IMPLEMENTATION OF A PRESENCE SYSTEM USING MOBILE-BASED FACE RECOGNITION AND GEOLOCATION (Case Study: Penfui Subdistrict Office)

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ABSTRACT

The e-presence application using facial recognition and geolocation aims to handle the attendance problem at the Penfui Subdistrict Office which still uses the fingerprint method. This method is less effective because it takes a long time because employees are required to queue to make attendance. This causes queues and double attendance data, making the data management process difficult. This research offers a solution regarding the development of an e-presence application that can be accessed online via an Android smartphone. The application is equipped with geolocation technology, allowing employees to make attendance within a radius determined by the admin. The e-presence application is also equipped with facial recognition technology which can prevent attendance fraud. This research shows that the e-presence application is a practical and efficient solution that can replace the fingerprint attendance method, thereby increasing employee productivity and comfort.

Keywords: e-presence, face recognition, geolocation, android.