

**A SECURE RECORD KEEPING MANAGEMENT SYSTEM FOR A
SECONDARY SCHOOL CASE STUDY:**

NYAKASURA SCHOOL

Submitted

By

KAJUMBA DOREEN JACKLINE

BIT/41752/91/DU

TUHAISE ENIDI

BIT/40600/91/DU

**A PROJECT REPORT SUBMITTED TO THE COLLEGE OF APPLIED
SCIENCES AND TECHNOLOGY IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF**

BACHELORS OF INFORMATION TECHNOLOGY AT

KAMPALA INTERNATIONAL

UNIVERSITY

JULY 2012

DECLARATION

We hereby declare that the contents of this proposal are our original work and have not submitted to any University or other Institute for the Award of a Degree.

KAJUMBA DOREEN JACKLINE

BIT/41752/91/DU

Signature... *[Handwritten Signature]*.....

Date... *08/08/2012*.....

TUHAISE ENIDI

BIT/40600/91/DU

Signature... *Tuhaise*.....

Date... *08/08/2012*.....

APPROVAL

I certify that this project proposal has been under my guidance and supervision and it is ready to be submitted in as a partial fulfillment of the Bachelor of Information Technology degree of Kampala International University.



Kasawuli Fanie
KASAWULI FANIE
FOR: RESEARCH OFFICE

Signed: *MB*.....

Supervisor: MR.BUSINGE PHELIX MBABAZI

Date: *08/08/2012*.....

DEDICATION

I Kajumba Doreen Jackline and Tuhaise Enidi dedicate this research work to all our family members and friends for their endless efforts in seeing us to this stage and Nyakasura School management for having availed with information during the case study. And thanks to Almighty God for protecting us safely through out our education.

ACKNOWLEDGEMENT

First, we give thanks to the almighty God for guiding us all the way through this course. We highly appreciate the help and guidance accorded to us by our supervisor Mr. Businge Phelix Mbabazi for all this efforts, availability, willingness and patience. We also thank everyone who helped us in this course particularly the lecturers not forgetting our fellow students

Special thanks go to our parents who have supported us through out this course of study at Kampala International University and to our dear friends who have encouraged and supported us in this research project, who include Sande Joseph, Muguluma Joshua.

MAY GOD BLESS YOU ALL

Table of Contents

DECLARATION.....	1
APPROVAL.....	2
DEDICATION	3
ACKNOWLEDGEMENT	4
CHAPTER ONE.....	9
INTRODUCTION.....	9
1.0Background.....	9
1.1 Problem Statement.	9
1.2 General objectives	10
1.3 Specific Objectives.....	10
1.4 Scope of the project.....	10
1.5 significance of the study.....	10
1.6 Requirements to be fulfilled by the proposed system.....	11
CHAPTER TWO	12
LITERATURE REVIEW	12
2.0 Introduction	12
2.1 Information system.	12
2.1.1 Components of an information system	13
2.1.2 Management information system	14
2.1.2.1 School management systems	14
2.2 Manual based information system.....	14
2.2.1 Advantages of manual systems	14
2.2.2 Disadvantages of manual based information systems	14
2.3 Computerized System.....	15

2.3.1 Benefits of a computer-based processing.....	15
2.3.2 Limitations of computer-based processing.....	16
2.4 Databases in information Systems	16
2.4.1 Effects of Database and DBMS	16
2.4.2 Disadvantages related with Databases and DBMS	17
2.4.3 Database terminologies	17
2.5 Visual basic.....	17
CHAPTER THREE.....	18
METHODOLOGY.....	18
3.0 Introduction	18
3.1 Target population	18
3.2 Area of the study	18
3.3 Sample size	18
3.4 Data collection procedures.....	19
3.5 Interviews	19
3.6 Questionnaires.....	19
3.7 Observations.....	20
3.8 Data analysis.....	20
3.9 Documents review	21
CHAPTER FOUR	22
DATA PRESENTATION, ANALYSIS AND DESIGN	22
4.0 Introduction	22
4.1 Data presentation.....	22
4.2 System analysis	24
4.2.1 Weakness of the existing system.....	25

4.2.2 Overview of the new system	25
4.2.3 System and requirement Analysis	25
4.2.4 User requirements	25
4.2.5 Functional requirements.....	26
4.2.6 Non functional requirements	26
4.2.7 System requirements	26
4.2.8 Hard ware requirements	26
4.2.9 Soft ware requirements of the requirements of the new system.....	27
4.3 System design	27
4.3.1 Relational database design.....	27
4.3.4 Conceptual data model.....	29
4.3.6 System testing	31
4.3.7 User Training	31
4.3.8 System conversion	31
CHAPTER FIVE	32
SYSTEM IMPLEMENTATION	32
5.0 Introduction	32
5.1 System implementation.....	32
5.2 System flow and interface design.....	32
Figure5.2.1 showing the login screen and home screen of the system	32
5.2.2 View and register new students of the system	33
5.2.4 The MDI FORM	33
5.2.6 Screen shot of employees form.....	34
Figure 5.2.7 Screen shot fees payment	35
Figure 5.2.8 screen of O level student's marks	35

Figure 5.2.9 screen of A level marks.....	36
CHAPTER SIX.....	38
DISCUSSION, CONCLUSION AND RECOMMENDATIONS.....	38
6.0 Introduction.....	38
6.1 Discussion.....	38
6.2 Limitation of the Study.....	38
6.3 Future works.....	38
6.4 Recommendation.....	38
6.5 Conclusion.....	39
APPENDIX A	40
QUESTIONNAIRE FORMART USED.....	40
REFERENCES.....	41

CHAPTER ONE

INTRODUCTION

1.0 Background

Education has played a leading role in the growth and development of many countries in the world today. In African secondary schools have been set up by the governments and a few private investors, these provide post primary education to many students from various regions in their respective countries. The Ugandan government has put emphasis in child education some of these schools are privately owned and others are government founded.

Nyakasura School is a government owned school located in Kabarole District in Fort Portal town. The school employs teaching and non teaching staff in their daily operations. Their main objective is to provide sound education to secondary students to enable them have a bright future. However there has been a slow data processing due to use of manual systems. This is attributed to the slow access speed related to the manual systems. It's to this reason that information which is required for administrators to make accurate and effective decisions is not good in an acceptable time frame. This project will be therefore setup to design computerized record keeping management information system to capture, store, and process and retrieve useful information about students and employees to ease the day to day administrative related tasks.

