

**DESIGN OF FEES PAYMENT AND MONITORING SYSTEM
CASE STUDY: VICTORIA HIGH SCHOOL- MASAKA
DISTRICT**

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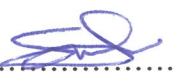

DECLARATION

I Makur David Diu and Ukongo Kolong Silvio are here by declaring that this project proposal is our original work and has never been submitted to any University or Institution for the Award of Diploma, degree or any academic Award.

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Signature.....
Date.....

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Signature.....
Date.....

SUPERVISOR APPROVAL

This is to certify that this project proposal entitled “Design of Fees Payment and Monitoring System for Victoria High School” was conducted and written under my close supervision.

Ms. Onkangi.....

Signature.....

Date.....

DEDICATION

We dedicate this work to our parents for all the love, understanding, encouragement, material and moral support without whom our education would not have been a success. To our dear brothers and sisters together with our supervisor Ms. Onkangi thanks for the encouragement and support during the time our study.

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We thank God for the courage and spiritual support He bestowed upon us, the strength and ability while pursuing our studies.

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ABSTRACT

Victoria high school has undergone a complete redecoration the manual way of keeping records has now been digitalized so as to ease the storing of the required data. The researcher designed a fees payment and monitoring system for school bursar that provided all the school's functions in order to improve the use of the fees payment and to reduce paper work. The main importance of the fees payment and monitoring system was the automation of the day to day operations of the school as well as monitoring the school resources such as fee's defaulters. Its supported functions such as issuing of clearance cards and additional of the new students.

The researcher used interview, questionnaires and observation as methods of data collection. The above methods enabled the researcher to collect relevant and accurate information. Collected data was analyzed both qualitatively and quantitatively by using computer packages like correlation and Microsoft SPSS.

The new has a wide variety of functionalities and management tools for the Victoria high school users, users being bursar and school students. Some of the functionalities are searching student's names, issuing receipts and clearance cards. However, it is up to the school to use our system. Unfortunately, up to now the school is running everything on manually. With this new system, no more users can search for particular name of the student from the system while the system administrator can add new users.

The system has user login specially designed for the system administrator. Normal users can't access the main menu unless they have the privilege granted by the system administrator. So in other word the main menu has user name and password. With this new system in effect the usage of bursar at the Victoria High School will be efficient, well managed and secure.

The researcher recommend that before the application is put into full use, it should be tested in a sample field to estimate any bugs that may not have been identified at the time of development. Also the researcher introduced the implementation of the new system online, system recovery and maintenance as areas of future study.

LIST OF ABBREVIATIONS

1NF	First Normal Form
2NF	Second Normal Form
CD-ROM	Compact Disk Read Only Memory
CODASYL	Conference on Data System Language
DBMS	Database Management System
DBTG	Database Task Group
DDL	Data Definition Language
DML	Data Manipulation Language
ER	Entity Relationship
GB	Gigabyte
GHZ	Gigahertz
IBM	Database management system
RAM	Random Access Memory
SQL	Structured Query Language

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CHAPTER ONE INTRODUCTION

1.0 General Introduction

Fees payment monitoring system is a non-traditional filing system whereby all the information about students' payment are fed in the computer. This system allows easy retrieval of data since it employs random access method, occupies less office space, reduces data redundancy (repeated data) and eliminates inconsistency (updating data in one file and not updating in another) since it employs relationships.

Victoria high school used a manual system. When a student had been admitted, pays school fees and then allocated a class. All these records were kept in a box file for future references. Eventually, piles of manual files occupy a large space in office. It was an inconvenience to check and analyze fees payment for even a single student because only sequential access methods can be used. Therefore, the researcher designed a computerized Fees payment and monitoring system that capture student's fees payments, produce the receipt and track the fees defaulters.

1.1 Background of the Study

Victoria High school is a private Secondary School that has an ever increasing number of students and great reputation. It is located along Masaka-Kyotera Rd, 1.5km from Masaka Town. However, at Victoria High School, the situation of poor data management has revealed a much less encouraging picture about future prospects of the school and it seems to have been one of the major problems that address the situation of education through private institutions.

Just like any other school, Victoria High School offers a number of combinational subjects such as Physics, Geography and Mathematics, Physics, Chemistry and Mathematics and History, Geography and Economics History, Kiswahili and Literature Economics, Geography and Mathematics Physics, Chemistry and Biology to mention but a few which calls for a great number of students to join the university. A classic data

management system have been put in place to avoid all the misfortunes like duplication of results, loss of financial data .The researcher came up with a computerized fees payments monitoring system that address the poor data management policies at the school by scrapping the old manual system.

1.2 Statement of the Problem

Victoria High School maintains a traditional filing system for fees payment records. This had many shortcomings that include; long retrieval of records since files can be accessed sequentially this was time consuming since you have to turn piles and piles of files in order to get the information you are looking for, files occupies a large office space, which would have been used for other purposes, there was data redundancy since student payment data was repeated in different files; inconsistency of data that was student payment can be updated in one file and not in another, and the records are insecure since they can be accessed by unauthorized users, these led to a slowness of the receipts processing and the bursar get hard time to retrieve the fees defaulters. Therefore, the researcher designed a Computerizing student' payment records that solved all these problems and bring efficiency.

1.3 Project Objectives

1.3.1 General Objective The researcher designed a system that monitor fees payments of students at Victoria High School that capture student's fees payments, produced the receipt and track the fees defaulters.

1.3.2 Specific Objectives

1. To investigate the problems that arises from the current system
2. To design a computerized fees payments monitoring system that will track the fees defaulters and produces financial statements.
3. To test the new designed system.
4. To implement the designed system.

1.4. Research Questions

1. What are the problems that arise from the current system?
2. How can the designed fees payments monitoring system track the fees defaulters and produce financial statement?
3. How can the designed fees payments monitoring system are tested?
4. What are the implementation strategies on the new system?

1.5 Scope of the Study

The Study covered the design of fees payment and monitoring system for Victoria High School. It covered students' fees payment records, which comprised the project leaving out payroll and other activities.

1.6 Purpose of Study

The aim of study was to design a computerized fees payment and monitoring system for Victoria High School that capture students fees payments, produces the receipt and track the fees defaulters

1.7 Significance of the Study

The new system benefited the management in that, there was faster retrieval of data, fees payment that was monitored as desired, and this had helped the management to know what they are owed.

The student's records were kept properly so that in case the receipt is misplaced the information can be easily retrieved.

It had helped the sponsors in that the system became transparent once the student pays; they receive a receipt and are assured of backup.

The new system assisted the bursar to easily identify the fees defaulters and also produces financial statement for each student.

In 1970, E.F Codd of IBM Research Laboratory produced an influential paper on the relational data model, timing and addressing the disadvantages of the former approaches. Many experimental relational systems were implemented thereafter, with first Commercial products appearing in early 1980s, in a particular note System Relational Project at IBM's San Jose Research Laboratory in California was developed (Astrahan et al., 1976). This project was designed to prove the practicality of the relational modal by providing implementation of its data structures and operations that led to two major developments.

2.2.2 Components of Database Systems

As it is mentioned in the history of DB, the Data Base Task Group (1971) proposal identified three components.

1. The Network Schema, this is the logical organization of the entire DB as seen by the DB Administrator which includes a definition of the DB name, the type of each record and the components of each record type.
2. The subschema, this part of the DB as seen by the User or application program.
3. A data management language, this is to define the data Characteristics and the data structure and, to manipulate the data.

2.2.3 Languages Used in Database Systems

For standardization, the DBTG (1969) specified three distinct Languages:

1. A schema Data Definition Language (DDL) that enables the DBA to define the schema.
2. A subschema Data Definition Language (DDL), this allows application programs to define the parts of the DB they require.
3. A Data Manipulation Language (DML), this is used to manipulate the data in the DB.

2.3 Database Management Systems (DBMS)

Date(2000) describes a DBMS as software that handles all access to the database. While Elmasri (2000) defines a DBMS as a general-purpose software system that facilitates the processes of defining, constructing and manipulating database for various applications. The Database Definition Language (DDL) is software that interacts with the users' application programs and the database. So a database is created and managed by a collection of programs known as Database management systems

2.3.1 Functions of DBMS

Ibid. (2000) states the functions of database management system as follows:-

- 1) Data definition. DBMS accepts data definitions (external Schemas, the conceptual Schemas, internal schema and all associated mappings) in source form and convert them to the appropriate object form. In other words, the DBMS must include DDL processor or DDL compiler components for each of the various data definition languages.
- 2) Data Manipulation. The DBMS must be able to handle requests to retrieve, update or delete existing data in the database or to add new data to the database. Therefore the DBMS must include a DML processor or compiler component to deal with the data manipulation language (DML)
- 3) Data security. It provides controlled access to the database by allowing only authorized users' access.
- 4) Integrity System. This maintains the consistency of stored data.
- 5) Data recovery system

2.3.2 Advantages of DBMS

Ibid. (2000) states the following advantages of database management system;

- 1) They consume less of space
- 2) In case of a networked environment there no need of transferring files from one place to another hence eliminating chances of losing information or misplacing files during their transfer.
- 3) There is information security. Only authorized users can access files by login using their accounts.
- 4) Data redundancy is eliminated

- 5) Data retrieval and processing is very fast since files can be accessed sequentially.
- 6) Data inconsistency is eliminated since files are linked.

2.3.3 Disadvantages of DBMS

In spite of the advantages of using a database management system, according to Ibid. (2000) states;

- 1) It involves unnecessary overhead costs that are not incurred in traditional file processing. These costs are due to high initial investment in hardware and software and training.
- 2) Need an expertise to manage it.

2.4 Computerized Information Storage

A computer is a sole tool used to keep, process, and retrieve information, Masaba (2000). It stores information using the concepts of database and the information is organized for easy and quick access whenever needed. In the computer based method of information keeping all information about a particular student is organized in form of records each being identified by a key record known as a primary key such as registration number of a student. All records are organized in an order predetermined by the value of a key field, stored in a database file on the computer's storage device such as disks or magnetic tapes. Accessing any record for some operation can be achieved by providing the computer with the value of the record in which the record are organized in the database file, which records are identified by means of unique or group of characters called a primary key.

