

ABSTRAK

Seiring perkembangan zaman, kemudahan dan kepraktisan karena kecanggihan teknologi sistem otomatisasi semakin dirasakan. Salah satu contoh pengendalian secara otomatisasi adalah menggunakan *Radio frequency identification*. Serta dapat memantau data kehadiran satpam oleh admin melalui website. Hasil akhir dari penelitian ini adalah dapat dihasilkan mekanik alat patrol satpam otomatis menggunakan RFID tag 13,56MHz. dapat dibuat dan dioperasikan dengan mikrokontroler NodeMcu sebagai pusat kendala. Jarak maksimal jangkauan kartu sejauh 0,7cm. perekam data patroli yang disimpan pada database yang kemudian ditampilkan laporannya pada website. Admin dapat memonitoring penggunaan kartu pada absensi satpam dan mengendalikan hak akses kartu dengan menggunakan website yang telah dibuat. Absensi manual menggunakan buku absensi harian yang berdampak pada efisiensi dan efektifitas pendataan, pencarian data sekaligus perhitungan rekap data yang membutuhkan waktu yang relatif lama. Disamping itu resiko kesalahan dan kehilangan data absensi semakin besar. Berdasarkan permasalahan diatas dibuatlah Sistem Informasi. Metode penelitian merupakan metode yang digunakan dalam pengumpulan data yang meliputi: pengembangan perangkat lunak menggunakan *wireframe* yang meliputi : analisa kebutuhan, desain, pengujian dan implementasi. Dengan dihasilkannya absensi berbasis web dapat memberikan kemudahan dalam proses absensi, pencarian data dan perhitungan rekap absensi, serta meminimalisir kehilangan dan kesalahan pencatatan data absensi

Kata kunci : RFID, Satpam, Website, Sistem Informasi

ABSTRACT

Along with the times, convenience and practicality due to the sophistication of automation system technology are increasingly felt. One example of automatic control is using radio frequency identification. As well as being able to monitor security guard attendance data by the admin through the website. The final result of this research is that a mechanical security guard patrol tool can be produced using a 13.56MHz RFID tag. can be created and operated with the NodeMcu microcontroller as the constraint center. The maximum distance of the card reach as far as 0.7cm. patrol data recorder which is stored in the database which is then displayed the report on the website. Admin can monitor card usage on security guard attendance and control card access rights by using the website that has been created. Manual attendance uses a daily attendance book which has an impact on the efficiency and effectiveness of data collection, data search as well as data recap calculations which require a relatively long time. Besides, the risk of errors and loss of attendance data is getting bigger. Based on the above problems, an Information System was made. The research method is the method used in data collection which includes: software development using a wireframe which includes: needs analysis, design, testing and implementation. With the production of web-based attendance, it can provide convenience in the attendance process, data search and attendance recap calculations, as well as minimize losses and errors in recording attendance data.

Keywords: RFID, Security Guard, Website, Information System