1.1 Problem Statement.

Nyakasura School has handled students and employees record in the manual based systems where retrieval of data is very slow since it has to be searched in many registers and file cabinets. The information is compiled to make assessments every term. This task becomes very difficult task since each student and employee has his/her own page and information details like

names, contacts, class, subjects learnt. Therefore this system was set up to automate some of the administrative tasks like information of previous years especially results of students.

1.2 General objectives

To develop a record keeping management information system that was able to improve efficiency in handling routine records collection activities for the students and employees of the school.

1.3 Specific Objectives

In order to achieve the general objectives above, the following specific objectives can help in accomplishing this project and these include;

- To manage and monitor employees and students records.
- To capture, manage and verify students results.
- To evaluate and monitor fees payment by students.
- To implement interfaces in order to improve the speed of capturing and retrieving students and employees' data.

1.4 Scope of the project

The project covered the students' results and employees' record keeping. Managerial issues such as results, admission, fees payment and registration. The project was only confined to Nyakasura School. The study took a period of 5 months starting with the month of January to the month of May 2012. During this time the research developed a computerized system that managed the students and employees records in Nyakasura School, thus enabling quick and efficient handling of administrative tasks.

1.5 significance of the study

- The study was introduced to the upcoming schools on how to incorporate to a secure record keeping management information systems in their schools for better organization.

- This study enabled the administrators to easily make analysis of the student's performance as the years go by.
- The study served as an example for the other researchers' who might want to develop a similar system.
- The speed of accessing records enhanced hence faster decisions were made by the administrators.
- This study also enabled us to graduate.

1.6 Requirements to be fulfilled by the proposed system

- Should maintain a database of all students and employees' particulars. Should input records concerning student's registration and related information.
- Should facilitate updating of various reports.
- Apart from the above, the new system is expected to run on any PC or laptop computer so long as Microsoft visual basic 6.0 exists.
- The system was expected to accommodate over a thousand records such that it can be used for many years while storing the records of the previous years.
- User friendly this will be through a visual basic interface.
- Easy and cheap to maintain.
- Able to withstand abuse and false information fed into it.
- And it should also be able to withstand illegal access by unauthorized users.
- A hard disk with at least 256MB free space and 512MB of RAM.
- A key board terminal.
- A printer.
- A monitor or screen.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

A literature review is an account of what has been published on a topic by accredited scholars and researchers. However, the literature review in this section will only be confined to the content that will be employed in the design of the new school management information system.

2.1 Information system.

A set of interrelated components working together to collect, retrieve, process , store and disseminate information for the purpose of facilitating planning, control, coordination, analysis, and decision making in businesses and other organizations. These are resources that enable collection, management, control, and dissemination of information throughout an organization.

There are six major types of systems that serve the various organization levels. These include Decision Support Systems, Transaction Processing Systems and Management Information systems.

An information system is an arrangement of people, data, processes and interfaces that act to support and improve the day to day operations in a business as well as support the problem solving and decision making needs of management and users.

An information system is any combination of information technology to support operations, management and decision-making.

(Codd and Earl 1987) explains information system as any organized combination of people, hardware, software communications network and data resources that collects, transform and disseminate information in an organization. (powers, Cheney, Crow 2nd edition) describes information system as a system formed through the coordinated functioning of people, equipment, procedures, data and other resources to provide uniform, reliable accurate information.

2.1.1 Components of an information system

Data: are raw facts about the organization and its business transactions

Computer Hardware: these are usually microcomputers, also called personal computers together with peripheral equipments such as, magnetic disks, input-output devices and telecommunications gear.

Computer software: set of instructions that tell the computer how to take data in process it, how to display it and how to store data and information.

Databases: a database is a collection of interrelated data (records) organized so that individual records or group of records can be retrieved that satisfy various criteria.

Telecommunication: (Jane P.Laudon and Kenneth C.laudon) define telecommunication as a collection of compatible hardware and software arranged to communicate information from one location to another.

Human Resource: these are “qualified people are vital component of any information system. Technical personnel include development and operational managers, system analysts, designers, computer programmers and operators”

Procedures: rules for achieving optimal and secure operations in data processing procedures including priorities in dispensing software applications and security measures.

2.1.2 Management information system

(Jane P.Laudon and Kenneth C.Laudon) define a management information system as systems that serve middle managers' interests by providing current and historical performance information to aid in planning, controlling and decision making at the management level.

“These systems rely on data obtained by transaction processing systems, as well as data outside the organization and data provided by business partners, suppliers and customers”

2.1.2.1 School management systems

These are systems that provide the regular features and modules like admissions, registration, fee management, payrolls and inventory. They allow you to store, modify and retrieve information using the pull down menu masters, admission information, examination, fee management, financial accounting, timetable, staff and payroll, library management system, inventory and transport etc. each of these modules has sub modules within them. The analysis reports generated by this system are a very powerful and unique tool.

2.2 Manual based information system

“This is a system that does not use any computer devices. All data would be kept in paper”.

2.2.1 Advantages of manual systems

The advantages include the following

- No training costs are needed; the current system is very easy to use and doesn't need a skilled employee.
- There are low setup costs and also no indirect costs like electricity bills.

2.2.2 Disadvantages of manual based information systems

The disadvantages include;

- Its time consuming.

- No proper records for the workers, members and books transaction.
- Many times duplication occurs as workers find it hard to keep track in the bundles of registers.
- Data is stored in filing cabinets and can get in wrong hands and can be used against the company.
- Retrieval of data is very slow as it has to be searched in number of registers and this is a waste a lot of time.
- Data is not always reliable as it is hand written and some human errors might have occurred.
- Lots of manual labor is required for record keeping.
- Data is stored kept in filing cabinets and this consumes a lot of space.

2.3 Computerized System

Computerized information storage system stores information using the concepts of database and the information is organized for easy access whenever needed.

2.3.1 Benefits of a computer-based processing

Speed: Computers can process millions of instructions each second, allowing them to complete a given task in a very short time. They are faster than manual systems.

Accuracy: the result of a calculation carried out by a computer is likely to accurate. In addition, errors that a human can make, such as typing error, can be reduced or eliminated entirely.

