

Universiti Teknologi MARA

**Student Assistance Application (SAA)
based on User Availability and Distance**

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SUPERVISOR APPROVAL

STUDENT ASSISTANCE APPLICATION (SAA) BASED ON USER AVAILABILITY AND DISTANCE

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JULY 24, 2017

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

Emergency or also can be known as urgent need situation can be define as an urgent situation that require assistance to overcome it and nowadays mostly assistance delivered were managed by technology advancement. The problem arise during such situation for instance difficult to find available person, time consuming and personality trait which can be a cause of assistance seeking troublesome. As a way to solve those problem this application is developed by making mobile application as platform to give a hand for those whom need assistance. Since the application is mobile application Android by Google were choose as mobile operating system. Besides that, the application also user Location-Based Services which is Geolocation and Recommendation System which is collaborative filtering technique. This application is developed based on Waterfall Model which has been modified suits the need of the project purpose. The original waterfall model consist of five phases however it has been modified making it four phases. This application is design and going through development as soon as all the requirement need has been gather. In design and development phase, system structure is construct involving use-case, flowchart, navigation map, interface design and database design. Actual application is start developed once design and development is completed. This application is developed by using Android Studio while Java, PHP and XML as main programming language and this application used online database to store data. This application is tested after it has been well developed so that it produce the correct result and achieve it purpose. The result show that it able to perform login, user registration view available users, calculate distance, view profile, view location on map, request for assistance, notify user, update user information and logout from the application.

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