

Technical Proposal

Implementation of Cloud School
System- A School Management
System (SMS)



P.O Box 11377-00100
Nairobi
info@africacloudspace.com

Joseph Wanjau
CTO AFRICA CLOUD SPACE

Contents

- 1.0 Introduction 2
- 3.0 Proposed System..... 3
- 3.1 Main Modules 3
 - ADMINISTRATION 3
 - ACCOUNTS MODULE..... 4
 - ACADEMICS..... 5
 - a) Kenya Curriculum..... 5
 - b) ACE Curriculum 5
 - STUDENT BEHAVIORAL MANAGEMENT..... 5
 - STORES MANAGER..... 6
 - LIBRARY MANAGER..... 6
 - COMMUNICATION 6
 - TRANSPORT MANAGEMENT 6
 - DIGITAL LEARNING/RESOURCES 6
- 3.2 Other Features 7
 - PARENTS PORTAL & APP 7
 - STUDENTS PORTAL..... 7
 - MPESA PAYBILL & BANK INTEGRATION 7
 - ARTIFICIAL INTELLIGENCE 7
 - BACKUP, SECURITY & ACCESSIBILTY 7
- 4.0 Implementation Approach..... 8
 - System Architecture..... 8
- 5.0 Timeframe..... 9
- 6.0 Proposing Institution..... 9
 - Some of our customers..... 9
- 7.0 Conclusion 10

1.0 Introduction

The proposed CloudSchool system manages all departments of a school from accounts & finance, academics, accommodation, stores, sports, digital learning among others and comes with parents & students' portals that allows them to access details like marks, fee balance, events, digital resources, diary among others via mobile phones or computers from any location.

CloudSchool is an all in one online school management system which aims to bring much needed simplicity to Administration in the field of Education. CloudSchool is a flexible and scalable educational management system where every user can discover and realize their potential to achieve overall development. The system promises quick and secure flow of information and fast response times.

Once our software is implemented in a school, it enables all the users (School Administrator, teachers, students, parents) to log-in to the system from any internet enabled device anywhere anytime. The solution that we are providing you has been especially designed considering the challenges Kenyan schools come across. It works with Kenyan and ACE curriculums, is multi-campus hence access from multiple campus and ensures real-time secured data access. Emphasis has been given on easy-to-use interfaces. The users need not be programmers or database experts to benefit from this system.

It is available for primary and secondary schools or a combination of both.

3.0 Proposed System

3.1 Main Modules

Key modules include:

- Academics (Kenyan & ACE curriculum)
- Finance & Accounting
- Stores Manager
- Library Manager
- Bulk SMS and Emails
- Transport Management
- User Management
- Digital Learning
- Communication (Bulk Email & SMS)
- Student Behavioral Management

ADMINISTRATION

This Section allows the school admin to:

- View & Register students with their bio-data, parents/guardian details (As per family) and previous school details.
- View & Register staff with their bio-data and more details
- View & Register classes
- Move students from one class to another
- Generate class list and student activities lists
- Generate parent's data
- Generate student profile among other features
- Manage student's admission
- Send email or SMS to individual parent
-

ACCOUNTS MODULE

Manages both students' fee collection, other incomes and expenditures. The fee collection module can be integrated with Mpesa Paybill and Banks through Pesalink for automated posting of payments and automatic issuance of receipts to parents via email and SMS.

Additional features include:

- You can create fee type (vote heads) like library fee, tuition fee, exam fee, swimming, lunch among others. These vote heads could be optional for each student or a group of students or can be mandatory to whole class. After creating the vote heads account debits/invoices in batch or individually depending on vote heads. User can send the invoices to parents in batch.
- Fee Payment and issuance of receipts and balance. This can be posted manually or can be automatic if integration is done. Receipt can be sent to parent via email or SMS. System notifies parents with fee balances automatically at the end of the month.
- Fee Reports Like (Balances, Invoices, Payment Records, Fee ledgers among others)
- Other Income like Bus or Grounds Hire
- Bank & Cash Management
- Expenses/Purchasing Management
- Journal entries
- Final Reports Like General Ledgers, Trial Balance, Income Report & Balance Sheet

N/B For schools who wants advanced accounting system we recommend Xero or Quick Books Online which we integrate the students fee collection & invoicing to. The 2 applications are also cloud-based and offers advanced features like bank reconciliation, expense management, asset management, payroll among others.

