**THE 58TH EDITION OF THE KENYA SCIENCE PROJECT AND ENGINEERING FAIR.**

**CATEGORY:** COMPUTER SCIENCE

**TITLE:** SCHOOL MANAGEMENT SYSTEM

**PRESENTERS:** MARGARET WANJIRU

MARION WANGECHI

**SCHOOL:** SHAMATA GIRLS HIGH SCHOOL

**SUB-COUNTY:** NYANDARUA NORTH

**VENUE:**  LESHAU BOYS HIGH SCHOOL

**DATE**: 29TH FEBRUARY 2020

TABLE OF CONTENT

Declaration….

Acknowledgement….

Abstract…..

CHAPTER ONE: INTRODUCTION

Background information…..

Statement of the problem…..

Objectives….

Limitations……

Assumptions……

CHAPTER TWO: LITERATURE REVIEW

Past work presented…..

Innovation….

CHAPTER THREE: METHODOLOGY

Requirements……..

Procedure…….

Observation…

Conclusion…..

System model……..

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

Analysis of observation…….

Interpretation of the data…..

CHAPTER FIVE: CONCLUSION AND RECCOMMEDATION

Conclusion

Recommendation

**DECLARATION**

We declare that the information contained in this project is purely based on our own knowledge gained from the curriculum activities in secondary school education and our own research.

**PRESENTERS ADM NO FORM SIGN**

Margaret Wanjiru 4081 4

Marion Wangechi 4225 4

**SUPERVISOR SIGNATURE**

MR. Kiharason

**PATRON**

MR. Julius Njenga

**SCHOOL PRINCIPAL**

MRS. Catherine kyalo

**SCHOOL STAMP**

**ACKNOWLEDGEMENT**

We thank the almighty God for the far he has brought us and the ability He has given us to see this blessed generation and solve problems affecting it. We would also want to thank school i.e. the administration, teacher and our classmates for the support they gave us during our research. Also our parents who never seized to encourage us and give us hope.

**MAY THE HIGH DEITY BLESS THEM ALL.**

**ABSTRACT**

The main aim of our project is coming up with a school management system to help secondary schools to save time and money by eliminating a great deal of manual process involved in having the right data of students and other members in the school by storing the data in a centralized server.

Our interface contains a title, name of the school, side bar which entails students, librarians, teachers, bursar, fees paid, expenses, balances and clubs.

Our system is a two-user where the user logs-in using two credentials that is username and password. The interface generally consists of the name of the school as the title, sidebar which entails dashboard, Vote-Heads, Fee Structure, Payments, Balances, Records, teachers, parents and Liberians. Each of these has its own display panel.

Dashboard has students page where students details are managed and promotion to the next class it’s done. It also has fee page where the admin sets or updates fee for each class .The help button in dashboard is where the user can check for any help on the present documents.

Vote-Heads is where the fee paid is divided into sections like boarding, food, health, co-curricular activities in ratio format. Fee-Structure section, here the admin can print fee structure for each class. The class is selected from a dropdown and view button clicked for display.

Payment section is where fee pay for each student is recorded. Payments are made using either of the two listed modes that is bank-slip or cheque. Fee statement is generated in this section. In Balances section a class is selected together with the range of balance specified in a combo and check balance button is clicked, students with fee balances are displayed in a table. Balance slips for students are printed by clicking Generate-slip button. For the Records section the admin generates reports such as payment reports either by class, term, mode of payment, and can view the total amount collected. The outputs of this project include receipts and fee statements generated after fee payments.

**CHAPTER ONE: INTRODUCTION**

**1.1:** BACKGROUND INFORMATION

The main idea of the project is to help save time and store data in an institution in a centralized server instead of storing it using the manual method and in different places which may cause loss of important data and information

**1.2:** STATEMENT OF THE PROBLEM

In some schools the administration tends to face loss of important data that cannot be retrieved hence may lead great loss to the institution in terms of finance, therefore, we came up with this project to help solve this problem.

**1.3:** OBJECIVES

1. To help manage, store data in a centralized server
2. To keep up with the technology i.e. replacing desktop application with web application technology
3. To help reduce data loss since information will be stored in on place with backups done regularly

**1.4:** MERITS

* Allow authorized users to add records
* Allow users to update or modify existing records
* Organize files and records for easy access, retrieval, and sharing
* It saves time
* Ensure security and integrity of data by safe guarding it against unauthorized access through use of password

**1.5:** DEMERITS

* Cannot be used by computer illiterate people
* Cannot be used in places with no access to power

**1.6:** ASSUMPTIONS

We highly believe that this project we help reduce loss of data since all data will be kept in a single centralized server with frequent backups.