2.4.1 Advantages of a Computerized System

Ibid. (2000) states the advantages of computerized system as below;

- 1) Data redundancy (duplication of data items) is minimized hence the computer provides consistent information.
- 2) Data can be easily accessed. Several computers located in different places can be interconnected by a communication link to facilitate information exchange. This can improve on security and transaction delays.
- 3) Easy retrieval of data
- 4) Data processing is easy as compared to other filing systems
- 5) Assessment of individual student payment is possible

2.4.2 Disadvantages of a Computerized System

1. Basic computer knowledge is required to access and perform any operation on computer-stored information.
2. File processing is dependent on availability of power
3. In a situation where there is no bypass procedure, once a computer system fails, then there would be no business transaction at all.
4. Hence it is clearly seen that the advantages of using a computerized system outweigh the disadvantages, of which many solutions are now in place.

2.5 Normalization

Normalization is a data analysis technique that organizes data attributes such that they are grouped to form non-redundant, stable, flexible, and adaptive entries.

Elmasri (2001) describes it as the process of analyzing the given relation schemas based on their functional dependency and primary keys to achieve the desirable properties of; Minimizing data redundancy and minimizing the insertion, deletion and updating anomalies.

Thereon Willis (2000) describes a primary key as a column whose values uniquely identify a row of data in the table. No two rows can contain the same primary key. When a primary key is created on a table, a DBMS automatically creates a uniquely index from the primary key on the table. This ensures that no two primary keys can be the same.

Foreign key is a column in the table where that column is a primary key in another table. It points to the primary key in another table. A foreign key in one row of a table points to an exact row or data in another table. Using foreign key and primary keys, a relationship between tables is made.

2.5.1 Types of Normalization

There are two types of normalization that is the first normal form (1NF) and second normal form (2NF).

2.5.1.1 First normal form (1NF)

In this type of normalization column values in the table that are non atomic are split into atomic values. Example of non-atomic attribute is Name. To meet the needs of 1NF, Name is split into first name and last name.

enhance the performance of the organization.

Organization; the hardware by setting them up to help achieve the set goals of the organization.

Staffing; worker/employees and managers are involves in the development of an information system

Directing; through the experts of system development, the requirements are put in the place. The experts are used in the developments of the required system by use of the required IT equipments like the applications software's.

2.9 Application of Information Management System

According to Zwass (1998), Fees Payment Monitoring System provides centralized management and process automation for public, private and school finance and audit activities such as circulation clearance cards, bank slips, receipts, and reporting the records of the finances.

Fees Payment Monitoring System can provide integration of process within the finance's offices and online web portal access for catalog search, content delivery or reservation request and check out history. They also track and automate notification of fees defaulters.

CHAPTER THREE METHODOLOGY

3.0 Introduction

This chapter presents the methods and procedures that were used to collect and analyze data. It discusses how the research was conducted. It further looks at area of study, target population, sample size, research design, sampling techniques, and data collection methods and data analysis.

3.1 Area of Study

The researcher designed a fees payment and monitoring system for Victoria high school. A case study method with a particular method of carrying out research and it involved an in-depth, longitudinal examination of a single instance or event. Also, the case study had helped the researchers to define the unit of analysis, and to identify the respondents.

3.2 Target Population

The researcher had targeted on bursar, head teacher, principal, teachers and students. This respondent's gave all information about fees payment monitoring system.

3.3 Sample Size

The researcher targeted the bursar, head teacher, 15 teachers, principal, and 15 students from senior five, 10 students from senior four, 5 from senior three, 5 from senior two and 5 from senior one. The respondents were interviewed, and the questionnaires were distributed to them.

3.4 Research Design

The researcher used exploratory and descriptive research designing. Exploratory design was used to access the impact of fees payment and monitoring system techniques in the academic sector, while descriptive design was used to understand the types of fees payment and monitoring system. The design had been a process of applying various techniques and principles for the purpose of defining system insufficient details to permit its physical realization.

3.5 Sources of Data

The researcher had collected data from two sources which includes; the primary and secondary sources. Primary sources included questionnaires that were designed to collect

data from respondents. This data was used to draw discussions and conclusion about the problems under the study. Secondary sources included the text books, journals, research reports, internet, news papers and other publication from which data were obtained.

3.6 Research Techniques

Simple random sampling as a technique of selecting respondents from the study population was used. The sampling procedure involved choosing the research units of the population of Victoria high school that was used in the study. The researcher used simple random samplings a tool of data collection because it save both resources and time. It also provided first hand information in details since the researcher had enough time to ask others information related to the topic and objectives of study. Samples offered more detailed information and high degree of accuracy.

3.7 Data Collection Methods

The researcher used interview, questionnaires and observation as method of data collection. This enabled the researcher to collect relevant and accurate information.

3.7.1 Interviews

These are fact-finding techniques where by the researcher collected information from individuals through face-to-face interaction. It was used to achieve all of the following goals: find facts, verify facts, clarify facts, generate enthusiasm, get the end-user involved, identify requirement, and solicit ideas and opinions. The researchers interviewed the bursar and note the responding answers. The researcher used interviews because; the interviews were all carried out on the same day thus time saving.

3.7.2 Questionnaires

Questionnaires are special purpose documents that allow the researcher to collect information and opinions from respondents. Using this technique, researcher designed and distributed fifteen questionnaires to students and ten to the administration. They were delivered and collected by the researcher on the same week.

The designer of the questionnaire was pyramid by structure where by researcher began with specific questions then general ones. Specific questions were relevant to the subject under study; but were used to warm up the respondent while general questions were

relevant to the subject under study. The questionnaire covered all the objectives. The researcher used questionnaires because they were answered quickly, responses were tabulated and analyzed quickly, and the researcher was able to get relatively simple options from a large group of data.

3.7.3 Observation

This method was used to verify the information gathered using the above methods and the missing information was recorded. Observation method revealed the filing system used, that was a pile of box files. The researcher had no problems with this method since the files are in open shelves. The researcher used observation because; the method was cheap, worker work and their schedules are not interrupted and provides a cross view of the work, that is to say people, objects, documents and other occurrences are observed concurrently.

3.8 Data Analysis

The data that were collected was analyzed both qualitatively and quantitatively. Qualitatively data were analyzed using personal communication and thematic analysis and coding techniques. Quantitatively, computer package like correlation and Microsoft SPSS used to quantify the data into simple percentage which was presented in form of tables and charts.

3.9 Validity and Reliability

Data quality control refers to as the validity and reliability of the instruments. Validity refers to the appropriateness of the instruments while reliability refers to its consistency in measuring whatever it was intended to measure. In this research, it was necessary to control its quality to minimize error. The questionnaires were first tested before distributing them to final recommended some modifications in the nature of the questions. The supervisor had been consulted for expert knowledge on questionnaire construction. After the assessment of the questionnaires, necessary adjustment was made bearing in mind the objective of the study, so as to get information that had been intended in this research. The questionnaires that were administered to the selected respondents.

3.10 Ethical Considerations

The researchers needed to show the greatest level of discipline by respecting the respondents and taking their responses confidentially so that they only serve the academic purpose they were intended for. The researcher travelled to reach out to every respondent during the process of data collections.

CHAPTER FOUR SYSTEM ANALYSIS AND DESIGN

4.0 Introduction

System analysis and design was the phase in which the requirements of the new system was identified. The research evaluated the feasibility of the new system. The researcher looked at the real design and usage of the new system. The tools used to develop the system, processing and output in the new computerized fees payment and monitoring system for the Victoria High School.

4.2 Analysis of the current system

In this chapter, the researcher looks at the existing system at the School. Looking at all the processes that take place when dealing with financial information, once any student pays fees, the bursar just takes note of the name, registration number, term of the student plus the amount paid and the balance. It becomes so hard in the sense that some payments are partial so a number of updates have to be made for proper data flow. In addition, any expenditure made is just recorded and at the end of the day, books are balanced. At the end of a given financial period, reports are generated and submitted to the management manually.

4.2.1 Logical Diagram of the current system

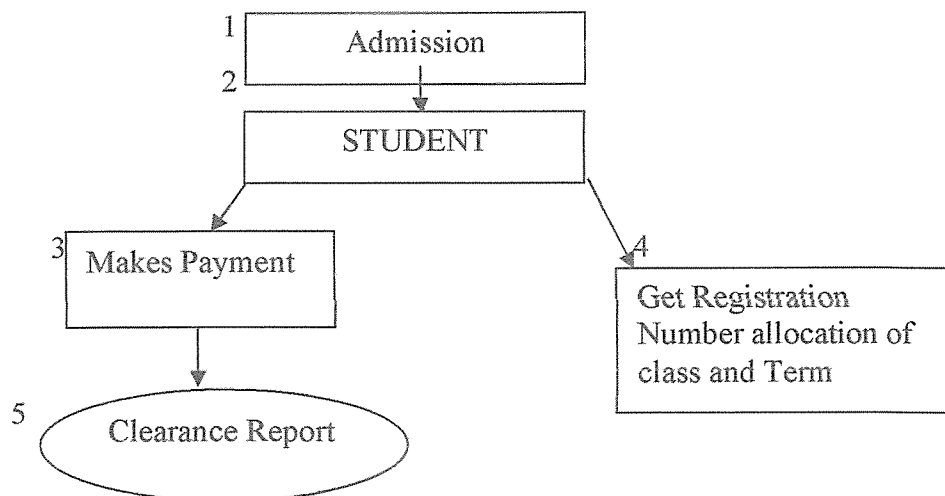


Figure 1: Logical diagram of the current manual system.

4.2 Description of the Proposed System

A new computerized system was developed with the capability for storing a vast piece of information. The main difference between the old system and the new computerized system is that data capturing and processing is computerized and that computers are used instead of papers and books. It requires less storage space. It is also much more efficient since it can generate reports within minimum time and with minimal errors.

A functional feature was included in the formation system to satisfy the business need and be acceptable to the User. Each process was explained precisely including inputs, logic, outputs and data stores associated with each process. Data is captured into the computer system using a keyboard by just typing it. Required details about a given activity like fees payment or any expense paid is made at this stage.

Data manipulation and processing is in different forms for example updating and editing to make it legible to the management. Data is changed into information and saved awaiting retrieval for any purpose. Besides totals for all incomes are made.

Processed data of information is output in form of reports and presented to the School Management. Specific data can also be output depending on the request given for example balance of a given student. This is done by creating queries.

4.3 Benefits of the proposed system

The new system sought to overcome the shortfalls associated with the old system. The new system achieved the following benefits;

1. Improved security and access control
2. Better services to students
3. Changes the way data is accessed (from sequential to random)
4. Regular updates
5. Provide accurate and timely information
6. Increased throughput
7. Decreased response time
8. Improve the current data collection, storage and update methods.
9. Increase collaboration by putting in place a database to enable the units within the

scope to share information on data stored

4.4 Feasibility of Proposed System

Feasibility study also known as preliminary investigation evaluated the system in technical, operational and environmental aspects.