Reliability: In many organizations, computer-based information systems are created to fulfill a particular function, the ability to modify the software that controls them provides a high degree of flexibility. Even the simplest personal computer, for example, can be used to create letters, produce cash flow forecasts or manipulate databases.

Repetitive tasks: computer-based information systems are suited to highly repetitive tasks that might result in boredom or fatigue in people. The use of technology can help reduce errors and free employees to carry out other tasks.

2.3.2 Limitations of computer-based processing

The disadvantages include; the dependency on electricity or power requires computer, skills and the information is vulnerable to computer viruses and hardware problems.

Judgment/experience: Despite advances in artificial intelligence techniques and expert systems, computer-based information systems are considered incapable of solving problems using their own judgment and experience.

Improvisation/flexibility: In general computer-based information systems are unable to react to unexpected situations and events. Additionally, since most systems are created to fulfill a particular function, it can be difficult to modify them to meet new or changed requirements.

Innovation: Computers lack creativity of a human being. They are unable to think in the abstract and are therefore restricted in their ability to discover new ways of improving processes or problems.

2.4 Databases in information Systems

A database is a collection of files that contain interrelated information.

(J Stanley Warford 1999)

A database management system is “a program that lets the user add, delete and modify records in the database”. (J Stanley Warford 1999)

Because it can access several files at once, A DBMS is much better than flat-file management

2.4.1 Effects of Database and DBMS

The introduction of database has a great impact some of which include

- Reduced application development time: DBMS supports important functions that facilitate quick development of application.

- Databases eliminate data redundancies therefore reducing the risk of inconsistencies and ensuring improved data integrity in addition to security.

2.4.2 Disadvantages related with Databases and DBMS

- It reduces much time to develop a database information system.
- Initial cost high-that is to say it is expensive to employ database administrators and data entry clerks.
- Databases are vulnerable to power fluctuations and disasters.
- Need an expertise to manage and computer skills to utilize it.

2.4.3 Database terminologies

A field: (Earl M.J 1989) defined it as what contains a specific piece of information with in a record.

Normalization: (Peter Rob and Carlos Coronel 2000) as “a process for assigning attributes to entities”

An entity: (David M. Kareoke1999) is something that can be identified in the users work environment, something that the user wants to track.

An attribute: (Ranez Elmasri and Shamkant B.Narathe) defines an attribute as a property that describes one aspect of an object.

A file: (Peter Rob and Carlos Coronel 2000) defines a file as a collection of related records

2.5 Visual basic

According to (Knowlton& Collings 2000) visual basic is a software development tool that is to say a tool that allows you to create programs. It combines graphical interface and programming code to make program development as rapid as possible.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter described the steps and procedures that are taken to develop a record management system for Nyakasura School. It covers organization units that are studied, the population that will be used, sample sizes, research instruments, and how data was collected and analyzed to get the user and system requirements.

The methods which are chosen for data collection are a combination of qualitative and quantitative methods. The qualitative methods include observation, focus groups and case studies. The quantitative methods used in this study will be interviews, questionnaires and review of document

3.1 Target population

The researcher evaluated the existing population of the school in relation to their performance and identified shortfalls of manual systems, design and implements a database system that will improve upon the weaker areas of existing manual system.

3.2 Area of the study

The study was carried out in Nyakasura School.

3.3 Sample size

The researcher considered a number of students in Nyakasura School, between 100 -200 students so as to have a mode of comparison to give a clearer view of responses.

3.4 Data collection procedures

The data collection techniques were to be self administered questionnaires which were comprised of open and closed ended questions that required a respondent to answer the entire question to the best of their knowledge. Interviews were also used in data collection from which the researcher had to ask questions and obtained response from the respondents, selected from Nyakasura School.

3.5 Interviews

Interviews are face to face interactions where a person (interviewer) obtains information from the interviewee. This method contributed to about 60% of the data collection in order to get requirements. During this study we realized several advantages and disadvantage of using this method as seen below.

Advantages of interview include the following;

- Interview allowed the researcher to discover areas of understanding, unrealistic expectation and expressions of the interviewee hence a collection of rich and detailed data.
- We got detailed data about procedures like student enrollment.
- We got opportunity to clarify questions and to follow-up questions and problems.

However their also disadvantages related to this method

- Transport expenses to and from the school
- There was need of high level of interpersonal skills since we interacted with people of different ages
- There were negative responses from the interviewees.
- Language barrier.

3.6 Questionnaires

Questionnaires were designed to collect data from a number of respondents. This method was used to cross check information that would be gathered

using other methods like interview; both open ended and closed questionnaires will also be used.

Open ended questionnaires enabled the user to get a lot of information since they didn't limit the respondents' contribution.

Close ended questionnaires were given to students to get a data like subject taught.

Advantages of close ended questionnaires

- ✓ They were easier to analyze since each question has possible answers
- ✓ They were economical

3.7 Observations

Observations were made to gather data while capturing a variety of interaction. It enabled us to learn about things the participants were not able provide in interview or questionnaires.

Two techniques of observation method were used during the study.

Direct observations: This technique was used to watch but not take part in the activities.

Participant observation: we participated in the culture or content being observed and actions. We recorded the observations which were later on analyzed and conclusions were made. Participation in observation helped us to learn how to calculate the grading of marks using a defined grading scale for both O and A level

3.8 Data analysis

The data collected from the field was organized, analyzed and presented, Structural model of the system was drawn. The information interpreted was used in designing and implementing a secure record keeping management system.

