

The application of active RFID using in school class attendance system

蕭中堯、戴江淮

E-mail: 9804885@mail.dyu.edu.tw

ABSTRACT

Radio Frequency Identification is one of the most important technical on the world, at an early stage the applications of RFID is using in the logistics. On campus the first introduce of RFID technology units which is School Library. The purpose of the RFID is to managed books. RFID also improve logistics management and time-saving the operation business. We use these properties to achieve what we want results. In the thesis, we will study deeply on RFID applications of education. We use two active Reader and the identification of active RFID Tag are unique. And according as the characteristics application of RFID like the precise personnel tracking, or a call and an answer, we can use a program to compare with Tag ID and the database. After the compare, we can control an entrance guard and personnel location. We can also achieve automatic tracking and statistics with student attendance rate in the classroom, and can be found study situation of student. We believe that through the thesis, we contributed to the school education.

Keywords : RFID ; TAG ; system ; after

Table of Contents

| | | | | | |
|----------------|---------------------------------|--|-----------------|-----------|-------|
| 授權書..... | iii | 中文摘要..... | iv | 英文摘要..... | v 誌 |
| 謝..... | vi | 目錄..... | vii | 圖目錄..... | ix 表目 |
| 錄..... | xi | 第一章 緒論..... | 1 1.1 研究背景..... | 2 1.2 研究 | |
| 目的..... | 2 1.3 研究目的..... | 2 1.4 章節結構..... | 3 第二章 | | |
| RFID系統與原理..... | 4 2.1 RFID系統組成與動作原理..... | 4 2.2 RFID相關標準..... | | | |
| RFID操作頻率..... | 5 2.2.1 ISO標準..... | 5 2.2.2 EPC和Ubiquitous ID Center RFID..... | 6 2.3 | | |
| 統..... | 7 2.4 RFID的特性..... | 9 第三章 RFID應用於上課點名系 | | | |
| 程..... | 11 3.1 現況說明..... | 11 3.2 系統運作與架構..... | 12 3.3 整體流 | | |
| 程式..... | 22 第四章 系統實作..... | 30 4.1 資料庫程式..... | 30 4.2 主 | | |
| 取TAG..... | 38 4.2.1 主程式的TAG與Reader的設定..... | 39 4.2.2 主程式讀 | | | |
| 錄A..... | 41 第五章 結論..... | 45 參考文獻..... | 47 附 | | |
| | 48 附錄B..... | 51 | | | |

REFERENCES

[1]

[http://designer.mech.yzu.edu.tw/article/articles/technical/file/\(2006-07-24\)%20RFID%E5%8E%9F%E7%90%86%E8%88%87%E7%B3%BB%E7%B5%B1%E4%BB%8B%E7%B4%B9.pdf](http://designer.mech.yzu.edu.tw/article/articles/technical/file/(2006-07-24)%20RFID%E5%8E%9F%E7%90%86%E8%88%87%E7%B3%BB%E7%B5%B1%E4%BB%8B%E7%B4%B9.pdf) [2] http://www.logix4u.net/inpout32_source_and_bins.zip [3]戴江淮編著RFID工程概論 學貫行銷股份有限公司 [4]陳宏宇編著 RFID系統入門無線射頻辨識系統 文魁資訊股份有限公司 [5]鄭同伯編著 RFID EPC無線射頻辨識完全解析 博碩文化股份有限公司 [6]范逸之、江文賢、陳立元編著 C++ Builder與RS-232串連通訊控制 文魁資訊股份有限公司 [7]位元文化編著 C語言入門進階 文魁資訊股份有限公司 [8]精通C++ Builder6 李勁編著 文魁資訊股份有限公司 [9]邱瑩青編著 RFID實踐非接觸式智慧卡系統開發 學貫行銷股份有限公司 [10] <http://tw.knowledge.yahoo.com/question/question?qid=1405101516928> [11]林隆煥 著 視窗程式設計函式庫Win32 API[上][下] [12]The Bipolar Digital Integrated Circuits Data Book for Design Engineers PART1. PART2