4.4.1 Technical Feasibility

This was a measure of the practicality of a specific technical solution and the availability of the technical resources and expertise that was divided into, hardware, software. The current system hardware and software specification were outdated because they could work for a few hours and only handled little information.

4.4.2 Operational Feasibility

Operational of the current system was not feasible since information retrieved from the files consumed a lot of the time that bursar required. The increase in bursar at the school therefore leads to high operational cost in terms of the wages.

4.4.3 Economical Feasibility

The cost-benefit analysis of the current system took a close work at the cost incurred to run it. It covered the revenue and expenditure of the school. The table below explains the budget incurred by the use of the current system per month in exception of the cost of the computers which were to be incurred during the first purchase.

Items	Particular	Rates	Amount (Ushs)
1	Stationeries		
	3 reams of photocopying papers	10,000	30,000
	3 printing charges (150 pages)	30,000	90,000
	3 copies of research reports binding charges	12,000	36,000
2	Photocopying 150 pages from resource center book bank and library	100	15,000
3	150 pages of typing charges	1,000	150,000
4	Telephone calls and faxes		60,000
SUBTOTAL			381,000
5	Travel and circulations for 4 returned journey	120,000	480,000
6	Subsistence 43 days	4,000	172,000
7	Research assistant remuneration	170,000	170,000
SUB TOTAL			822,000
8	System Study & Specification Identifications		359,900
9	Hardware & Software Acquisition		1,850,000
10	Internet & Data collection Charges		200,000
11	System Design and Implementation		1,300,000
12	Systems Installation		350,000
13	Systems Maintenance		1,200,000
SUB TOTAL			5,259,900
TOTAL			6,462,900

Table1: Economic feasibility of proposed system

4.5 Requirement Specification

This is a description of the needs and desire for an information system. Requirements are divided into categories, system and technical.

4.5.1 System Requirements

4.5.1.1 Hardware Requirements

In the research, the researchers used the following hardware to design and implement the fees payment monitoring system as seen in the table below:-

Components	Specification
Processor	Pentium IV 3GHz
RAM	256MB
Hard disk	80GB
Floppy drive/ Flash disk	3.5 inch density / 512MB
Monitor	15 inch, resolution 800x600
Input devices	Keyboard and mouse
CD-ROM drive	52x
Printer	HP Laser jet

Table 2: Hardware requirements

4.5.1.2 Software Requirements

Components	Specification
Operating system	Microsoft windows 2000 or higher
Office	Microsoft windows 2000 or higher
Other application software	Visual Basic 6.0, SQL server 7.0
Antivirus	Norton 2009

Table 3: Software requirements

4.5.2 Technical Requirements

4.5.2.1 Functional Requirements

This is a function or feature that must be included in an information system to satisfy business needs and be acceptable to the user. They include:

1. The system should calculate the balances of the student
2. Should able to respond to the user in a few seconds
3. Produce weekly reports
4. Be reliable, portable and useable

4.5.2.2 Non-functional Requirements

These are specified by the user and are not incorporated in the system. They include:

1. The development costs and user training should be cheap
2. The system should be completed within agreeable time
3. The system should be able to handle 500 transactions per second

4.6 System Design

This encompasses the conceptual, logical and physical design of fees payment and monitoring system. It dealt with the preliminary design and the detailed design. It included diagrams which facilitated the user's understanding of the fees payment and monitoring system.

4.6.1 Conceptual Design

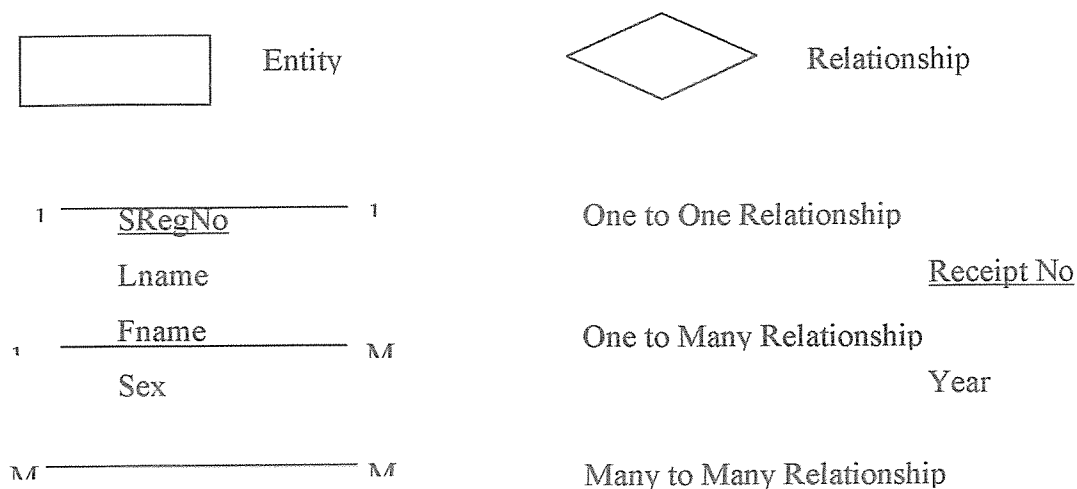
This conceptual design included a conceptual data model which was a detailed model that captured overall structure of organizational data, while being independent of any fees payment and monitoring system or other implementation consideration. A conceptual data model included the relevant entities, relationships, and attributes as well as rules and constituency that defined how data were used.

4.6.1.1 Entities of the fees payment and monitoring system

The key elements of the entity relationships model were entities, attributes, identifiers and relationship. ER diagram depicted the information requirements at the fees payment and monitoring system; Student, payment, clearance and term_of_year.

4.6.1.2 Entity Relationship Diagram

KEYS



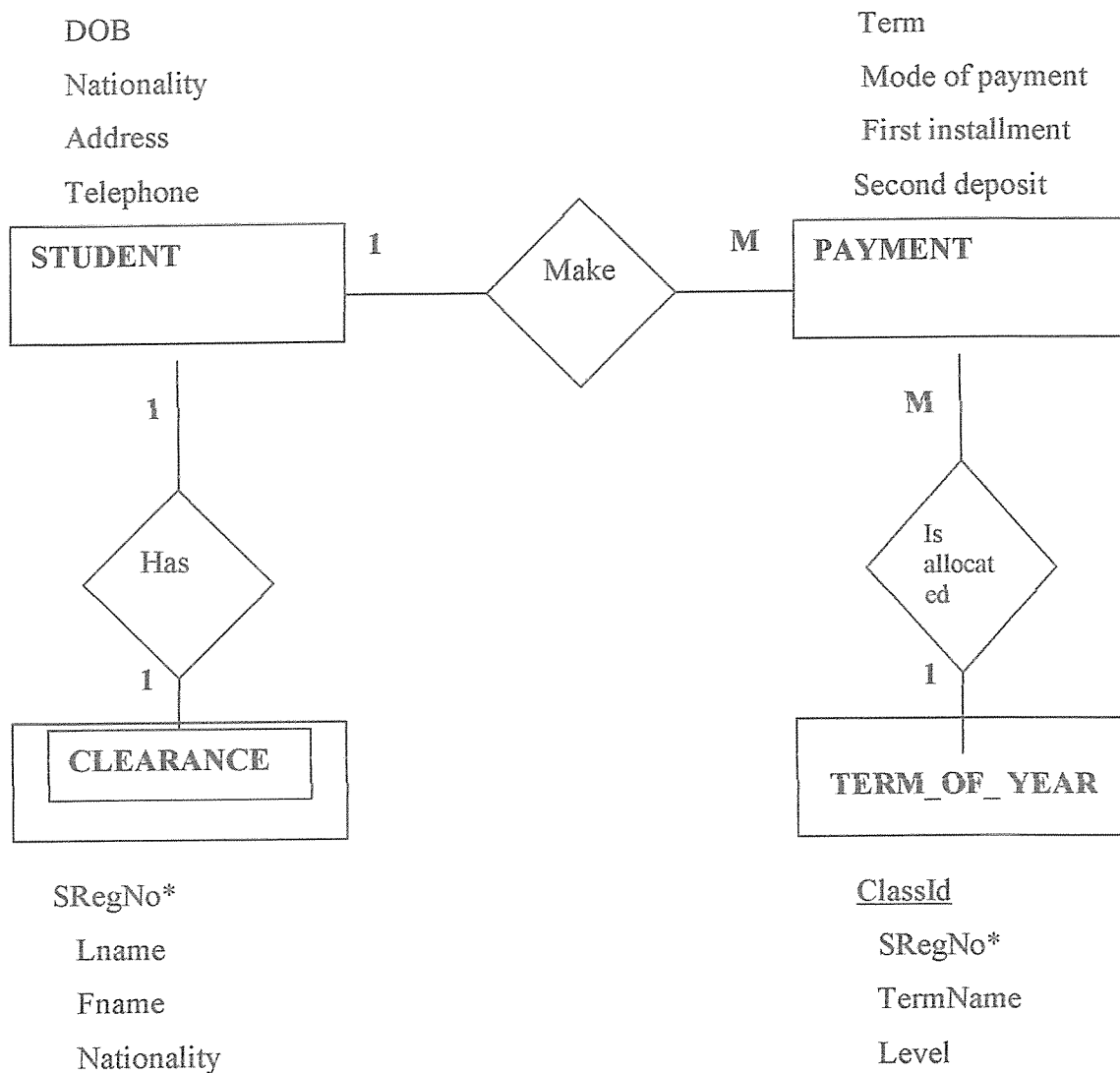


Figure 2: Entity relationship diagram for fees payment and monitoring system

The entity-relationship above one student makes much payment; also one student has one clearance. Much payment is allocated in one term_of_year.

4.6.2 Physical Design

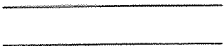

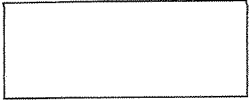
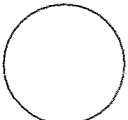
Describes how a proposed system will deliver the general capabilities discussed in logical design. It considers the following parts of a system: Output requirement; the system will produce receipts and weekly reports on payments. They will be printed out as hard copy and Input requirement; Data will be input by a keyboard through onscreen forms. Using a student's registration number, data accuracy will be checked.

