

NURUL HUDA, 20.230.0085 SISTEM INFORMASI PRESENSI GURU DAN PEGAWAI NON PNS BERDASARKAN GEOLOCATION DAN FACE RECOGNITION BERBASIS MOBILE DI SMK NEGERI 2 PEKALONGAN, Dibawah bimbingan Christian Yulianto Rusli, M.Kom dan Eny Jumiati, M.Kom 126+xv hal / 75 gambar / 27 tabel / 2 lampiran / 27 pustaka (2005- 2017)

ABSTRAK

SMK Negeri 2 Pekalongan merupakan sekolah negeri yang beralamatkan di Jl. Perintis Kemerdekaan No.29 Pekalongan Barat Kota Pekalongan. Dalam proses presensi di SMK Negeri 2 hanya tersedia 2 alat fingerprint belum mampu memadai jumlah Guru dan Pegawai non PNS di SMK Negeri 2 yang berjumlah 40 Orang, karena pengumpulan kehadiran bersifat terbatas dalam waktu tertentu. Yang membuat setiap guru dan pegawai yang ingin melakukan presensi harus dilakukan secara bergantian dan mengakibatkan jika terlambat 1 detik saja akan mempengaruhi rekapitulasi hak bulanan. Untuk membantu mempermudah guru dan pegawai yang bekerja di SMK Negeri 2 Pekalongan, maka dibutuhkan suatu sistem presensi dimana setiap guru dan pegawai mampu melakukan presensi dimanapun jika sudah didalam lingkungan kerja. Untuk itu diperlukan Sistem Informasi Presensi Guru dan Pegawai non PNS berdasarkan Geolocation dan Face Recognition berbasis mobile di SMK Negeri 2 Pekalongan. Sistem ini menggunakan metode pengembangan prototype dengan tahap komunikasi atau menganalisa kebutuhan sistem, perencanaan atau mendesain sistem sesuai dengan analisa kebutuhan, pemodelan program, konstruksi atau proses pengkodean dengan bahasa pemrograman, dan deployment dan feedback oleh pengguna. Sistem Informasi ini telah diuji menggunakan pengujian White Box, Black Box dan pengujian UAT. Hasil dari pengujian tersebut yaitu Sistem ini mampu membantu proses presensi disemua lingkungan sekolah bagi guru dan pegawai serta memudahkan dalam pelaporan hasil presensi oleh bagian kepegawaian. Diharapkan untuk penelitian yang selanjutnya sistem ini dapat dikembangkan lagi dengan menambahkan fitur deteksi foto hidup untuk pengguna saat melakukan presensi wajah.

Kata Kunci : Sistem Informasi, Presensi, Lokasi, *Face Recognition*.

NURUL HUDA, 20.230.0085 PRESENCE INFORMATION SYSTEM OF TEACHERS AND EMPLOYEES NON-PNS BASED ON GEOLOCATION AND FACE RECOGNITION BASED ON MOBILE AT VHS 2 PEKALONGAN, Under the guidance of Christian Yulianto Rusli, M.Kom and Eny Jumiati, M.Kom
126+xv pages / 75 figures / 27 tables / 2 appendices / 27 libraries (2005- 2017)

ABSTRACT

Vocational High School 2 Pekalongan is a public school which is located at Perintis Kemerdekaan 29 Pekalongan Barat Pekalongan City. In the attendance process at VHS 2, there are only 2 fingerprint tools available, but it is not sufficient for the number of teachers and non-civil servants at VHS 2, totaling 40 people, because attendance collection is limited in a certain time. What makes every teacher and employee who wants to do attendance has to be done alternately and results in being late for even 1 second it will affect the monthly entitlement recapitulation. To help make it easier for teachers and employees who work at VHS 2 Pekalongan, a presence system is needed where every teacher and employee is able to make attendance wherever they are in the work environment. For this reason, a non-civil servant teacher and employee presence information system is needed based on geolocation and mobile-based Face Recognition at VHS 2 Pekalongan. This system uses a prototype development method with the communication stage or analyzing system requirements, planning or designing systems according to requirements analysis, program modeling, construction or coding processes with programming languages, and deployment and feedback by users. This information system has been tested using White Box, Black Box and UAT testing. The results of these tests are that this system is able to assist the attendance process in all school environments for teachers and employees as well as facilitate the reporting of attendance results by the personnel department. It is hoped that for further research, this system can be further developed by adding a live photo detection feature for users when making face presentations..

Keywords: *Information System, Presence, Location, Face Recognition*