

# **SCHOOL INFORMATION MANAGEMENT SYSTEM PROPOSAL**

**PREPARED FOR THE SCHOOL**

## **ABSTRACT**

The education system outlines the backbone of every nation. Technology can play a very crucial role in streamlining the whole system of education. Exploring the technological approach to education processes, streamlining education processes and spiralling acquaintance amongst students, staff, parents and management becomes essential for today's fast growing educational environment.

Today's schools need to manage more information than ever before. Without a solid internal infrastructure for teachers, administrators and departments to share data, critical school and student information can be lost, or worse – communicated incorrectly – leading to a host of problems that can affect your school's image and endurance. To remain competitive, schools need a simple solution that can run individual functions, connect their entire operation, use the web as a key communication tool and simplify day-to-day operational responsibilities, giving staff more time with students. The system will automate various scheduling activities of a school and optimises the use of premium resources. Concerned authorities can easily and seamlessly use the system to create timetables, otherwise a time consuming and tedious task.

The solution, that we are going to provide you , has been especially designed considering the challenges that schools come across. Some of these challenges are low cost of ownership, mediocre IT infrastructure, skill set level requirements, resource optimization, parent-student-teacher community interaction, security, and stability. Emphasis has been given on easy-to-use interfaces. The menu driven screens will have detailed explanations and offer several options. The users need not be programmers or database experts to benefit from this system. In addition to automating creation of timetables, a school can use the application to computerise various other activities such as the examination process, grading system, fees payment, student attendance, and news and event management. The application will also provide a Web based interaction facility to parents, teachers, and students.

## **EXECUTIVE SUMMARY**

As a senior systems developer, programmer and engineer, I am very grateful for the opportunity to submit a proposal for the development of your school academic management portal. Working together with you, we will deliver incomparable results, which will enhance the efficiency of work at the school and knowledge of both the students and the staff of your school, and eventually impact on the society at large.

## **MOTIVATION FOR BUILDING SYSTEM**

There is no doubt that the use of Information and Communication Technology (ICT) is perceived as a catalyst for economic growth. In lieu of this, coupled with over eight (8) years of operation in the ICT industry, we have successfully partnered with organisations of different sizes, offering different kinds of services and in various different locations. Our unique products and services have truly proven our competencies and commitments to the development of business and non-business oriented organisations.

Our project development team offers a variety of custom desktop and web applications for e-commerce, online and offline shopping carts, electronic payment systems, content development systems, educational portals, computer system engineering, etc.

Our programming team is well equipped with the modern day computer languages such as C++, C#, PHP, ASP, SQL, Java, JavaScript, VB, Ajax, Perl, Python. We are also vast in the development of fully functional database applications with SQL, Oracle, SQLite, Sybase, PostgreSQL.

Moreso, our network engineering team is equipped with modern day technological solutions for LAN/WLAN administrations, Routing, Switching and Network Administration.

## **PROPOSED PROJECT**

This Institute/School Management System Software is a complete suite of features that permit all aspects of administration of institutes and colleges. This software helps you to capture, manipulate and present student data in a meaningful manner, generating fast reports automatically. Institute Management Software centralises the data and automates institute administration, thus meeting the communication and information needs of the entire Institute in real time.

## **WHY?**

Crude methods of processing data in most academic institutions in Uganda today has been a major set-back to the industry. Especially with the growing population of students and staff, this has a multiplier effect on subjects, results and so on. In a fast-changing world where trivial procedures are rapidly phasing off, your school desires to implement a new state-of-the-art automated school management system capable of supporting its major processes like report card preparation, student and staff record management, SMS system, public notices, school finance management, attendance taking, etc.

This project is targeted at deploying a project that is programmed with an excellent record and identity management system that will be customised according to the school exams record sheet and administrative records. It will automate every administrative process and connect the school to the world. The system will be available to the administrators,

teachers, parents, students with a passcode to access it for the various necessary tasks on computers, tablets or smartphones.

## **PROBLEM STATEMENT**

Headmasters and Teachers are facing problems at the start of every new academic year, because of the distribution process for courses and classes, in addition to this, through and at the end of every year another problem is facing them, which is the complexities of the grades entry process for their students. Lack of communication after a school day between Headmasters, Teachers, Parents and Students, which has a bad reflection on the educational process.

## **SCOPE AND OBJECTIVES**

### **Aim**

Developing School management system for modern schools.

### **Objectives**

- Critical review of the School Management System
- Design and develop a system for solving the problem
- Evaluation of the proposed system
- Deployment of School Management System
- To build a responsive portal to manage the different school activities.
- To track student's grades for their parents.
- To facilitate the distribution process of courses and classes for teachers.
- To facilitate the grades entry process for students by teachers.
- To make a virtual community between the members of educational process.

**✓ The School Management System was designed to be highly scalable, by this we mean:**

its functionality can be expanded to meet possible future requirements of the school system as long as the process can be automated.

This includes all core subsystems used for the input of results from the subject teacher's result computing sheet, to their processing, which includes rules for passing and outputs (Broadsheet, Class Report Sheet, Personal Report Card etc.).