3.9 Documents review

We also consulted documents or previous records of the school therefore the research we gather daily proceedings of the manual system by reviewing the available documents.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DESIGN

4.0 Introduction

This chapter focuses on the presentations of the data got during the course of the field study. The data was represented using charts tables

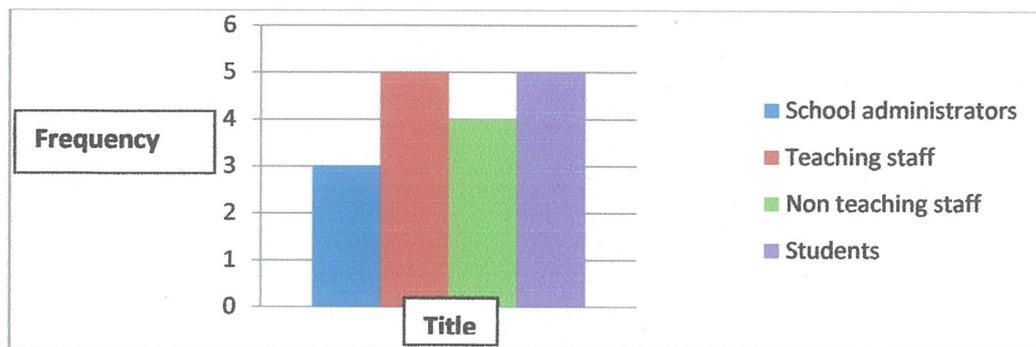
4.1 Data presentation

During data collection we interacted with the following categories of respondent's the table below gives roles of the respondents the number contacted and their school roles

Table.1 showing the respondents and their Role in the school

Titles	frequency	Role
School administrators	3	Manage, control the day to day running activities in the school
Teaching staff	5	Teach students
Non teaching staff	4	Carry out other activities like cooking, cleaning and security
Students	5	Learn and study
Total	17	

Figure4.1 Graph showing the respondents and their Role in the school

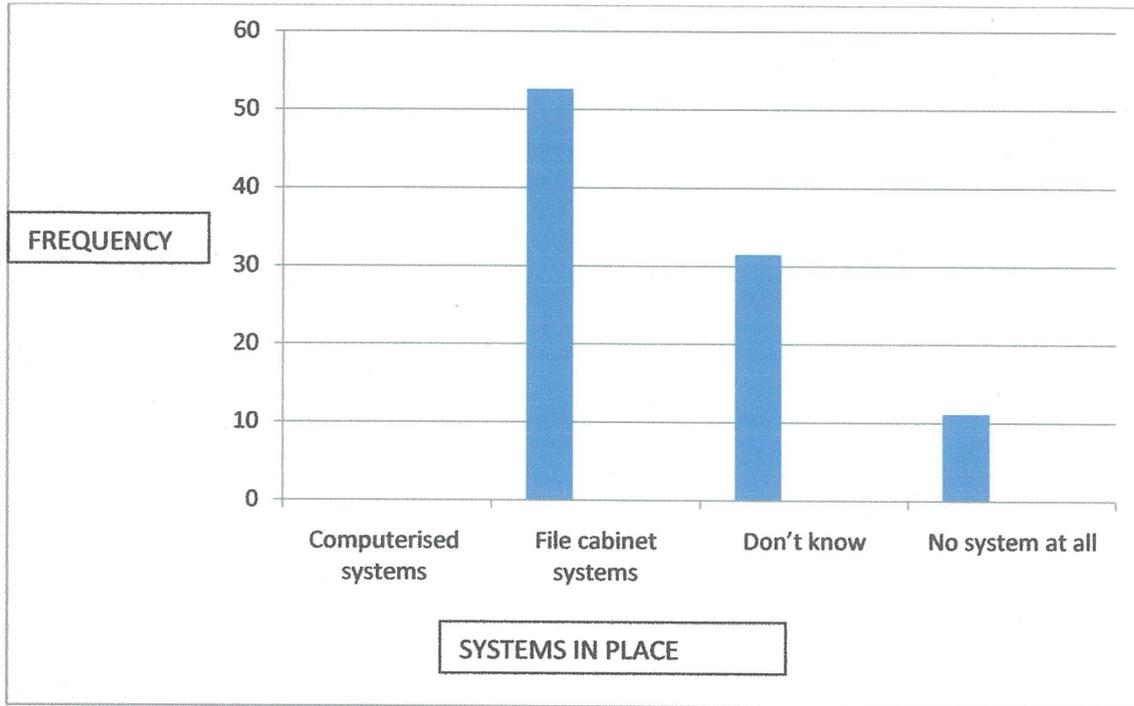


From Table: 1 we interviewed a total of 17 people. Some were selected randomly and others strategically to get specific data. Staff members, administrators and student all of Nyakasura school. All their contribution was used to guide us towards the completion of the study.

Table .2: A table representing tools used to keep student and employee records and information

System	Frequency	Percentage
Computerized systems	0	0%
File cabinet systems	12	52.6%
Don't know	6	31.5%
No system at all	1	11.1%
Total	19	100%

Figure 4.1 Graph representing tools used to keep student and employee records and information



4.2 System analysis

The existing system was paper based; records were printed on paper and placed in file cabinets. The rate at which records were accessed was slow since a person had to go through piles of papers to get a specific record. Hence anyone from the external environment had to wait for long hours to be given a record he or she requests for.

The system was tiring and labor intensive, teachers had to compute marks of each student grade and submit them to the administrators. This activity was tiresome and many mistakes are bound to happen.

4.2.1 Weakness of the existing system

- The system was inefficient in tracking student and employee records, storage, retrieval and manipulation of data was very slow.
- Insecurity there was no authentication methods in place hence a person can easily access information which was very dangerous

4.2.2 Overview of the new system

The new system categorizes the system users into results O and A level, fees payment and registration. Each of these has specified tasks which are required of them. To maintain integrity each individual has register. The new system is database based, the back end database is designed in Microsoft access 2007.various tables are designed to handle different records. The system will allow teachers and administrators in their respective positions to interact and do their administrative tasks effectively and efficiently. Security controls like authentication with user names and passwords are put in place to allow only the authenticated persons to use the system. User interfaces to the system are designed using visualbasic6.0

4.2.3 System and requirement Analysis

In order to document all end user requirements for the system, data collected was analyzed using structured analysis approach to rigorous specify the process. This section includes requirements of the new system that we categorized into user requirements, functional and non functional requirement as follows

4.2.4 User requirements

Through the data gathering process the following stakeholders were identified teachers and school administrators with the following user requirements

- i. A user friendly system, one that is easy to learn and use
- ii. A secure system where the administrator can manage system users

- iii. Report generation for the administrator review.
- iv. Allow data to be added into the system and easily retrieved.
- v. Automatically calculate performance of students and save the results

4.2.5 Functional requirements

The system shall perform the following functional requirements

- i. Generate reports for the administrator
- ii. The different users will authenticate themselves before accessing a service.
- iii. Accepts only one unique record
- iv. Allow a user search for records in the database
- v. Allow administrator to insert, update and delete data from the database containing students and employees records.
- vi. Allow students to pay the required fees needed by the school
- vii. Storage of all the financial records concerning school fees.