4.6.2.1 Pseudo code

Pseudo code (derived from pseudo and code) is a compact and informal high-level description of a computer programming algorithm that uses the structural conventions of programming languages, but omits detailed subroutines, variable declarations or language-specific syntax. The programming language is augmented with natural language descriptions of the details, where convenient. Pseudo Code for the System;

1. *Start*
2. *Enter Username and Password*
3. *Is the password and username valid?*
4. *If no*
5. *Then go Back to Step 2*
6. *Else*
7. *Display Input Form*
8. *Capture Data*
9. *Store Data in the Database*
10. *Data Manipulated (System Administrator)*
11. *Reports*
12. *Management*
13. *End*

4.6.2.2 Data Flow Diagram

Tool	<u>key</u>	Description
 		File/database
		Input/out put
		Function

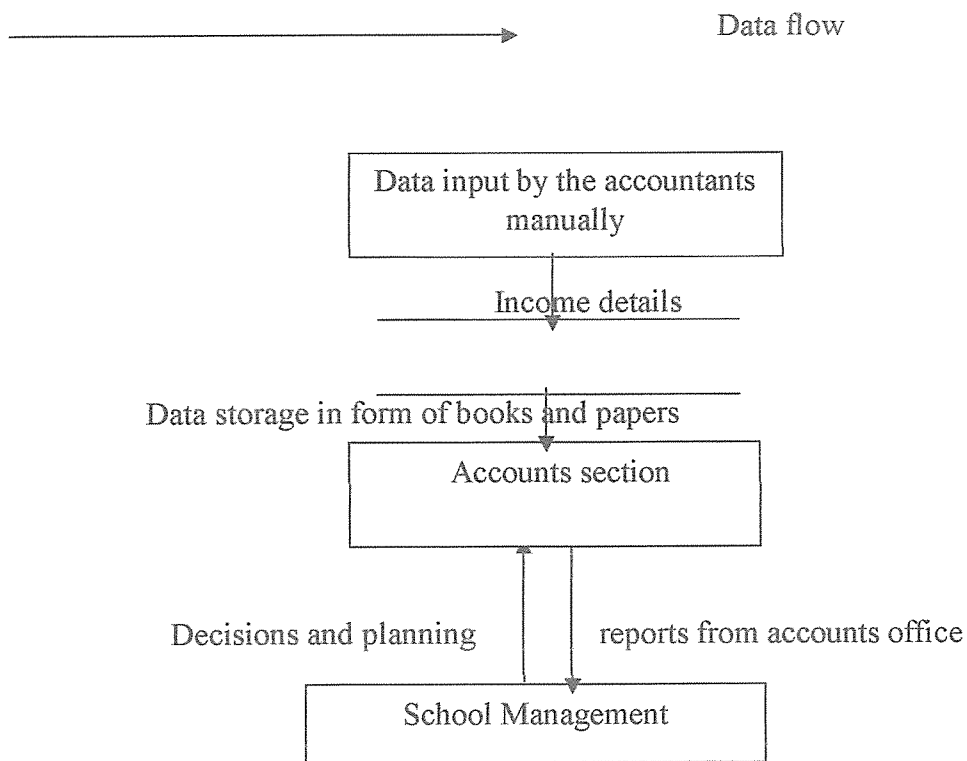


Figure 3: *Data Flow Diagram for fees payment and monitoring system*

4.6.2.3 The context diagram of the new computerized system

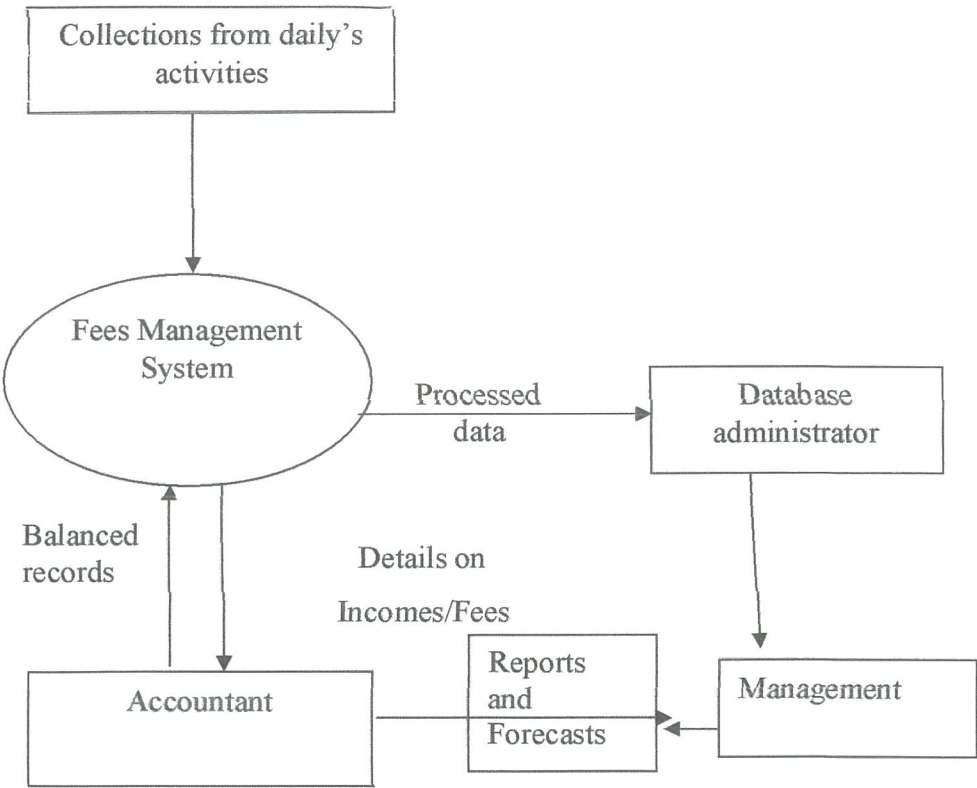


Figure 4: The context diagram of the new computerized system

4.6.3 Forms
4.6.3.1: Login form

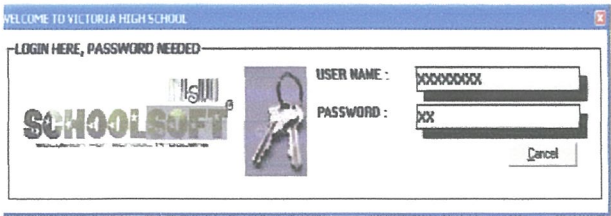


Figure 5: Login form

In this form the users are required to have a user name and password to ensure the security of information. In case the user entered the wrong password the system rejected and denied access.

4.6.3.2 Main Menu

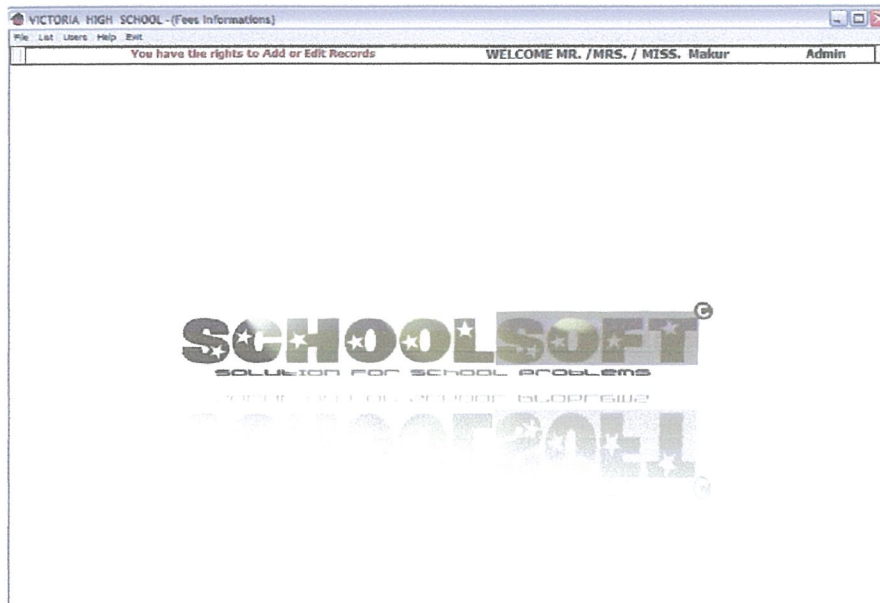


Figure 6: *Main menu form*

This was the form that data appears first when the system is opened. It contains name search option where the user uses it to search the name from the system files. The form will take the user to other forms.

4.6.3.3 Add New record (Payments)

VICTORIA HIGH SCHOOL - Fees Information		WELCOME MR. / MRS. / MISS. Makur Admin	
5/23/2010 12:02:24 AM			
VICTORIA HIGH SCHOOL (Home Form)			
Reg Number: Term / Class / Year: First Name: Last Name: Fees TShit: Reference 1: Reference 2:		Balance: 0 NO BALANCE Payments Made: 0 NO PAYMENTS MADE <div style="border: 1px solid black; padding: 10px; text-align: center; font-size: 1.2em; font-weight: bold;">No payments Made</div>	
AmountPaid Tsh: /= Bank Slip Number: Date Paid: AmountPaid Tsh: /= Bank Slip Number: Date Paid: AmountPaid Tsh: /= Bank Slip Number: Date Paid:		AmountPaid Tsh: /= Bank Slip Number: Date Paid: AmountPaid Tsh: /= Bank Slip Number: Date Paid: AmountPaid Tsh: /= Bank Slip Number: Date Paid: Bank Paid in: Branch:	
SAVE ADDNEW		DETAILS RESET CLOSE	

Figure 7: *Add new record (payments)*

This form was used for recording information about the names of the students who had been admitted and had not yet made any payments. it has save,addnew,details,delete and close button.

4.6.3.4 Payments form (When not cleared)

[illegible]

Figure 8: *Payment form (when not cleared)*

This forms shows the records of the students who had paid part of tuition fees but not yet

cleared their fees payment. The forms were designed in such way that the user has a provision to add, save, delete, and search for a record. A user still can navigate through the records using move next, move last, move first and move previous buttons. The form is then closed using close button

4.6.3.5 Payments Form (When cleared)

The screenshot shows a web application interface for Victoria High School. The title bar reads "VICTORIA HIGH SCHOOL (Home Form)". The main header area includes "WELCOME MR. / MRS. / MISS. Makur" and an "Admin" link. Below this, a message states "You have the rights to Add or Edit Records".