## Features

- Dormitory Management
- school fees collection
- income
- expenses
- balance sheet
- Student Examination
- Attendance Module
- Timetable Module
- Online Payment Acceptance (PayPal and Stripe)
- Reports Module
- Check Student Result with PIN
- Dark Theme Feature and RTL
- Assignment Module
- Study Material Module
- Academic Syllabus Module
- Online Student Admission Module
- Help Desk Features for Student
- Translation/Localization
- Import Module
- Subject Management
- Online Enrollments
- Helpful Links
- SMS Alerts
- Manage Moral Talks
- Live Search Student
- Beautiful Statistical Dashboard
- Transportation Management
- School Holidays
- Right to Left Features for Arabic Student
- Online Payment acceptance of Fee
- Document Management
- Class Management Module
- Backup Management
- Export Module
- Settings Module
- Beautiful Dashboard Widget
- SMS Api
- Complete Open Source Codes
- Employee management and payroll

## **FEATURES CATEGORISED:**

### **School Administration**

- i. Class Management
- ii. Subject Management
- iii. Programs Management
- iv. Dormitory and House Management
- v. Classrooms Management
- vi. Signature automation
- vii. Academic and Attitudinal remarks automation

### **Student Finance**

- i. Itemised Student Bills Management
- ii. Scholarship Management
- iii. Student Permit
- iv. Student Fees Payment and Other Payments
- v. Expenses
- vi. Student Balances

### **Financial report**

- i. Student's financial Details
- ii. Student Bills
- iii. Class Debtors
- iv. Class Full Payment
- v. Current balance list
- vi. Print student Bills in bulk
- vii. Debtors List
- viii. Full Payment
- ix. The Day's Collected Fees Details
- x. Payment Summary
- xi. Other payment Details

### **Admission & Records**

- i. Student Admissions
- ii. Teachers Management
- iii. Continuous Assessment
- iv. Grading System
- v. Automatic Terminal Report Remarks Management
- vi. Student Status Management
- vii. Teachers and their subjects Management
- viii. Student & Staff Attendance Records\*

**Records report**

- i. Student Demography
- ii. Students' Terminal report
- iii. Academic report
- iv. Students' Status History
- v. Students' Assessment Records
- vi. Classes History
- vii. Class List
- viii. Admission List

**Stores**

- i. Inventory

**Why You Should Consider Implementing The System:****The system makes it possible to:**

1. Manage all school's Dormitory, Subjects, Classrooms, and Programs of study
2. Locate teachers, subjects, classes and students in few seconds
3. Print Teachers and subjects they teach for any term or academic year
4. Know all class teachers for any academic year
5. Print Class lists, student in a particular program, level, status, house, etc
6. Terminal Reports with subject, class and level positions and an auto generated
7. academic, attitude ,conduct, etc remarks
8. Print statements of accounts, exam permit, dormitory of residence report and many
9. others.
10. Know all student debtors at a click of a button
11. Print Student Bills, Class Bills, etc
12. Add Additional Fee Items to a student, gender, house or level's bill
13. Student Academic History from Admission year until now
14. All Students under scholarship for any academic year
15. Student's admissions list, Number of Students Admitted for any academic year
16. Manage the School, from the library to Stores.
17. Revoke or Grant access to information.
18. Directly monitor performance of Class and Student.
19. Get access to information easily.
20. Manage the School from a central point.
21. Parent Access to Ward's Info.
22. Class attendance records, etc
23. Statistics on School growth rate
24. Statistics on Scholarships
25. SMS Integration

## **Usefulness of the system Highlight**

- The systems eco and user-friendly, zero-paper processes in all levels, not only does it help make management of a school easy.
- The Principal and Management will get more control over operation and the processes in the school, eg Fee accruals, Stores, library, etc
- Automates and integrates all processes in the school for better efficiency and flexibility.
- The Records Office can easily configure subject wise lesson plans. This will help them monitor academic progress during the current term/year.
- The system can easily be configured to comply with the rules and the regulations of the school in relation to the Admission process, examinations, assignments , student promotion, attendance etc.

- It ensures that the reports are informative, precise and comply with the school's requirements.
- Students/Pupils and teachers can view their personal, financial and academic information through the system.
- Parents login to check student's performance and attendance history, as well as initiate communication with a teacher.

### ***System flexibility***

- Web based interface which will reduce the requirement of support at all locations where the software runs.
- No need for separate installation in every node you want to run this software.
- Centralised data storage for easy backup & restoration
- Excellent Role based security for users to prevent data malfunctioning possibilities.
- Highly cost effective in terms of required hardware & human resource.

### ***Scalability***

- Our system will be able to accommodate any future business growth.
- Our software has the capacity to grow with you.

### ***Customer Service***

- First class service: Our Customer commitment is reflected in overwhelming
- 24/6 support
- Client Input: The system will base on the requirement of our client to build the system and we will need your unquestionable support and assistance when the need arises.

***performance.***

- The system design and platform utilises the latest developments in computer technology.
- The system has a graphical user interface, it is fully web based, user friendly, and includes a
- Report writer for user-designed reports. The software is technically stable and virtually bug-free.

**PACKAGE:**

***Software Installation***

The entire package will include full installation of the system on a hosting platform owned by the school for a period of one week.

***Training***

Training of staff for 3 days a week for an entire month on how to use school digital information systems.

**COST:**

The entire package will cost UGX 750,000 only.

**Services include**

1. Application Development
2. Database Management
3. Network Administration
4. Project Management
5. IT Consultancy Services

I am confident that our proposed Advanced school Management System will help reduce the challenges you are facing in running the school. We sincerely hope that you will consider us as a long-term partner and allow entering into a mutually beneficial relationship. We are available to answer your questions and we look forward to discussing this opportunity further.