ACADEMICS

a) Kenyan & IGCSE Curriculum

The system has the following features for both Kenya Curriculum both 844 & Competence-Based:

- Manages Exams
- Grading
- Lesson Allocation
- Marks Entry
- Marksheet & Broadsheet Generation
- Termly Report Cards
- Results Analysis among other features

b) ACE Curriculum

Features include:

- Paces Management
- Subjects & Sub-subjects
- Pace Score
- Pace Projection
- Paces Ordering
- Termly Progress report
- Supervisor Progress Card (SPC)
- Transcript among other features

The System also supports British International Curriculum subject to customization as per school needs.

STUDENT BEHAVIORAL MANAGEMENT

Keeping track of student's personal, social and emotional development. It also allows teachers to enter subject comments for each student. This helps in tracking progress of

the student at a personal level. It also generates a report at the end of the term with the subject's comments & behavioral report. The system is able to understand the areas that students is strong in hence advice parents & teachers accordingly.

STORES MANAGER

Keep track of what goes in and out of store. Procurement & dispatch made easy. Store items can be managed and the employees can raise indents whenever items are required.

LIBRARY MANAGER

The Library Management has everything i.e. book title, category, author, year of publication, etc. can be recorded and a bar code printed on the book with a serial number. The module is very effective as books issued; to be received and lost/damaged can be tracked, resulting in avoiding losses.

COMMUNICATION (Bulk SMS and Emails)

The institutions can send out targeted information to parents about school events, fee balances, among others. This can be done per class or to whole school.

TRANSPORT MANAGEMENT

In this section you create vehicles for transportation, add the name, vehicle code, a driver for the vehicle, create routes and add pickup points for your students. Further to this it comes with an app for the parent that help them track movement of the bus, notify them when bus is near their location and sends a notification when child is dropped and picked by the school bus.

DIGITAL LEARNING/RESOURCES

Providing relevant digital content to students all controlled by the teachers.

3.2 Other Features

PARENTS PORTAL & APP

Parents can access invoices, payments, statements, receipts, digital material, make payment via mobile money & bank among other features.

STUDENTS PORTAL

Accelerate your student's performance using digital learning as they access their academic reports.

MPESA PAYBILL & BANK INTEGRATION

The system saves time for accountants by automatically posting payment whenever a payment is made and issues receipts automatically via email or SMS.

ARTIFICIAL INTELLIGENCE

With time, the system is able to understand the areas that students is strong in hence advice parents & teachers accordingly. This is through the teachers comments, students comments, parents comments and overall performance analysis using machine learning tools.

BACKUP, SECURITY & ACCESSIBILITY

The database is automatically backed up to cloud servers. It's also distributed hence access is from multiple cloud servers. We have partnered with Amazon, Ionos & Microsoft to provide the infrastructure. Its also accessible anywhere anytime using any device.

You can access the system demo by visiting www.cloudschool.co.ke/demo.