4.2.6 Non functional requirements

- i. Quick response to user search request
- ii. The System must notify the users in case of users
- iii. The system must allow for expansion in the future
- iv. The system should allow only authorized user to update records

4.2.7 System requirements

In order for the system to perform to its fullest the following system requirement should be met .these requirements should be got from the registered vendors to avoid inconveniences.

4.2.8 Hard ware requirements

Hardware are the physical parts of a computer that one can see and touch, one should also careful when buying the hardware requirements and make

sure that they are in good conditions .The General hard ware requirements to the system are as shown in the table below;

- ✓ A hard disk with at least 256MB free space and 512MB of RAM.
- ✓ A key board terminal.
- ✓ A printer.
- ✓ A monitor or screen.
- ✓ Processor(Intel Pentium (iv) AMD Cyrix, Intel Celeron)with minimum speed of 700mhz

4.2.9 Soft ware requirements of the requirements of the new system

- ✓ Operating system for the computer (Windows 2003/2007)
- ✓ Data base management system Microsoft access
- ✓ Visual basic 6.0
- ✓ Microsoft office

4.3 System design

The system design of the record management system is broken down into relational database, stratucltural system design and interface design

4.3.1 Relational database design

The back end database of the system was developed using Microsoft access 2007.the design rules and procedures taken included

- Identifying the class or object of focus for example a student,
- using the design view we specified the data types of the fields and their sizes
- Adding some brief description to the fields to explain the details of storage
- Specification of primary key to avoid duplication in the fields

