

## **Android application system, keep the distance**

### **ABSTRACT**

While physical distancing is crucial to prevent COVID-19 infection, it is difficult to estimate a safe distance, and sometimes, people tends to be negligent in adopting the new norm. Keep The Distance application system is an Android-based system developed for addressing the difficulty of maintaining a safe physical distancing by giving a warning notification to the users if they are not within a safe distance. KTD application is designed to detect a user's current location using Global Positioning System (GPS), calculate and compare the distance between users to ensure they are at the safe distance of 1 metre. A notification message would be pop-up as an alert if users failed to keep a safe distance. This system will stop if the users turn off the GPS signal. The development of the KTD application adopts the Rapid Application Development approach. The requirements of the KTD are defined through an interview with a teacher from SMK Bandar Tasik Puteri. The KTD application is then built using Android Studio using the Java programming language, and Google Firebase is used as a database to store user's location. The testing for developed KTD is conducted with the teachers from the same school location. The KTD application helps users maintain a safe distance of 1 meter when they detect other nearby users. Moreover, the KTD application can increase users' awareness regarding safe physical distancing as alerts will be given if they failed to do so.