The form itself is titled "VICTORIA HIGH SCHOOL (Home Form)". It contains several input fields and sections:

- Reg Number:** LHS/234/OL
- Form / Class / Year:** Form 4 / 2010
- First Name:** DAY
- Last Name:** LAY
- Fees Total:** 150 000 /-
- Balance:** 0
- Payments Made:** 350000
- Reference 1:** 11/06/2010/150000/000
- Reference 2:** 28/07/2010/350000

A green box on the right side of the form indicates "Created". Below the main form, there are two columns of payment history entries, each with fields for "Amount Paid Total", "Bank Slip Number", and "Date Paid".

At the bottom of the form, there are buttons for "SAVE", "ADD NEW", "DETAILS", "PAID", and "CLOSE".

Figure 9: payment form (when cleared)

This form was for recording students who had cleared their payments and a waiting issuing of the clearance card. The forms were designed in such way that the user has a provision to add, save, delete, and search for a record. A user still can navigate through the records using move next, move last, move first and move previous buttons.

4.6.3.6: List for (Students who paid)

VICTORIA HIGH SCHOOL - (List)

SEARCH: Search for: [] Search by: [] Order By: [] Sort By: []

Reg Number	First Name	Last Name	Term	Class	Year	Reference 1	Reference 2	1st 15th	1ST AMOUNT
1965/234/OL	DAVID	LIAT	1	Form4	2010	1/Form4/20...	2010/1/For...	350 000/=	350 000/=
1965/345	MAKUR	LIAT	1	Form3	2008	1/Form3/20...	2008/1/For...	800 000/=	800 000/=

Reg Number: 1965/345 1st Payment: 800 000/= Bank: NBO
 Reference: 1965/345/1965/345 2nd Payment: / Bank: /
 Name: MAKUR 3rd Payment: / Bank: /
 Class: LIAT 4th Payment: / Bank: /
 Fee: 800 000/= 5th Payment: / Bank: /

Balance: 100000 (one hundred(s) thousand(s) ONLY)
Amount Paid: 800000 (eight hundred(s) thousand(s) ONLY)

LIST REPORT CLEARANCE BACK EDIT RECORDS REFRESH ADD NEW CLOSE

Figure 10: List for students who paid form

This form records information about the student's name, especially those who had cleared their payment and have been issued with fees card. The forms were designed in such way that the user has a provision to add, save, delete, and search for a record. A user still can navigate through the records using move next, move last, move first and move previous buttons.

4.6.3.7 List Form (List of all users)

VICTORIA HIGH SCHOOL - LIST OF ALL USERS

USER NAME	PASSWORD	USER AS
MAKUR	David	Admin
1965/345	Salim	Local User
1965/345	Ali	Local User

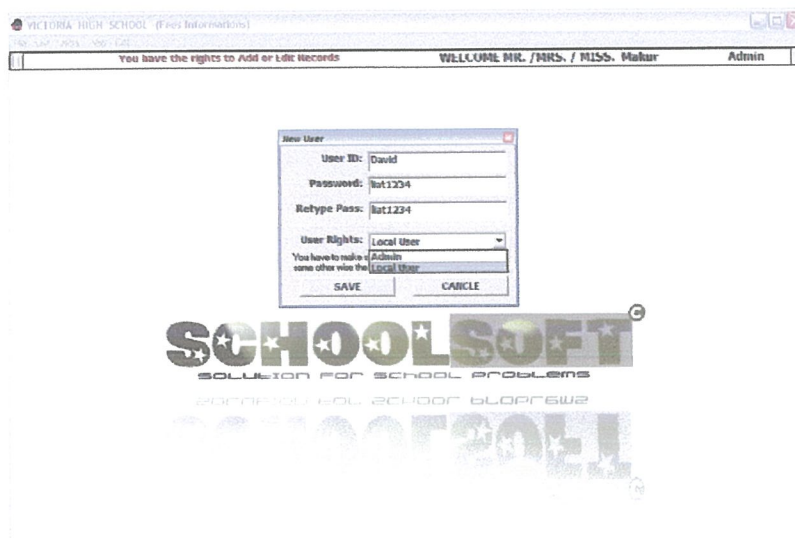
DELETE THE SELECTED USER ACCOUNT CANCEL

SCHOOLSOFT
 SOLUTION FOR SCHOOL PROBLEMS
 VICTORIA HIGH SCHOOL - LIST OF ALL USERS

Figure 11: *List of all users form*

This form shows the list of the users for the fees payments and monitoring system. it contains username, password and users account. The selected user can be deleted from the account or cancelled.

4.6.3.8 New User Form (Create New User)



The screenshot shows a web application window titled "VICTORIA HIGH SCHOOL (Fees Information)". The main header bar contains the text "You have the rights to Add or Edit Records" on the left, "WELCOME MR. / MRS. / MISS. Makur" in the center, and "Admin" on the right. In the center of the page is a "New User" dialog box. This dialog box has the following fields: "User ID:" with the value "David", "Password:" with the value "Bat1234", and "Retype Pass:" with the value "Bat1234". Below these is a "User Rights:" dropdown menu set to "Local User". A note below the dropdown states: "You have to make some other user the Local User". At the bottom of the dialog are "SAVE" and "CANCEL" buttons. In the background, there is a large, stylized "SCHOOLSOFT" logo with the tagline "SOLUTION FOR SCHOOL PROBLEMS" and a version number "2009/01/01 - 2009/01/01" below it.

Figure 12: *New user form*

This form was used for the creation or addition of the new user to the system. A user still can navigate through the records using move next, move last, move first and move previous buttons. It contain save and cancel button.

4.6.3.9 Program Help Form

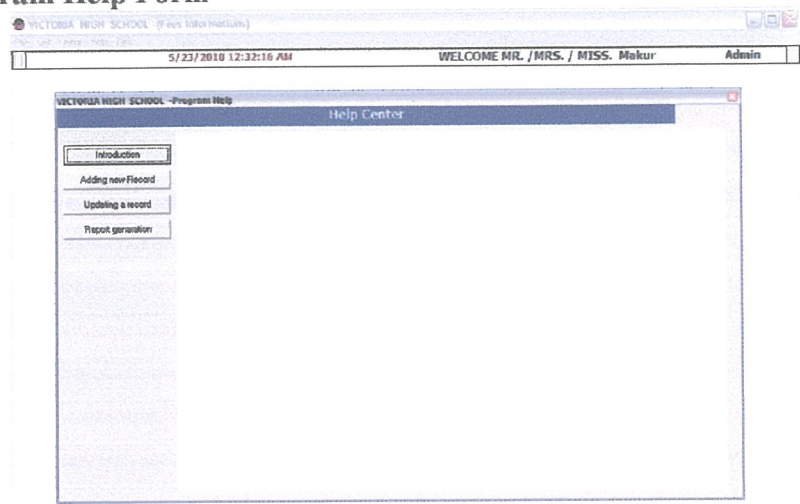


Figure 13: Program Help form

This form helped the users to know the documentations and recommendations of the system for the better usage.

4.6. 4 Reports

The following reports were generated by the system as shown below.

4.6.4.1 Student’s Clearance report

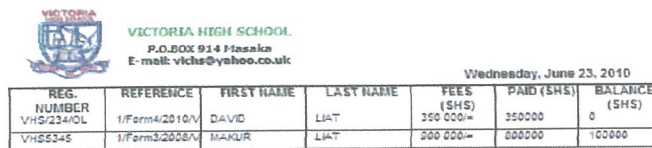
This shows a receipt issued to a student after all payments have been done and a student has paid fully.



Figure 14: Student’s Clearance report

4.6.4.2 Student List (Fee due) report

This shows what the student owe the school and total amount owed



REG. NUMBER	REFERENCE	FIRST NAME	LAST NAME	FEES (SHS)	PAID (SHS)	BALANCE (SHS)
VHS/234/OL	1/Ferm4/2010/V	DAVID	LIAT	250 000=	250000	0
VHS5345	1/Ferm3/2008/V	MAKUR	LIAT	200 000=	000000	100000

Navigation icons: back, forward, search, etc.

Figure 15: *Fees Information List Report*

4.7 System Testing

Before actually implementing the new system into operations, a test run of the system is done removing all the bugs, if any. It is an important phase of a successful system. After the above codifying of the whole program of the system, a test plan should be developed and run on a given set of test data. The output of the test run should match the expected results: The following test run are carried out:

4.7.1 Unit testing

This is the first stage of testing; this is done by using written test plan and prepared test data. The path consists of a number of test runs such as valid paths through the codes. For each test run, there is a list of conditions tested, the test data used and the expected results. All the forms that are on the system are tested against the test plan and the conditions.

4.7.2 Integration testing

This tests the interfaces between programs in the same functional area. Each program is linked to other programs with which it interacts. The whole process must be in a specified sequence and within specified response time. The integration between the program

interfaces created in Visual basic 6.0 and the database created in Ms Access is fully tested to ensure that they effectively link.

4.7.3 Acceptance Testing

This proves to the client, that the system, meets the business requirements agreed upon, in the functional specifications. The test data is replaced with live data provided by the client. The client records all errors, discrepancies and other aspects. They are discussed with the developer, whereby, the errors are corrected by the developer, and the changes are implemented at the expenses of the client.

4.8 System Implementation

This tests the whole system by linking together all the programs subsystems. Bugs are recorded and the categorized in terms of priority are fixed and those with less priority can be addressed in the follow-ups releases. The following are also carried out.

The data from the old system is transferred safely to the new system. This is done by:

- i. Users enter data; one has to ensure that data entry errors are controlled.
- ii. Data conversion by using a developed program that transfers data from the old format to the new format.

4.8.1 Installation and Change Over

This stage involves the following;

Installation on site: The hardware is brought on site, the software is installed (this includes operating system and management information system)

Site commissioning: The system is installed on site, connected to any other third party components; commissioning tests are run to identify discrepancies between interfaces, until the system works without any problem.

System change over; direct method is used, it occurs when at a given time one system ends, and a replacement starts immediately. The advantage is that it is the cheapest and there is a clear break between the old and the new system.

4.8.2 Auditing

An independent review of the school's system to see if all records were as they would be was carried out. This was done to track all records of transactions from its output back

through all processing and storage to its source

4.8.3 File and Data Conversion

Old files were converted to the new ones without loss of accuracy. Folder files containing student's data were keyed into the system using a keyboard. A strategic implementation was used.