Figure 4.3.2 a screen shot of design view of table in the database

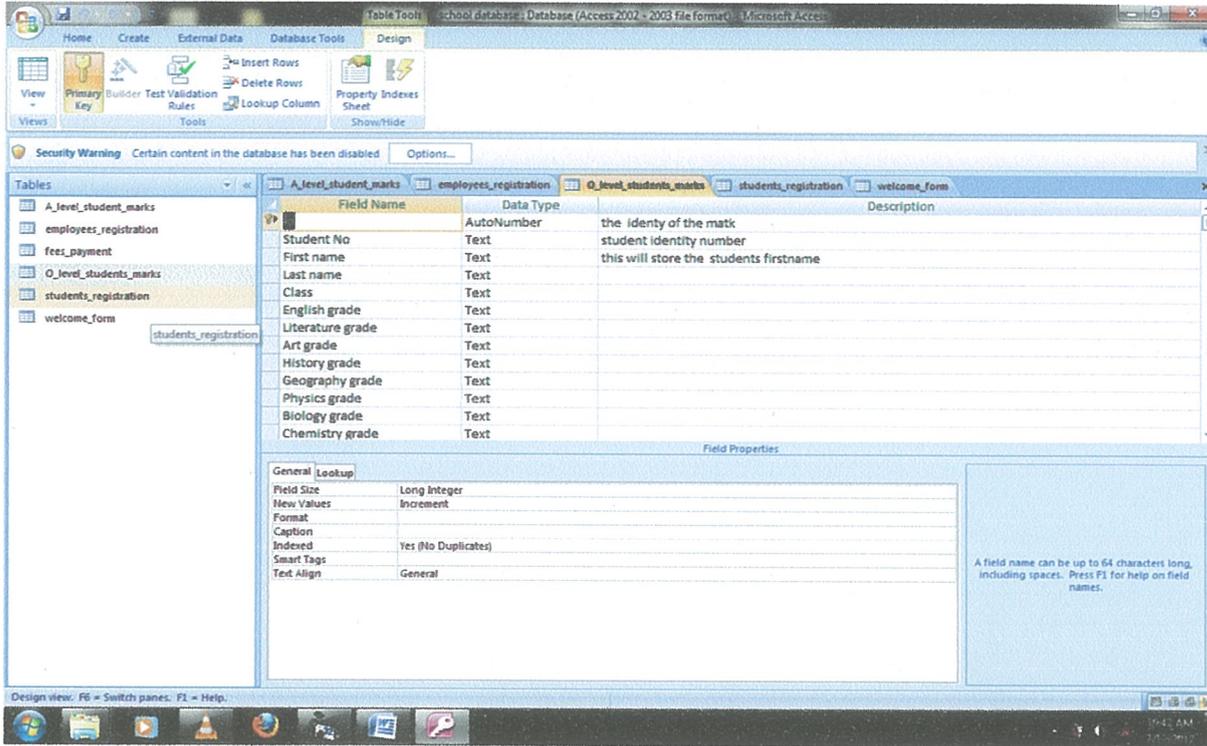
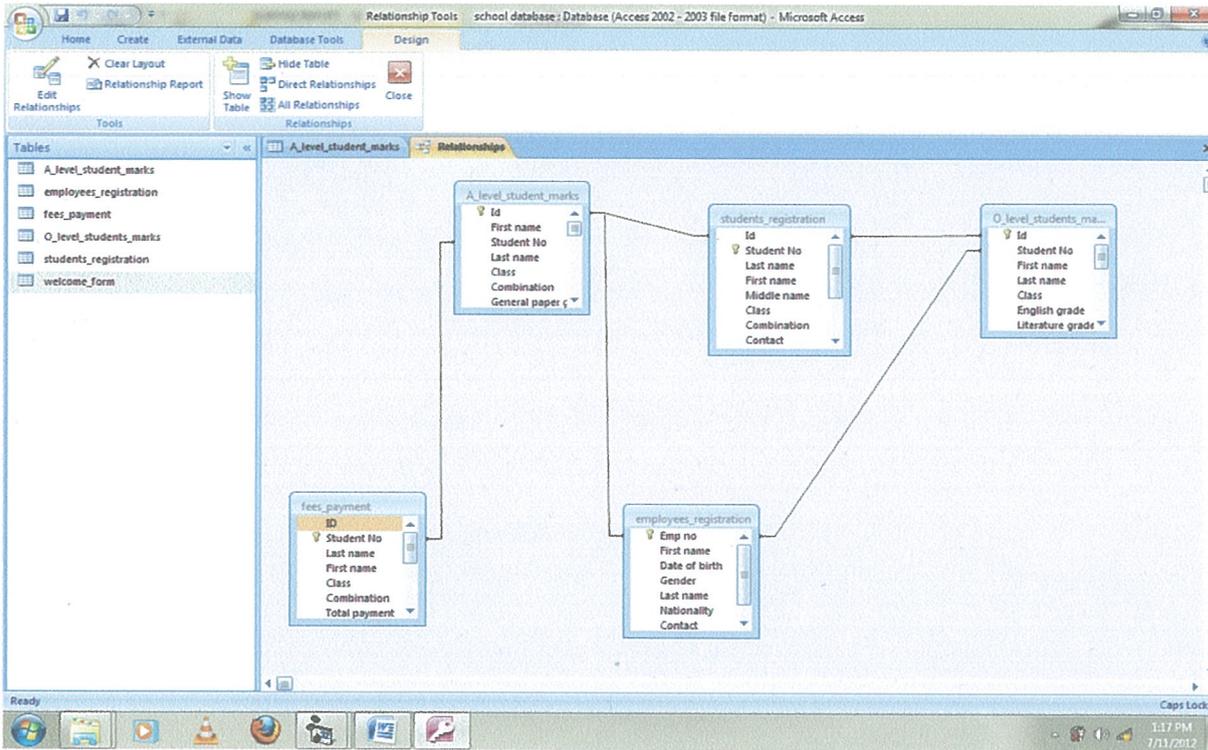
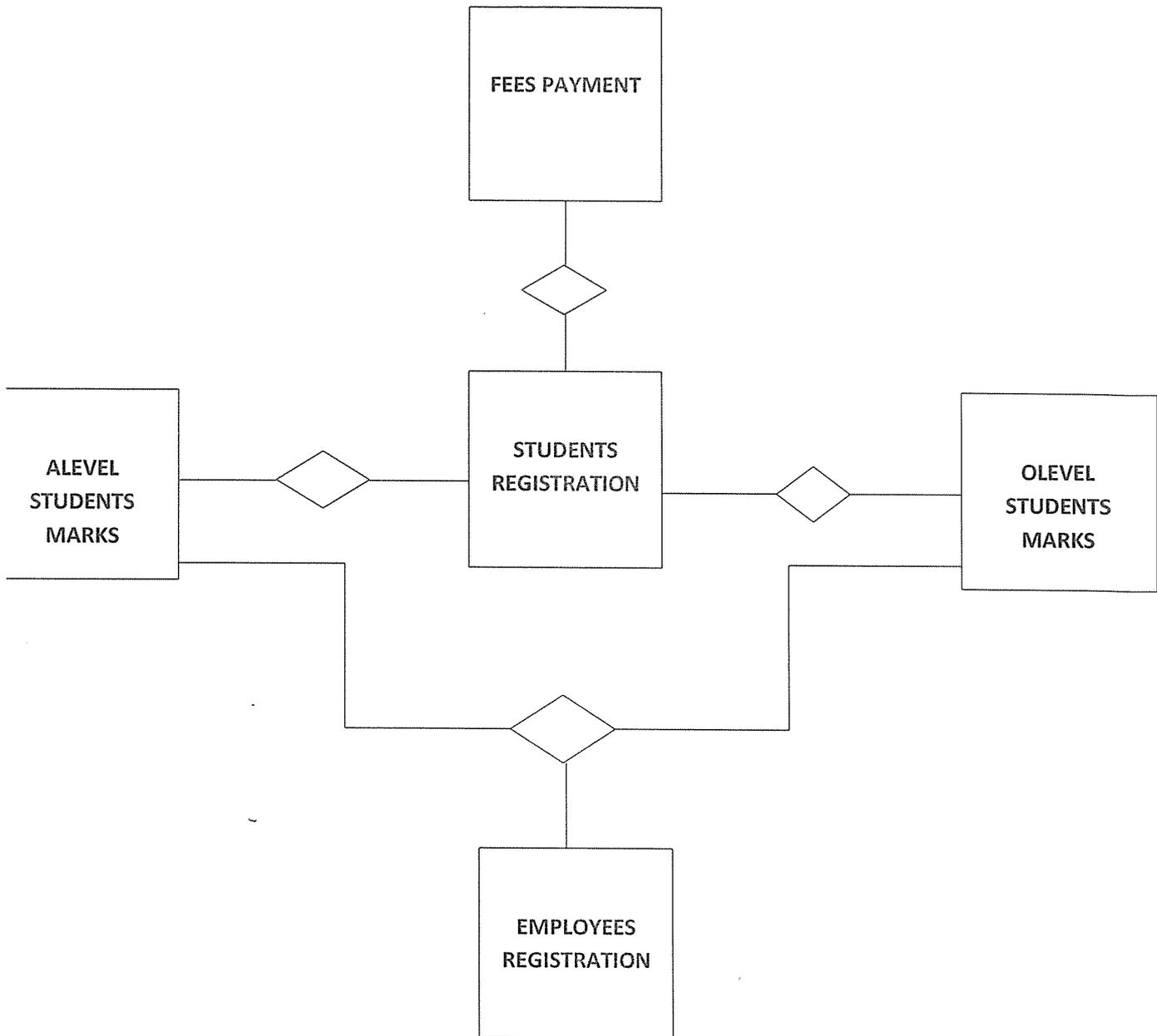


Figure 4.3.3 a screen shot showing table relationships



4.3.4 Conceptual data model

The conceptual data model provides for developing a structure from the top to down to the low level. In this section various entities, their attributes and relationship are identified as well as the relationship among entities. The rectangle shape represents the entities.



4.3.5 Testing

Testing is a process of verifying that a software product meets the requirements.

4.3.6 System testing

Before actually implementing the new system into operation a test run of the system was done removing all the bugs during testing are as below.

- i. **Unit test:** each form was individually tested with the prepared test data then all errors were removed from the system
- ii. **System test:** tests on the entire system were performed using the actual data in the database. The results were analyzed at each stage of the execution.

4.3.7 User Training

Users were picked asked to test the interface of the computerized system and comment on its usability. The comments were used to make changes where possible. Some of the activities during the training of the users can be seen below.

- iii. How to enter the data using the designed interface
- iv. How to process the data(saving, deleting etc)
- v. How to log into the system
- vi. How to print out reports.

