**Group: ACE**

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**8.0 System Testing**

**Reader**

This module is the one responsible for processing the scanned RFID cards ready to be used by the Admin and User interfaces.

**Database communication (JDBC)**

Communicates with the MySQL database in order for the user and admin interfaces to get or insert the processed data from the Reader module.

**User interface**

This module is responsible for the functionalities of the professor, which is the student and professor attendance, making use of the Reader module and then the Database communication module to fill up the attendance database.

**Admin interface**

This module is responsible for the functionalities of the maintenance personnel, which is to manage the various databases, if there is no centralized database, to make sure that the data is consistent, while ensuring that all the system is reliable.

**9.0 System Implementation Plan**

**9.1 Personnel Training**

All personnel would be required to attend a training seminar that would demonstrate how the system works and how to use it.

**9.1.1 Maintenance Personnel**

The training program would consist of the following: system API, database design, security measures, user privileges, and basic knowledge of all the user interfaces.

**9.1.2 End-User Personnel**

The user training program would only consist of the basic system flow, how to use the program, and some frequently asked questions.

**9.2 System Installation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | week 1 | week 2 | week 3 | week 4 |
| Set up Database Server |  |  |  |  |
| Installation of hardware |  |  |  |  |
| Software |  |  |  |  |
| Training of End Users |  |  |  |  |
| Personnel Training |  |  |  |  |

Since this is a new system, there is no legacy system to replace or convert. This is the time table under the assumption that the ID cards of the personnel and students are already RFID cards.

1. **Cost Benefit Analysis**

**10.0.1 Investments**

|  |  |
| --- | --- |
| **Basic Time & Attendance Module** | |
| Barcode ID | P3 |
| RFID | P25 (China) / P40 (Europe) |
| ID Printer | P150,000 (barcode and RFID combined)  P100,000 (barcode only)  P125,000 (RFID only) |
| Card reader | P5,000 |
| Database server | P10,000 |
| LCD | P2,000 |
| Software | P50,000 |
| Maintenance | 10%-20% of total price |
| **Total:** P117,000 – P167,040  (excluding mass production of ID cards, and maintenance cost) | |

* + 1. **Benefits**

|  |  |
| --- | --- |
| **Barcode** | **RFID** |
| Cheaper | Expensive |
| Consumes processing power to retrieve student data | Instant data in ID |
| Can only be read by barcode reader | Option for card reader and Samsung Galaxy S3 |

* + 1. **Cost-Benefit Analysis**

For a difference of P50,000, the expectations would be either a cheaper but slower ID scanning system, a more expensive but faster process, or a combination of both. A larger expected queue would of course require several card readers (in the case of putting it at the gate). The queue depends on the population of the school.