Parallel approach method in which the old system and the new system were operated side by side until the new system showed reliability and the old system would be abandoned.

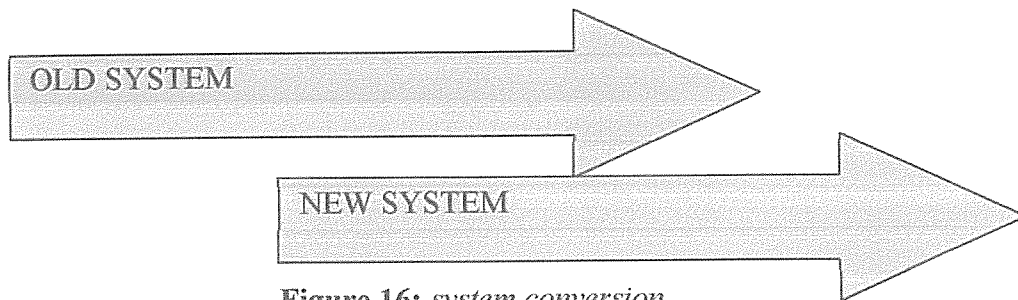


Figure 16: *system conversion*

4.8.4 User Training

All users of the new system were trained on how to use it. It was conducted using projected on screen PowerPoint slide show presentation. Training was the most interesting part of the study. The bursar was who uses the system on a daily basis was first trained then other staffs such as headmistress were also trained.

4.9 Security features of the system

The system enforced on the security to guard the system against crashing and data corruption. When the application loads, the login form will appear where the user enters the username and password. If the system checks in the database and find that the username and password provided by the user, don't matched, it will definitely deny the access. User rights have been assigned to every user who login into the system. To guarantee this, a form for add user was included where the application checks in the database for the rights each user had been assigned.

CHAPTER FIVE

DISCUSSION, RECOMMENDATIONS, AND CONCLUSION

5.0 Introduction

From the research, the researchers came up with the following conclusions and recommendations based on the research objectives for this study, which were; to investigate on the problems that arise from the current system, to design a fees payment and monitoring system that will help students and staff members to access the fees payments records more easily and effectively, to implemented on the computerized fees payment and monitoring system and to test the designed fees payment and monitoring system.

5.1 Discussion

The current system was evaluated and found to be having inefficiencies and lacks effectiveness in some areas of operation. Data entry was done manually by writing down on receipts and invoices for particular records. There was no data validation scheme, the company as a result was prone to errors leading to misconceptions, loss of funds, and other inconveniences associated with lack of proper record keeping. There was a direct set back being experienced through wastage of materials such as stationery, time loss through tedious manual data entry and retrieval methods.

This study was aimed at designing a computerized fees payment and monitoring system for Victoria High School. This was carried out in order to answer the following, according to the previous study already carried out and the analysis of this study:

1. What are the problems that arise from the current system?
2. How can the designed fees payments and monitoring system track the fees defaulters and produce financial statement?
3. How can the designed fees payments and monitoring system are tested?
4. What are the implementation strategies on the new system?

The researcher used interview, questionnaires and observation as method of data collection. The data collected was analyzed both qualitatively and quantitatively. Computer package like correlation and Microsoft SPSS was used to quantify the data into

simple percentage which was presented in form of tables and charts, designed and implementation phases of the new system were broadly discuss

5.2 Recommendation

The package is highly recommended to be used in Victoria high School for effective process and retrieval of student's payment record. It employs Microsoft Access and Visual Basic 6.0 to generate the report, which can be used by bursar to track down fees defaulters.

The researchers recommend that before the application is put into full use, it should be tested in a sample field to estimates any bugs that may not have been identified at the time of development.

Since the system is under operation for it to be implemented with fewer problems, it's recommended to be run on Window XP, Operating System, Hard Disk size of at least 40GB and RAM size of at least 51MB.

Since the system was in use, it should be run a alongside manual files in order to prevent in convenience, that is parallel conversion should be adopted for the system. It's recommended for others schools to adopt the same system to insure efficiency and effectiveness in data storage and retrieval. Also the researchers recommend changing the current payment system to suit the technological advancement in the world.

Password level may be increase to high- level depending on the confidentiality of the stored data for authorized users. The current system is basically low- level.

5.3 Conclusion

The report describes the manual and computer methods of keeping information pointing out the bad and good side of each. It also gives the background of the whole study, objectives, problems encountered are well stated and the concept adopted in computers to manage files are given.

The system was developed with scalability and redeveloped to new requirements. This system could be updated to include other requirements that may come up as the system requirements expand.

5.4 Future Areas of Improvement

Due to time shortage and lack of enough resources, what was not accomplished was left for future enhancement, which includes: Staff payrolls and Academic progress.

5.5 Limitations of study

During the project formation some problems were encountered that included:

1. The case study was far from the university that led to the project being costly in terms of finance accrued from transport and time given that the project had no sponsors other than researchers.
2. Researchers had no full knowledge of the software program used to design the package.
3. Power fluctuation that frequently interfered with my project especially during the design phase.
4. Unavailability of resources such as computers since the laboratories at the University campus was ever occupied.

5.6 Solutions to the Problems

1. The researchers fully financed the project.
2. The researchers went for a two week course on how to use VISUAL BASIC 6.0.
3. On power fluctuation, there was no other alternative other than to put to halt whatever would be doing until it could come back.
4. On lack of resources, the researchers would plead with some students to offer their user accounts.

All in all it was through hard work and determination that researchers managed to complete this project.

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APPENDICE

APPENDIX A: QUESTIONNAIRE FOR ADMINISTRATION\ TEACHING STAFF

PREAMBLE

Dear respondents,

I am researching on the fees management system in a secondary school. The questionnaire is designed to help in finding out how fees payments can be monitored.

The information sought is needed for this academic research only and will be treated with confidentiality and will be solely for the purposes of this research. Hence the researcher humbly requests you to put a tick on the answer where appropriate and give your views where necessary in the spaces provided.

Thank you!

SECTION A: BACKGROUND INFORMATION

5. Sex

Female ☐

Male ☐

6. Age

19-25 ☐

26-35 ☐

Above 35 ☐

7. Which section do you teach?

Ordinary level ☐

advanced level ☐

Both ☐

None ☐

8. For how long have you been in this school? Years

SECTION B: FEES PAYMENT INFORMATION

8. How do students pay their school fees

Cash ☐ Cheque ☐ Bank deposit ☐

5. Under which term is your fees paid

Termly ☐ Yearly ☐ Installment ☐

9. Are students issued any document of confirmation?

Yes ☐ No ☐

10. How are they kept?

Box files ☐ Filing cabins ☐ others, specify ☐

11. How long does it take a document to be processed?

Immediately ☐ After one day ☐ After a week ☐ End of term ☐

Others, specify ☐

SECTION C: COMPUTER INFORMATION

12. Are you computer literate?

Yes ☐ No ☐

13. Would you welcome the introduction of a computerized system for monitoring fees payments in your school?

Yes ☐ No ☐ I don't know ☐

14. Give a reason for your answer above

Thank you for your time and contribution towards our research

A QUESTIONNAIRE FOR STUDENTS

Dear respondents,

I am researching on the fees management system in a secondary school. The questionnaire is designed to help in finding out how fees payments can be monitored.

The information sought is needed for this academic research only and will be treated with confidentiality and will be solely for the purposes of this research. Hence the researcher humbly requests you to put a tick on the answer where appropriate and give your views where necessary in the spaces provided.

Thank you!

SECTION A: BACKGROUND

1. Sex

Female ☐ Male ☐

2. Age

Below 18 ☐ 19-25 ☐ above 25 ☐

3. What level of education are you?

Ordinary level ☐ Advanced level ☐

4. For how long have you been in this school?

Years ☐

5. Where do you reside?

Home ☐ Hostel ☐ School ☐

SECTION B: FEES PAYMENT INFORMATION

6. Who pays your fees?

Parent ☐ Guardian ☐ Bursary ☐ Self ☐

7. How is your fees paid?

Cash ☐ Cheque ☐ Bank deposit ☐

8. Are you issued payment receipts?

Yes ☐ No ☐

SECTION C: COMPUTER INFORMATION

9. Are you computer literate

Yes ☐ No ☐

10. Would you welcome the introduction of a computerized system for monitoring fees payments in your school?

Yes ☐ No ☐

11. Give reasons for your answer

Thank you for your time and contribution towards our research

APPENDIX B: SAMPLE INTERVIEW GUIDE

Interviewee: Mrs. Jostine Njovangwa

Date: 12/10/08

Time: 2.00 pm-2.16 pm

Place: Headmistress' office

Subject: Fees Management

Time allocated	Interviewer objective or question	Interviewee response
1 – 2 min	Objective I Makur David Diu and ukongo kolong Silvio are second year Diploma of Computer Science and student from Kampala International University. We thank you for your valuable time. The purpose of this interview is to obtain an understanding of the existing fees payment system	
1-2 min	Qn1. What is the mode of payment?	
1-2 min	Qn2 What do you issue out to confirm the payment? Follow up...	
1 – 2 min	Qn3 How are the documents of confirmation kept? Follow up...	