4.0 Implementation Approach

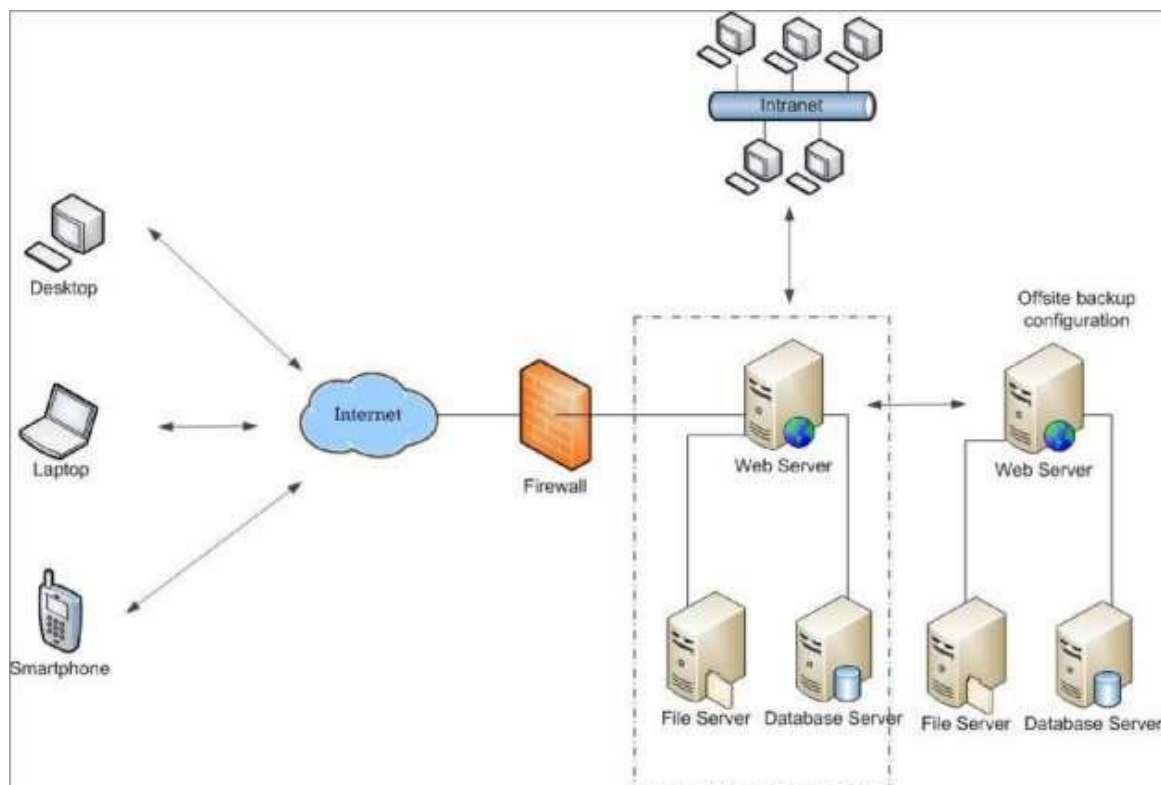
During implementation we shall consider a number of things like:

- User training
- Data Migration
- Specific Customizations after requirements gathering

In data migration we normally use Excel to export data from old system and import it to the new system. The time needed for above can be determined once we visit the institution.

System Architecture

The System Architecture Diagram illustrate the development and end user devices to interact within the proposed requirements.



5.0 Timeframe

The timeframe for implementation & customization shall be determined once we visit the institution.

6.0 Proposing Institution

For the last 7 years now, Africa Cloud Space has been working with over 500 schools to enable teachers, student and parents' access interactive academic and administrative management solutions. We have a team of highly qualified and dedicated staff who are there to meet all your needs. We understand that successful implementation of a software involves much more on quality training, users support and system updates to keep in touch with current technology and changing requirements and that why we are available on a 24/7 basis to serve you. For more information visit www.africacloudspace.com

Some of our customers

1. Kiota School – Nairobi
2. Faith Ventures Christian Academy – Nairobi
3. MillBrook International School
4. HotSprings Girls High School – Mai Mahiu
5. Elgin Christian School –Thika
6. Lilyanna Preparatory- Kitengela
7. Wisdom Towers Junior School – Ruiru
8. Almasi School – Syokimau
9. Moi Forces Academy – Nairobi
10. Ngenia High School – Limuru
11. Ruaraka High School - Nairobi

Among other schools

7.0 Conclusion

Our vision is to see all Kenyan schools have an integrated convergent ICT infrastructure, with a common umbrella portal for academic interaction, digital learning and enhanced data security. We look forward to implementing the system to your school anytime upon approval of this proposal.

You could contact us for more information, implementation and training through below contacts.

Mobile: 0798 067754 / 0733 895 871 | **Email:** info@africacloudspace.com

System Demo Link: www.cloudschool.co.ke/demo

Visit Us

Stone Groove Court, Mirema Drive(Off Safari Park),
Thika Road, Nairobi. Kenya

Prepared By:

Joseph Wanjau

Chief Technology Officer

Africa Cloud Space Ltd

Phone: 0720 068 297

Email: j.wanjau@africacloudspace.com / info@africacloudspace.com