DEVELOPMENT OF ATTENDANCE RECORDING DEVICE FOR CCIT FACULTY USING RADIO FREQUENCY IDENTIFICATION

A Project Design
Presented to the Faculty of the
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Ramon Magsaysay Technological University
Main Campus, Iba, Zambales

In Partial Fulfilment
of the Requirement for the Degree
Bachelor of Science in Computer Engineering

by
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The study hereto attached entitled

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ABSTRACT

Radio Frequency Identification (RFID) technology is a smart object tracking and automated data collection solution. It provides a contact less data link, without need for line-of-sight or concerns about harsh or dirty environments that restrict other auto (Identity) ID technologies such as bar codes. RFID is a technology that uses radio waves to transfer data from an electronic tag, called RFID tag or label, attached to an object, through a reader for the purpose of identifying and tracking the object. RFID technology which is a matured technology that has been widely deployed by various organizations as part of their automation systems. In this research, an RFID based system has been built in order to produce a time-attendance management system. RFID systems consist of two main components: Transponder (tag) located in the object for identification, and Interrogator (or reader), which allows the data transfer to and from the transponder.

This system consists of two main parts which include: the hardware and the software. The hardware consists of the motor unit and the RFID reader. The RFID reader, which is a low-frequency reader, is connected to the host computer via a serial to USB converter cable. The Time-Attendance System (Graphic User Interface) GUI was developed using visual basic.Net. The Time-Attendance Management System provides the functionalities of the overall system such as displaying live ID tags transactions, registering ID, deleting ID, recording attendance and other minor functions.