**ABSTRACT**

With the development of fast internet-based technology, computerized systems are becoming widely used in everyday life. Short messages also play the most important role in our daily lives in form of alerts and mode of communication, Computer users can get information on time and comfortably via the web application and email addresses .

Kadogo system can be used by both parents and teachers of a school subscribed to the system to monitor and keep track of each child at school. The system will be programmed to deliver detailed information of a child during the course of the day on daily basis to the parent much more this will make a huge impact on awareness to the parents. Parents usually have undefined means of tracking child’s conduct and way of life at school therefore availing a web application that offers this information to parents and guardians bridges the communication gap hence lack of awareness between both parents and teaching staff.

By using the system as a mediator between the parents and school teaching staff, teachers can easily record the child's response with references to all the actives offered at school on daily basis which is later accessible by the guardian or parent at the end of the day in regard to school modules as well as integrating with an email gateway that can transfer notifications of records.

**INTRODUCTION**

Within the modern age, as time and years pass by, the needs and requirements of people increase tremendously. People desire and need more facility and try to do specific tasks quickly within a short period of time, however most of these facilities require external support and effort to execute them which is more technical given the drastic change in technology and majority are deterred from using digital solutions to address certain loopholes. Therefore the need to digitize and manage data and information based on school daily reports on a child, prompts the development of Kadogo an online web application to store,retrieve and share proceeded information of the child between the school and parent.

Recently, majority of schools communicate to parents and guardians (customers) through hard documents, this trend in most cases is tiresome and not to forget a bit outdated in the sense that the daily journals processed by the teachers start on the child's arrival to school to later departure, in between various activities have occurred that all have to be captured by the teacher on a piece of paper of a form which is later typed and given to the parent on picking up the child from school, this information in most cases does not hold accurate data regarding the child as per the various tasks that have to be undergone to fill the form before the child’s departure.

In addition it becomes increasingly difficult for one or two teachers to monitor tremendously increasing number of pupils in a class and have each record ready by the end of the day. Not to forget this information can as well be distorted perhaps maliciously by both the child and the parent without consent and end up losing valuable communications thus trait of poor record management.

The purpose of this project is to promote parent awareness and monitor child’s behavior,safety,participation,health ,attendance on meals among others through digital measures of a web application thus automated delivery of information through the system hence immediate information sharing and storage in a digitized standard.

**Objectives**

**Main Objective**

The main objective is to develop a web application that will take record of the child's given attributes at school and at the end of the day the parent or guardian can study this attributes as retrieved in the system.

**Specif Objectives**

1. To analyze the challenges related to the use of the current manual system
2. To determine the user Requirements of the system that is to be developed
3. To design and implement an after-sales service support system
4. To test and validate the system.

**Scope**

The scope of study for this research will focus on schools in Uganda. The project puts emphasis on handling day to day records of a child at school and information stored,retrieved by the parent and assessments made. Thus the project will mainly concentrate on developing a web application (Kadogo) meant to be used by schools in Uganda to capture information and equally share with authorized personals which in this case becomes the parent or the guardians.

**Significance**

The system is relevant in facilitating the process of monitoring and handling information as well as internal operations by the teachers in the process of preparing information of the child’s responsiveness at school in regard to various activities.

To Scientific World

The system will enable researchers to learn new ideas that have practical application benefits of technology including the ability to create new machines that increase productivity thus effective time and resource management.

**System Study**

The need to analyze the challenges related to the use of the current manual systems of daily journals say in particular day of school attendance by a given child which is an extensional service and determine the user requirements for Kadogo system is to be developed and design and implement the system and finally run the test of the developed system thus unit testing to test the software module or component for the application

**Context Diagram**

Context diagram is a top level (also known as level0) data flow diagram .the context diagram establishes the information boundary between the system being implemented and the environment in which the system is to operate and present all external entities that may interact with the new system. The objectives of the context diagram focused attention on external factors and events that are considered in the development of the complete set of system requirements and constraints. This will further be used to represent the external entities of the system that interact with the new system.

Teachers

Teachers

Child

Parents

Child

Parents

DB(database)

DB(database)

GUI/ Retrieving info

GUI/ Retrieving info

We have three defined entities thus child’s table, teaches and parents with all attributes in the database defined thus this tables have the database as the pivot and center for submitting data. The graphical user interface(GUI) enhances as a central view point for both users thus school and parents.

**Data flow Diagram**

The data flow diagram shows logical transmission of processed information within the system.

Kadogo system to begin is a web application that operates in format that child's data during the course of the day at school is input to the database by the school thus teachers who in this case clearly outlines all the attributes related to the child conduct and response to activities at school thus monitoring process.

Once the child’s data has been updated into the system,the data is processed into information with clearly defined relational database concepts of the daily information that is transferred and submitted to the parents table who at the end of the school session logins in to the system and has the ability to only view they child’s content and information for the parent’s assessments and later the information is stored in the achieves for future references.

System to be developed

Kadogo system

Integration server database

Web client

Daily data

Child’s data

Admin/school

Parent

Achieves

**Development Tools**

|  |  |  |
| --- | --- | --- |
| Language | Guideline | Tools |
| Python | HTTPS://www.python.org/dev/pep |  |
| HTML | Web browser interaction | html |
| db.sqlite3 | database | sqlite |
| Bootstrap | HTTP://www.Bootstrap.com | Bootstrap (styling browser ) |
| GitHub | Http://GitHub.com | GitHub (code back up and storage) |

**User interfaces**

this is a logical description of how the users will be interacting with the system , thus the outline process by both the parents and the teachers in the input and retrieving of data respectively throughout the entire system.

Sign up/sign in

Web output of the child’s journals with reference to both a parent and teacher

Parent’s Detsils

Child’s assessment

Teachers

details

Parents

Retrieves Child information

Teachers

(inputs child’s assessment)