**CHAPTER TWO: LITERATURE REVIEW**

PASTWORK REPRESENTED

In the present system all the work is done on a paper and also desktop application system. The whole session attendance is stored in a register and at the end of the session the reports are generated which tends to take more time. The current system used in most schools is:

* Not user friendly since retrieval of data is very slow and data is not maintained efficiently.
* Manual control- a lot of errors occur
* Lots of paper work
* Time consuming
* Less accuracy

INNOVATION

We have created a web application to replace the desktop application. The web application runs under a browser either chrome, Mozilla and etc. this project can be installed in any computer running on any Operating system including Windows, Mac Os X and also Linux.

**CHAPTER THREE: METHODOLOGY**

REQUIRMENTS

Laptop or a smart phone, a browser (chrome, Mozilla Firefox), power

**PROCEDURE**

In the development of the system we used waterfall model.

This is a development process that emphasizes on completing one phase before proceeding to the next.

* First there is requirement definition
* Followed by system design where
* Followed by construction where there’s coding and testing of the system you’re creating
* Then followed by implementation of the project
* Then the system is designed where there is maintenance e of the project

This model was used because of the following:

* The customer can use the prototype to gain experience on the final product.
* feedback paths for error correction as & when detected later in a phase
* The customer can use the prototype as the wait for the final product.
* Easy to incorporate changes to the system.

OBSERVATION

The project is able to:

1. Add records e.g. Users, teacher, parents, librarian, student etc.
2. Analyze record
3. Modify records and also
4. print

CONCLUSION

As discussed earlier, a school tends to lose a lot of important data and information. That’s why it’s mandatory for schools to keep and maintain all records in a school. Having a proper record means having lots of benefits to both the parents, teachers and the administration. This system is designed in a way that’s user friendly, easy to operate, easy to learn for novice and also with a lot of efficiency.

The school system project is developed by PHP language and fully meets the objectives of the system which has been developed. This project has reached a steady state where all bugs have been have been eliminated.

By using the proposed system we are overcoming the problems of tedious manual entry and also time wastage when looking for information from paper work.

Login

Design Tree Diagram

Dash Board

Exams

Balances

Parents

Librarian

Payments

Fee Structure

Fees

Students

Vote heads

Manage students

Manage parent

Check

Submit

View

Save

Set fees

Manage exams

Promote stud

Gen Slip

Fee stat

Update

Update

Manage library

Print

Delete

Update

Add

Delete

Add

Clubs

Receipt

Print

Delete

Promote

Results

Print results

Print

**CHAPTER FOUR: DATA ANALYSIS AND REPRESENTATION**

DATA ANALYSIS

We applied this project in our school and it is surely helping to solve some of the problems our school used to encounter in the past days since all records are kept in a centralized server.

System management project is a kind of proposal made top secondary schools after realizing how well the system can be implemented and used to solve most problems encountered in various schools. The need of accurate, regular and easy attendance follow up and analyzed records which require less time to enter and prepare called for the development of this system.

DATA INTEPRETATION

4%

96%

4% of the people in our school were undecided while 96% gladly appreciated our project and recommended it to be used in the school.

**CHAPTER FIVE: CONCLUSION AND RECOMMENDATION**

CONCLUSION

As discussed earlier on in the introduction, student performance is greatly influenced by class attendance. That’s why it’s mandatory for schools to keep and maintain record of attending students according to education laws of Kenya. Having proper record means having lots of benefits to both the administration and class teacher as listed on chapter one under benefits of the proposed system. This system is designed in such a way that is very user friendly, easy to operate, easy to learn for novice users and also with lot of efficiency.

The Management System is developed using the web languages and fully meets the objectives of the system which it has been developed. The system has reached a steady state where all bugs have been eliminated. The system is operated at a high level of efficiency and all the teachers and user associated with the system can really understands its advantage. The system solves the problem it was intended to solve as requirement specification.

In this proposed school system management project has been taken in the digitalized way. By using the proposed system we are overcoming the problems of the tedious manual entry. Here we are implementing a system where the required data of each and every person in a school is recorded and can automatically be modified or updated. We are also designing a system where in the attendance details have been sent to their respective parents/guardians through broadcasting of an email.

RECOMMENDATION

This system will act as a prototype of the most effective software. There is much more needed to develop. A lot of more resources are needed to develop the most effective software. We recommend this software to be advanced and modified to serve more efficiently in implementing these services. We strongly recommend this system to be used in secondary schools so that we can together improve records keeping, student monitoring and in general education quality.

On top of that we would like this system to be developed as a website where even students can access their individual attendance reports, also a developed version for higher learning institutions which will use the system development technology to capture the presence of a student during a lecture. May be in future the use of biometrics can be applied so as to facilitate and easy the task of recording attendance and also a real time system that will be notifying the parent through an SMS if a student is absent when records are being entered.

**REFERENCES**

1. Our computer science teacher Mr Samuel Mwangi
2. Longhorn Secondary computer studies book three:

TOPIC: System development