1-2 min	Qn4 How are these documents accessed? Follow up...	
1-2min	Qn5 How long do you take to track down fees defaulters? Follow up...	
1-2 min	Qn5 Would you welcome Computerizing the system? Follow up...	
1-2 min	Objective Conclusion Thank you for your cooperation, we will avail you with a copy of what transpired during the interview and a free copy of the system	
16 min	Total time allocated for interview (2.00Pm-2.16pm)	
General comments and notes		

APPENDIX C: PROGRAM CODE

Log In

```
Private Sub Command1_Click()
```

```
End
```

```
End Sub
```

```
Private Sub Command2_Click()
```

```
Beep
```

```
End
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
Timer1.Enabled = True
```

```
Adodc1.Visible = False
```

```
Adodc1.ConnectionString = "Provider=Microsoft.Jet.OLEDB.4.0;Data Source=" &
```

```
App.Path & "\Pas1.mdb" & ";Jet OLEDB:Database Password=" & "Diu2010"
```

```
End Sub
```

```
Private Sub Label4_Click()
```

```
Beep
```

```
End
```

```
End Sub
```

```
Private Sub Text1_KeyPress(KeyAscii As Integer)
```

```
If KeyAscii = 13 Then
```

```
Text2.SetFocus
```

```
SendKeys "{home}+{end}"
```

```
End If
```

```
End Sub
```

```
Private Sub Text2_KeyPress(KeyAscii As Integer)
```

```

On Error Resume Next
If KeyAscii = 13 Then
Adodc1.RecordSource = ("select * from pass where password='" & Text2.Text & "' and
user = '" & Text1.Text & "'")
Adodc1.Refresh
If Text3.Text = "" Or Text4.Text = "" Or Text5.Text = "" Then
MsgBox "Access Denied", vbCritical, "Password"
Text1.SetFocus
SendKeys "{home}+{end}"
Else
MDIForm1.Show
Unload Me
End If
End If
End Sub

```

MAIN FORM (MDI-frm)

```

Private Sub add_Click(Index As Integer)
home.Show 1
End Sub

```

```

Private Sub chpass_Click(Index As Integer)
Form2.Show 1
End Sub

```

```

Private Sub exit_Click(Index As Integer)
Dim X As VbMsgBoxResult
X = MsgBox("ARE YOU SURE YOU WANT TO CLOSE THE PROGRAM
????", vbYesNo, "CLOSING SCHOOL SOFT ???")
If X = vbYes Then

```

```
End  
End If  
End Sub
```

```
Private Sub exit2_Click(Index As Integer)  
Dim X As VbMsgBoxResult  
X = MsgBox("ARE YOU SURE YOU WANT TO CLOSE THE PROGRAM  
????", vbYesNo, "CLOSING SCHOOL SOFT ???")  
If X = vbYes Then  
End  
End If  
End Sub
```

```
Private Sub help2_Click(Index As Integer)  
Form4.Show 1  
Form4.ShockwaveFlash1.LoadMovie 0, "c:\schoolsoft\schoolsoft.swf"  
Form4.ShockwaveFlash1.Play  
End Sub
```

```
Private Sub list1_Click(Index As Integer)  
list.Show 1  
End Sub
```

```
Private Sub MDIForm_Load()  
Call Main  
Label2.Caption = login.Text1.Text  
Label4.Caption = login.Text5.Text  
If Label4.Caption = "Local User" Then  
file(0).Enabled = False  
us(3).Enabled = False  
newuser(2).Enabled = False
```

```

If Label4.Caption = "Local User" Then
Label5.Caption = "You account is limited; You can't Add a new record, or Edit a record."
Label5.ForeColor = &H80&
End If
End If
If Label4.Caption = "Admin" Then
Label5.Caption = "You have the rights to Add or Edit Records"
Label5.ForeColor = &H60&
End If
End Sub

```

```

Private Sub MDIForm_Unload(Cancel As Integer)
Dim X As VbMsgBoxResult
    X = MsgBox("ARE YOU SURE YOU WANT TO CLOSE THE PROGRAM
????", vbYesNo, "CLOSING SCHOOL SOFT ???")
    If X = vbYes Then
        End
    End If
End Sub

```

```

Private Sub newuser_Click(Index As Integer)
Form1.Show 1
End Sub

```

```

Private Sub Timer1_Timer()
If Label4.Caption = "Local User" Then
Label5.Caption = "You account is limited; You can't Add a new record, or Edit a record."
Label5.ForeColor = &H80&
End If
If Label4.Caption = "Admin" Then

```

```
Label5.Caption = "You have the rights to Add or Edit Records"
```

```
Label5.ForeColor = &H60&
```

```
End If
```

```
Timer2.Enabled = True
```

```
Timer1.Enabled = False
```

```
End Sub
```

```
Private Sub Timer2_Timer()
```

```
Label5.Caption = Format(Now)
```

```
Timer1.Enabled = True
```

```
Timer2.Enabled = False
```

```
End Sub
```

```
Private Sub us_Click(Index As Integer)
```

```
Form3.Show 1
```

```
End Sub
```

List Form

```
Private Sub Command1_Click()
```

```
Unload Me
```

```
Set DataReport2.DataSource = adoview1
```

```
DataReport2.Show
```

```
End Sub
```

```
Private Sub Command2_Click()
```

```
On Error Resume Next
```

```
Unload Me
```

```
Set DataReport1.DataSource = adoview1
```

```
Set DataReport3.DataSource = adoview1
```

```
DataReport3.Show
```

```
DataReport1.Show
```

```
End Sub
```

```
Private Sub Command3_Click()
```

```
Unload Me
```

```
End Sub
```

```
Private Sub Command4_Click()
```

```
Call rs_view
```

```
Call fill_list
```

```
End Sub
```

```
Private Sub Command5_Click()
```

```
On Error Resume Next
```

```
MDIForm1.Label1.Caption = ListView1.SelectedItem.ListSubItems.Item(6).Text
```

```
Unload Me
```

```
home.Show
```

```
home.Command1.Caption = "UPDATE"
```

```
home.Command2.Enabled = True
```

```
home.Command3.Enabled = True
```

```
home.DATA(1).Text = MDIForm1.Label1.Caption
```

```
home.Timer3.Enabled = True
```

```
End Sub
```

```
Private Sub Command6_Click()
```

```
Unload Me
```

```
adoview.AddNew
```

```
home.Show 1
```

```
End Sub
```

```
Private Sub Command7_Click()
```

Unload Me

Set DataReport3.DataSource = adoview1

DataReport3.Show

End Sub

Private Sub Form_Load()

Timer1.Enabled = True

Call rs_view

fill_list

End Sub

Private Sub ListView1_Click()

Timer2.Enabled = True

Label3(0).Caption = ListView1.SelectedItem

Label3(1).Caption = ListView1.SelectedItem.ListSubItems.Item(6).Text

Label5.Caption = ListView1.SelectedItem.ListSubItems.Item(8).Text

Label3(2).Caption = ListView1.SelectedItem.ListSubItems.Item(1).Text

Label3(3).Caption = ListView1.SelectedItem.ListSubItems.Item(2).Text

Label3(4).Caption = ListView1.SelectedItem.ListSubItems.Item(8).Text

Label3(5).Caption = ListView1.SelectedItem.ListSubItems.Item(9).Text

Label3(6).Caption = ListView1.SelectedItem.ListSubItems.Item(12).Text

Label3(7).Caption = ListView1.SelectedItem.ListSubItems.Item(15).Text

Label3(8).Caption = ListView1.SelectedItem.ListSubItems.Item(18).Text

Label3(9).Caption = ListView1.SelectedItem.ListSubItems.Item(21).Text

Label3(10).Caption = ListView1.SelectedItem.ListSubItems.Item(10).Text

Label3(11).Caption = ListView1.SelectedItem.ListSubItems.Item(13).Text

Label3(12).Caption = ListView1.SelectedItem.ListSubItems.Item(16).Text

Label3(13).Caption = ListView1.SelectedItem.ListSubItems.Item(19).Text

Label3(14).Caption = ListView1.SelectedItem.ListSubItems.Item(22).Text

Label3(15).Caption = ListView1.SelectedItem.ListSubItems.Item(11).Text

Label3(16).Caption = ListView1.SelectedItem.ListSubItems.Item(14).Text


```

Label3(17).Caption = ListView1.SelectedItem.ListSubItems.Item(17).Text
Label3(18).Caption = ListView1.SelectedItem.ListSubItems.Item(20).Text
Label3(19).Caption = ListView1.SelectedItem.ListSubItems.Item(23).Text
Label3(20).Caption = ListView1.SelectedItem.ListSubItems.Item(28).Text
Label3(21).Caption = ListView1.SelectedItem.ListSubItems.Item(29).Text
Label1(33).Caption = ListView1.SelectedItem.ListSubItems.Item(24).Text
Label1(30).Caption = ListView1.SelectedItem.ListSubItems.Item(25).Text
Label1(34).Caption = ListView1.SelectedItem.ListSubItems.Item(26).Text
Label1(32).Caption = ListView1.SelectedItem.ListSubItems.Item(27).Text
End Sub

```

```

Private Sub ListView1_DblClick()
On Error Resume Next
If cmbsearch.Text = "REGNUMBER" Then
txtsearch.Text = ListView1.SelectedItem
Else
If cmbsearch.Text = "REFERENCE" Then
txtsearch.Text = ListView1.SelectedItem.ListSubItems.Item(1).Text
End If
End If
End Sub

```

```

Private Sub Timer1_Timer()
For e = 1 To 14500 Step 400
Width = e
DoEvents
Next e
Timer1.Enabled = False
End Sub

Public Sub fill_list()
On Error Resume Next

```

```

Dim X As Integer
ListView1.ListItems.Clear
While Not adoview1.EOF
Set lst = ListView1.ListItems.add(, adoview1(0), , 1)
    For X = 1 To 29
        lst.SubItems(X) = adoview1(X)
    Next X
adoview1.MoveNext
Wend
End Sub

```

```

Private Sub Timer3_Timer()
On Error Resume Next
Dim liat
Call getconnected
Call rs_view
If adoview1.State = 1 Then adoview1.Close
    liat = Text1.Text & " like " & Text2.Text & "*"
    adoview1.Filter = liat

```

```

    Timer3.Enabled = False
End Sub
Public Sub adoviewFILTER()
Dim sby, oby, Dasc As String
'On Error GoTo uklo
If cmbsearch.ListIndex = -1 Then cmbsearch.ListIndex = 0
If cmbOrder.ListIndex = -1 Then cmbOrder.ListIndex = 0
If cmbsort.ListIndex = -1 Then cmbsort.ListIndex = 0

```

```

Select Case cmbsearch.ListIndex
Case 0

```

```
sby = "Refrence"
```

```
Case 1
```

```
sby = "RegNumber"
```

```
Case 2
```

```
sby = "Refrence2"
```

```
End Select
```

```
Select Case cmbOrder.ListIndex
```

```
Case 0
```

```
oby = "Refrence"
```

```
Case 1
```

```
sby = "RegNumber"
```

```
End Select
```

```
Select Case cmbsort.ListIndex
```

```
Case 0
```

```
Dasc = " asc"
```

```
Case 1
```

```
Dasc = " desc"
```

```
End Select
```

```
check_adoview1
```

```
If cmbsearch.ListIndex >= 0 Then
```

```
adoview1.Open "select * from FeesData where " & sby & " like '" & txtsearch & "%'  
order by " & _
```

```
oby & Dasc, cnn
```

```
Else
```

```
If Not IsNumeric(txtsearch) Or txtsearch = "" Then
```

```
adoview1.Open "Select * from FeesData where RegNumber like '%" & txtsearch & "%' order by " &  
oby & Dasc, cnn
```

```
fill_list
```

```

Exit Sub

End If

adoview1.Open "Select * from FeesData where " & sby & " like " & txtsearch & " order
by " & oby & Dasc, cnn
End If
adoview1.Requery 1
fill_list
End Sub

