile push technologies. The method used for the project is focus on Android operating system implementing REST API for basic function of this mobile application. Java language was used for development and for push notification, Firebase Cloud Messaging is implement in this project. Several surveys has been done to students related to events in UiTM KJM and how they received alert regarding events. Two tests has been done to which are functionality testing and statistical testing on latency performance. Based on results of statistical testing on latency, average for Maxis is 2.41 seconds, for Digi is 2.43 seconds and UMobile is 2.11 seconds. This shows that carrier for UMobile received fastest notification between Maxis and Digi. Overall average for latency performance is 2.32 seconds. From the tests and analysis that have been done, it shows that the result is promising for the idea of Alert Notification Service (ANS) on event for UiTM KJM.

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