4.3.8 System conversion

We recommended that the school uses a parallel run approach, this ensures that both systems be used till that time when the users are more familiar to it and can use it comfortable. This also ensures that early stage failures don't affect the school.

CHAPTER FIVE

SYSTEM IMPLEMENTATION

5.0 Introduction

This chapter deals with the result of system design and implementation.

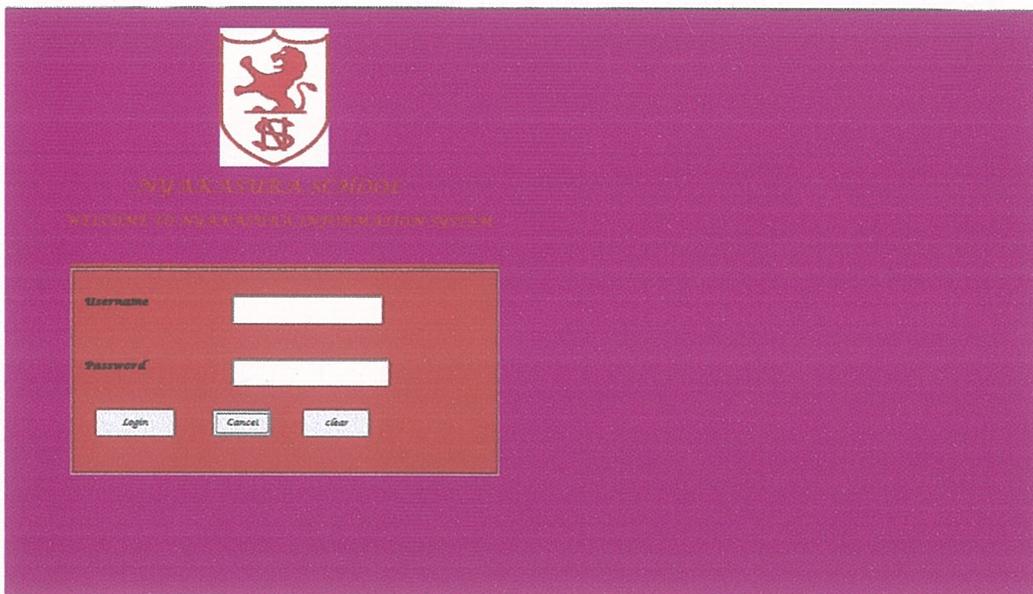
5.1 System implementation

This stage involves the actual implementation activities carried out. The phase comprises of testing usability and security of the system. To make sure that the computerized system functions well.

5.2 System flow and interface design

The system developed has various forms in the system starts with welcome form where a person will be prompted to log into the system. When the system authenticates the user it provides an interface where the system user can carry out registration for students

Figure5.2.1 showing the login screen and home screen of the system



5.2.2 View and register new students of the system

This will be one of the big responsibilities the administrator will carry. The form provides options for entering details of the students. This will enable the administrator to know the number of students registered in the system. The close button exits the form

Figure 5.2.3 the screen shot is as below

The screenshot shows a web-based form titled "STUDENTS REGISTRATION" with a green background. The form contains the following fields:

First Name	JOHN	Age	25
Middle name	MUKALAZI	Contact	0784492717
Last name	DPID	gender	MALE
Date of birth	07/01/1996	Religion	CATHOLIC
Age			
class			
Combination			
Previous record	of pdf		
Student No	30		

At the bottom of the form, there is a control bar with the following buttons: Add Record, First Record, Next Record, Previous Record, Last Record, Search, Save, close, Back, Refresh, and reset.

5.2.4 The MDI FORM

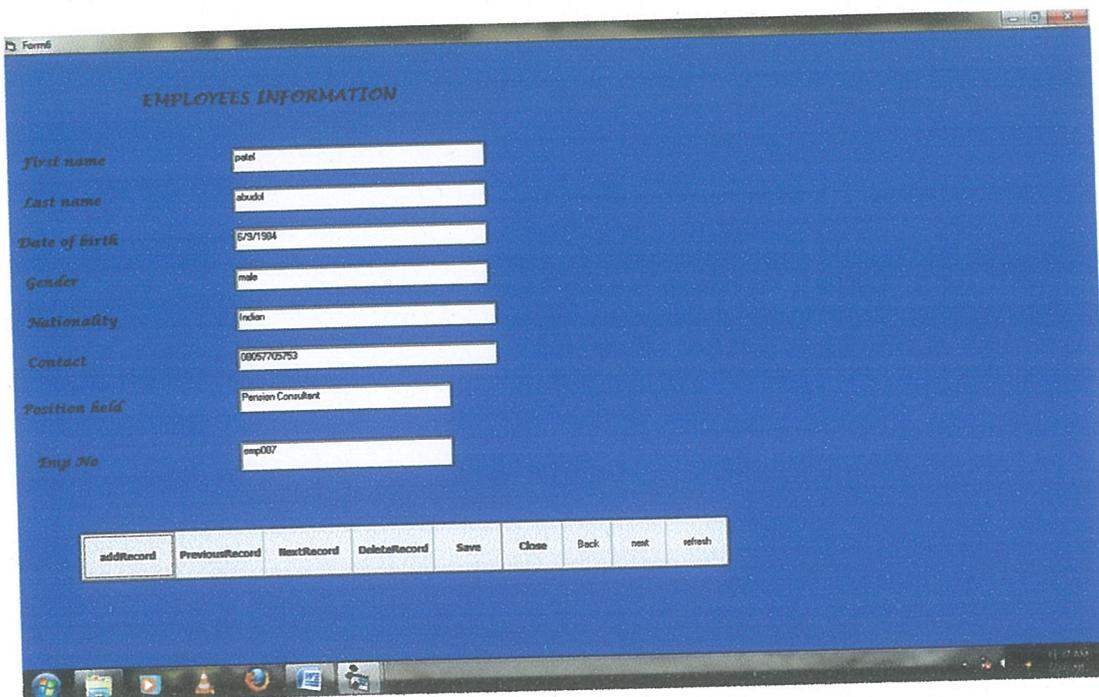
Displays all the forms in the system and reports which are connected to each other.

