ABSTRAK

RFID (Radio Frequency Identification) adalah teknologi yang digunakan untuk membaca data pada RFID tag atau card. Teknologi RFID itu sendiri terfokus pada identifikasi sebuah object melalui rangkaian kode yang hanya dapat dibaca reader dengan software tertentu. RFID bekerja dengan cara, reader memancarkan medan magnet dengan frekuensi tertentu yang konstan, kemudian energi tersebut digunakan tag atau card sebagai sumber energi untuk mengirimkan serangkaian angka yang unik dan diterima oleh RFID reader. RFID diperkirakan akan menggantikan penggunaan barcode yang umum dipakai untuk memberi label harga barang. RFID dengan cepat mendapat perhatian karena kemampuannya dalam melacak objek yang bergerak. Seiring dengan perkembangan teknologi, maka RFID sendiri pun juga berkembang sehingga nantinya penggunaan RFID bisa digunakan untuk kehidupan sehari-hari.

Oleh karena itu, topik tugas akhir ini merancang sistem transaksi pembayaran perparkiran menggunakan RFID diambil. Kemudahan dalam transaksi perparkiran menjadi salah satu kelebihan sistem ini. Terdapat beberapa form didalam aplikasi yang dapat membantu pemakaian dari pihak operator.

Mencatat semua transaksi pada database dan mengolahnya merupakan fungsi utama dari aplikasi ini. Percobaan dilakukan dengan menggunakan 5 kartu transponder yang memiliki data pada database berbeda-beda. Dengan percobaan yang telah dilakukan sistem telah berhasil.
RFID (Radio Frequency Identification) is technology used to read data on RFID tags or cards. RFID technology itself is focused on identifying an object through a series of codes that can only be read reader with certain software. RFID works in a way, reader emits a magnetic field with a certain frequency is constant, then the energy used tag or card as an energy source to deliver a unique set of numbers and received by the RFID reader. RFID is expected to replace the use of a barcode which is commonly used to label the price of goods. RFID quickly get attention for his ability to track moving objects. Along with technological development, then the RFID itself also expanded so that future use of RFID can be used for everyday life.

Therefore, this final topic of design of the parking payment transaction system using RFID is taken. Ease of parking transactions become one of the advantages of this system. There are several forms in the application that can help the use of the operator.

Record all transactions on the database and process them are the main functions of this application. Experiments carried out using five transponders card that has data on different databases. With the experimental system that has been done successfully.
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