```

```

Private Sub Timer2_Timer()
If MDIForm1.Label4.Caption = "Local User" Then
Command5.Enabled = False
Command6.Enabled = False
End If
End Sub

```

```

Private Sub txtsearch_Change()
adoviewFILTER
End Sub

```

```

Private Sub cmbsearch_Click()
adoviewFILTER
If cmbsearch.Text = "REFERENCE" Then
txtsearch.Mask = "#/S#/AA#####"
txtsearch.SetFocus
Else
If cmbsearch.Text = "REGNUMBER" Then
txtsearch.Mask = "AA#####"
txtsearch.SetFocus
End If
End If

```

End Sub

Private Sub cmbsort_Click()

adoviewFILTER

End Sub

Private Sub txtsearch_KeyPress(KeyAscii As Integer)

KeyAscii = Asc(UCase(Chr(KeyAscii)))

End Sub

Private Sub Form_Unload(Cancel As Integer)

Dim counter As Integer

counter = Me.Height

Do: DoEvents

counter = counter - 300

Me.Height = counter

Me.Top = (Screen.Height - Me.Height) / 2

Loop Until counter <= 300

Unload Me

End Sub

Home Form

Private Sub Command1_Click()

On Error GoTo liat

Dim res As VbMsgBoxResult

If DATA(0).Text = "" Then

MsgBox "Registration number needed Please." & vbCrLf & "Please Enter A Value

For The Said Field.", vbInformation, "Information"

DATA(0).SetFocus

```

Exit Sub
End If
If Combo1.Text = "" Then
    MsgBox "Enter the Term, Class, and the year", vbInformation, sorry
Exit Sub

End If
Call WriteData
adoview.Update
Unload Me
list.Show 1
Exit Sub
liat:
MsgBox "CHECK THE REFERENCE YOU HAVE ENTERED", vbCritical, "ERROR
101"
End Sub

Private Sub Command3_Click()
Dim X As VbMsgBoxResult
    X = MsgBox("You are trying to Delete this record. Are you sure???", vbYesNo,
DATA(1).Text)
    If X = vbYes Then
        adoview.Delete
        adoview.MoveNext
        End If
        Unload Me
        list.Show
End Sub

Private Sub Command4_Click()
Unload Me

```

End Sub

Private Sub Command5_Click()

Unload Me

list.Show 1

End Sub

Private Sub DATA_KeyPress(Index As Integer, KeyAscii As Integer)

KeyAscii = Asc(UCase(Chr(KeyAscii)))

End Sub

Private Sub Form_Load()

Timer1.Enabled = True

infomode = True

findmode = False

Command2.Enabled = False

Command3.Enabled = False

End Sub

Private Sub Form_Unload(Cancel As Integer)

Dim counter As Integer

counter = Me.Height

Do: DoEvents

counter = counter - 300

Me.Height = counter

Me.Top = (Screen.Height - Me.Height) / 2

Loop Until counter <= 300

Unload Me

End Sub

Private Sub Timer1_Timer()

```
For e = 1 To 13600 Step 400
```

```
Width = e
```

```
DoEvents
```

```
Next e
```

```
Timer1.Enabled = False
```

```
End Sub
```

```
Private Sub Timer2_Timer()
```

```
'On Error Resume Next
```

```
Label4.Caption = Val(DATA(5)) + Val(DATA(8)) + Val(DATA(11)) + Val(DATA(14))  
+ Val(DATA(17))
```

```
Label2.Caption = Val(DATA(4)) - Val(Label4)
```

```
If Val(Label2.Caption) <= 99999999 And Label2.Caption <> "" Then
```

```
Label3.Caption = InWord(Label2.Caption) & "ONLY"
```

```
If Val(Label4.Caption) <= 99999999 And Label4.Caption <> "" Then
```

```
Label5.Caption = InWord(Label4.Caption) & "ONLY"
```

```
End If
```

```
End If
```

```
If Label2.Caption = "0" Then
```

```
Label3.Caption = "NO BALANCE"
```

```
Else
```

```
If Label2.Caption <= 0 Then
```

```
Label3.Caption = "Negative Figure"
```

```
End If
```

```
End If
```

```
If Label3.Caption = "NO BALANCE" Then
```

```
'Label5.Caption = "Creared"
```

```
Label7.Caption = "Creared"
```

```
Label7.BackColor = &H8000&
```

```
Else
```

```
If DATA(4).Text = "____/=" Then
```



```
Label7.Caption = "Enter the amount to be paid."
```

```
End If
```

```
If Label3.Caption = "Negative Figure" Then
```

```
Label7.Caption = "Creared++"
```

```
Label7.BackColor = &H8000&
```

```
Else
```

```
Label7.Caption = "Not Cleared"
```

```
Label7.BackColor = vbRed
```

```
End If
```

```
End If
```

```
If Label4.Caption = 0 Then
```

```
Label5.Caption = "NO PAYMENTS MADE"
```

```
Label7.Caption = "No payments Made"
```

```
Label7.BackColor = vbBlue
```

```
End If
```

```
DATA(1).Text = Combo1.Text & "/" & Combo2.Text & "/" & Text1.Text & "/" &
```

```
DATA(0).Text
```

```
DATA(22).Text = Text1.Text & "/" & Combo1.Text & "/" & Combo2 & "/" &
```

```
Label7.Caption
```

```
End Sub
```

```
Private Sub Timer3_Timer()
```

```
'On Error Resume Next
```

```
Dim liat
```

```
Call getconnected
```

```
Call rs_view
```

```
liat = Label6.Caption & " like '" & DATA(1).Text & "''"
```

```
adoview.Filter = liat
```

```
Call load
```

```
Timer3.Enabled = False
```

End Sub

Help Form

Private Sub Command1_Click()

ShockwaveFlash1.LoadMovie 0, "c:\fees\add.swf"

ShockwaveFlash1.Play

End Sub

Private Sub Command2_Click()

ShockwaveFlash1.LoadMovie 0, "c:\fees\update.swf"

ShockwaveFlash1.Play

End Sub

Private Sub Command4_Click()

ShockwaveFlash1.LoadMovie 0, "c:\fees\introduction.swf"

ShockwaveFlash1.Play

End Sub

UserList Form

Public Sub fill_list()

On Error Resume Next

Dim X As Integer

ListView1.ListItems.Clear

```

While Not adopath.EOF
Set lst = ListView1.ListItems.add( , adopath(0), , 1)
    For X = 1 To 2
        lst.SubItems(X) = adopath(X)
    Next X
adopath.MoveNext
Wend

End Sub

Private Sub Command1_Click()
On Error Resume Next
adopath.Filter = Label1.Caption & " like " & Label2.Caption & "*"
adopath.Delete
adopath.MoveNext
MsgBox "That User has been deleted."
Unload Me
End Sub

Private Sub Command2_Click()
Unload Me
End Sub

Private Sub Form_Load()
On Error Resume Next
Call Mainpass
Call fill_list
End Sub

Private Sub ListView1_DblClick()

```

```
Label2.Caption = ListView1.SelectedItem '& " is selected ready to be deleted."
```

```
Timer1.Enabled = True
```

```
End Sub
```

```
Private Sub Timer1_Timer()
```

```
Dim Diu
```

```
Call Mainpass
```

```
Call rs_viewpass
```

```
    Diu = Label1.Caption & " like '" & Label2.Caption & "'"
```

```
    Call loadnew
```

```
    Timer1.Enabled = False
```

```
End Sub
```

ChangePass Form

```
Private Sub Command1_Click()
```

```
    If Text3.Text = "" Then
```

```
        Command1.Enabled = False
```

```
    Exit Sub
```

```
    End If
```

```
    Call getconnectedpass
```

```
        If Text3.Text = Text4.Text Then
```

```
            Call writedatapass
```

```
            adopass.Update
```

```
            Unload Me
```

```
            login.Show
```

```
            Unload MDIForm1
```

```
        Else
```

```
            MsgBox "The password you have re-entered is not the same. try again",  
vbInformation, "Pass not the same"
```

```
            Text3.Text = ""
```

```
Text4.Text = ""  
Exit Sub  
End If  
End Sub
```

```
Private Sub Command2_Click()  
Unload Me  
End Sub
```

```
Private Sub Form_Load()  
Call Mainpass  
Label4.Caption = MDIForm1.Label2.Caption  
End Sub
```

```
Private Sub Timer1_Timer()  
Dim Makur  
Call getconnectedpass  
Call rs_viewpass  
Makur = Label3.Caption & " like " & Label4.Caption & ""  
adopass.Filter = Makur  
Call loadpass  
Timer1.Enabled = False  
End Sub
```

```
Private Sub Timer2_Timer()  
If Text3.Text = Text4.Text Then  
Command1.Enabled = True  
Else  
If Text3.Text = "" Then  
Command1.Enabled = False  
End If
```

End If
End Sub

NewUser Form

```
Private Sub Command1_Click()  
If Text2.Text = "" Then  
    MsgBox "The password field can't be empty. Sorry.", vbCritical, "Erro Pass free"  
    Exit Sub  
Else  
If Text1.Text = "" Then  
    MsgBox "The User Name field can't be empty. Sorry.", vbCritical, "Erro User free"  
    Exit Sub  
End If  
End If  
If Text2.Text = Text3.Text Then  
    Call writedatanewpass  
    adopass.Update  
    Unload Me  
    MsgBox "A new user has been Added. Chake the list of Users.", vbInformation, "New  
user"  
End If  
End Sub  
  
Private Sub Command2_Click()  
    Unload Me  
  
End Sub  
  
Private Sub Form_Load()  
    Call Mainpass  
    adopass.AddNew
```

End Sub

Private Sub Timer1_Timer()

If Text2.Text = "" Then

Command1.Enabled = False

End If

If Text2.Text = Text3.Text Then

Command1.Enabled = True

Else

Command1.Enabled = False

End If

End Sub

APPENDIX D: TIME FRAME

ACTIVITIES	MONTH						
	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG
PROPOSAL WRITING							
PROPOSAL SUBMISSION							
CONDUCTING RESEARCH							
RESEARCH WRITING							
ANALYZING DATA							
EDITING OF RESEARCH							
DEFENDING RESEARCH THESIS							
SUBMISSI OF FINAL COPIES							