Figure 5.2.5 The screen shot is as below



5.2.6 Screen shot of employees form

This one enables employees to register both teaching and non teaching staff which helps to keep records in the school.



EMPLOYEES INFORMATION	
First name	potel
Last name	abudd
Date of birth	0/3/1984
Gender	male
Nationality	Indian
Contact	0805705753
Position field	Pension Consultant
Emp No	emp007

addRecord PreviousRecord NextRecord DeleteRecord Save Close Back next refresh

Figure 5.2.7 Screen shot fees payment

The below form shows payment details of students O and A level. Plus parent and guardian information captured and kept. Various features are present on this form to enable the administrator to manage the records

The screenshot displays a web application window titled "FEES PAYMENT" with a blue background. The form is divided into several sections:

- Students Details:** Includes fields for First name (MUKASA), Last name (WALTER), Class (S4), and an empty Combination field.
- Payment Details:** Includes fields for Total payment (40000), Payment made (20000), Balance (20000), and ID (14).
- PARENT/GUARDIAN INFORMATION:** Includes fields for Father name (MUKASA), Occupation (LAWYER), Employer (STATE HOUSE), Mother name (RITA), Mother Occupation (NURSE), and Mother Employer (KJU).

At the bottom of the form, there is a navigation bar with buttons: Add Record, First Record, Next Record, Previous Record, Last Record, Search, Save, Back, Refresh, and reset. The Windows taskbar is visible at the bottom of the screen.

Figure 5.2.8 screen of O level student's marks

The interface design allows an administrator to add records of students who study O'level in Nyakasura School.

Form4

O'level marks

first name:
 last name:
 class:
 student No:
 id:

subject	grade	subject	grade
English	<input type="text" value="3"/>	Art	<input type="text" value="4"/>
History	<input type="text" value="6"/>	Literature	<input type="text" value="6"/>
Geography	<input type="text" value="4"/>	Physics	<input type="text" value="9"/>
Mathematics	<input type="text" value="6"/>	Subject named	<input type="text" value="11"/>
CXE	<input type="text" value="5"/>	subject passed	<input type="text" value="10"/>
Biology	<input type="text" value="9"/>	Division	<input type="text" value="1"/>
Chemistry	<input type="text" value="9"/>		
Commerce	<input type="text" value="1"/>		

Figure 5.2.9 screen of A level marks

Form5

A level marks

student details
 student No:
 Last Name:
 First Name:
 Class:
 Combination:
 id:

Subject	grade	Points
General paper	<input type="text"/>	<input type="text" value="5"/>
Literature	<input type="text"/>	<input type="text"/>
History	<input type="text"/>	<input type="text"/>
Geography	<input type="text"/>	<input type="text" value="4"/>
Mathematics	<input type="text"/>	<input type="text"/>
Economics	<input type="text" value="B"/>	<input type="text" value="5"/>
Agriculture	<input type="text" value="F"/>	<input type="text" value="0"/>

Subject	grade	Points
Chemistry	<input type="text"/>	<input type="text"/>
Biology	<input type="text"/>	<input type="text"/>
Physics	<input type="text"/>	<input type="text"/>
Divinity	<input type="text" value="B"/>	<input type="text" value="5"/>
Art	<input type="text"/>	<input type="text"/>
Points earned	<input type="text" value="15"/>	<input type="button" value="view points"/>

The interface design allows an administrator to add records of students basing on the combination he or she offers. When all marks have been entered the user can carry out various tasks like computing the subject grades points and the total points the student got.

And the above forms include;

Search button; this enables the administrator to look for particular records in the database and make changes where possible.

Next button; moves to the next record in the record set

Previous button; moves to the previous records which the user has already viewed

Clear button; this button erases the text box leaving them clear and ready to receive records

Close button closes the form and returns to the student personal information form

CHAPTER SIX

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter gives an overview of this research, summary of the field discoveries, conclusion and provided recommendations.

6.1 Discussion

The new system is computerized from entry of data processing, to generating of reports. The system reduces on the amount of work done when entering data. The system has speed, validation routines and is reliable. It is secure through a password.

6.2 Limitation of the Study

During the project formation and development, some of the problems encountered include the following:

- The case study was far from our homes hence project being costly in terms of finance accrued from transport fare and hence resulting in time wastage.
- Getting access to some records was very hard
- Negative attitude from employees in the school.

6.3 Future works

The system should be further developed to allow students to view their marks and performance online.

6.4 Recommendation

We recommend that the school puts in place other database application like oracle since they have more record storage space

6.5 Conclusion

The manual (paper file system) and computerized method of dealing with information were analyzed critically pointing out the bad and the good sides of each. It also gives the background of the whole study, objective problems encountered as well as the concepts adopted in computers to manage all in all the advantages of the computerized system.

List of appendixes

APPENDIX A

QUESTIONNAIRE FORMART USED

1. Do you use computers to do some of the school work?
2. How do you keep your records?
3. Who is responsible for registering all activities in school?
4. Who is eligible to be registered?
5. What difficulties do tourists find in registering?
6. How are students enrolled into the school?
7. Please give a rough estimate of how many student are in this school?
8. How do you cater for students with disabilities?
9. Do you think there is a need to introduce a computerized system process?
10. What subjects are taught in O and A level? Please elaborate

REFERENCES

- Applegatel, Mcfarlan F, mckenney 1996, corporate information systems
- Coburn, A.F 2001. Models for integrating and managing acute and long term care services in rural areas. Journal of applied gerontology.
- Cannolly T and begg C 2003, database systems: a practical approach to design
- Duncombe s. and helks R 2001, information and communication technology
- Lonnie D.Bently Kevin C.Dittman, Jeffery L.Whitten, 5th edition 2001 page 45.
- management: text and cases, 4th edition, Irwin, Chicago.IL
- Ralp M stair Jr 1986. Computer in today's world, Homewood illinoir 60430.
- <http://www.ehow.com/about/5194585-types-management-information-systems.html> (visited between January 05 2011 and February 06 2011)
- <http://tutor2u.net/business/ict/intro-information-system-types.html> (visited between may 06 2011 and may 20 2011)
- http://wiki.answers.com/Q/Disadvantages_manual_based_information_system
- http://wiki.answers.com/Q/Define_manual_based_information_system
- http://wiki.answers.com/Q/Advantages_manual_based_information_system