UNIVERSITI TECHNOLOGY MARA

NEIGHBOURBESAFE: A MOBILE APPLICATION FOR NEIGHBOURHOOD SECURITY

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ABSTRACT

Neighbourhood is a space where people gather to socialize and live in the same environment. It was found that residents prioritise neighbourhood safety over home safety. This shows that a secure neighbourhood is better than a secure home. NeighbourBeSafe: A Mobile Application for Neighbourhood Security was initially proposed as Kuala Lumpur is deemed as a high threat location and frequent occurrence of neighbourhood crimes. Fear of crime was also an issue as it creates sociological fear to be victimized. Moreover, social divided residents due to urbanisation and lack of mobile application for community security are also the factors. The objective of this project is to identify the requirements for NeighbourBeSafe; to design NeighbourBeSafe; and to develop NeighbourBeSafe. Android-based mobile application is used for this project where the target users are neighbourhoood residents living in Bukit Rahman Putra, Sungai Buloh. The project also utilises techniques such as geolocation to find the user's current location via global positioning system (GPS), geotagging to add coordinates to a marker and short message service (SMS) to send SOS alert. Nonetheless, the mobile application has limitations such as its availability on Android operating system only and the map feature is not relevant to be used in elevated housings (e.g., condominium). Furthermore, the project is developed in English language and the methodology used is mobile application development life cycle (MADLC). It is developed from the identification phase till the testing phase only. NeighbourBeSafe mobile application is developed with features such as adding alerts on specific location (map view); a dashboard to count the number of daily, weekly, monthly and yearly alerts; adding trusted contacts; SOS alert button to alert the trusted contacts of the user's current location; and calling authorities based on the user's current location. Testing is done using the system usability scale (SUS) on six users. Although most users deemed the app as unnecessarily complex, they acknowledge its well-integrated functions. In the future, the app would allow past alerts to be visible. In conclusion, Neighbourhood community residents are more aware of dangers within their surroundings and the security technology can enhance the security within the community.

Keywords: Android, Mobile Application, Neighbourhood Security, System Usability Scale

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INTRODUCTION

1.1 Project Background

Figure 1.1 shows the crime statistical report of index crime rate per 100,000 population by state in the year 2019 published by the Department of Statistics Malaysia (Mohd Uzir, 2020). W.P. Kuala Lumpur has the highest index crime occurrence of 642.6 and 592.3 in 2018 and 2019, respectively.
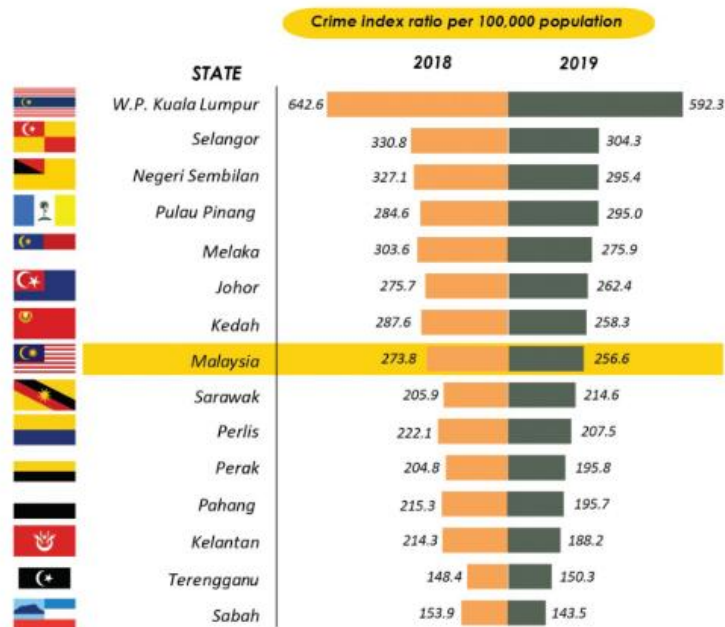
Figure 1.1 Crime index ratio per 100,000 population by state (2018-2019)

Source: (Mohd Uzir, 2020)