

# **ONLINE STUDENTS' RESULTS PROCESSING SYSTEM**

**CASE STUDY:** Kampala International University

**BY**

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A Project Report Submitted to School of Computer studies in  
Partial fulfillment of the requirements for the award of  
the Degree of Bachelor of Information Technology of  
Kampala International University

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## DECLARATION

I PAULINE K'OMUGISHA BASIMAKI here by declare that the contents of this proposal is my original work and has never been to any other Institution of learning for any academic award.

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Date: 25<sup>th</sup> June 2009

## APPROVAL

This Project Report has been brought to completion under my supervision.

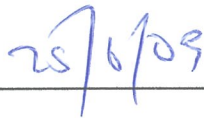
Signed



Mr. Kampororo Ezra

(Supervisor)

Date



## **DEDICATION**

I dedicate this project to the God Almighty for everything that happened has been only by this grace and his will.

I also dedicate it to my parents Mr. & Mrs. Basimaki for their unceasingly prayers and support they gave me throughout my studies.

May glory and honor be unto the Almighty God.

Pauline K'omugisha Basimaki



## **ACKNOWLEDGEMENT**

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May the Lord reward you with his abundant Blessings.

Pauline K'omugisha Basimaki

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## **ABBREVIATIONS**

|       |   |  |
|-------|---|--|
| OSRS  | - | Online Students Results Systems                    |
| PHP   | - | Hyper Preprocessor                                 |
| HTTP  | - | Hyper text transfer protocol                       |
| HTML  | - | Hyper text markup language                         |
| DBMS  | - | Database Management System                         |
| SDLC  | - | System development life cycle                      |
| DFD   | - | Data flow diagrams                                 |
| CASE  | - | Computer Aided System Engineering                  |
| UML   | - | Unified Modeling language                          |
| ASCII | - | American standard code for information interchange |
| SQL   | - | Structured Query language                          |

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## **ABSTRACT**

For the last seven years students results have been processed and released using the traditional way (paper based). This is where exams are marked and when the results are ready, they are pinned in their respective faculties for instance if it is faculty of computer studies that is where results will be pinned on the Board. Complaints like missing results are submitted after the release of results and worked upon. Data can easily be lost if there is no database which is storing and updating these data (results).

The researcher studied and discovered that, the system was cumbersome to students and the people who are involved in preparing results, hence implemented a web driven database which could store and retrieve students academic results which can be viewed online. This ease the workload of staff and students where by they will be able to check their results wherever they are and at the convenient time. This includes:

Chapter 1- Introduction

Chapter 2- Literature review

Chapter 3- Methodology

Chapter 4- System analysis and design

Chapter 5- Implementation and Testing and finally Chapter 6-

Recommendation and Conclusion



## **CHAPTER 1**

### **INTRODUCTION**

#### **1.0 INTRODUCTION**

Online Students Results System (OSRS) is a system developed for students to access their results on internet and utilize internet when they need. The system presents a comprehensive view and integration of a database that can be maintained and manipulated with great flexibility to meet the needs of institution administration, students and the public at large.

This will lead to a clear specification of priority of aims, objectives, justification and a decision to concentrate on efforts on building up database driven website that is user friendly, reliable, confidential and cost effective with elements of flexibility to build confidence in the management of an institution.

#### **1.1 BACKGROUND**

Kampala International University is a private University which started in 2002, it is located along Ggaba Road in Kansanga. The University is located in Kampala 3 Kilometers from town. The university has two different Campuses, Main Campus and Western Campus. The university offers various courses from certificate level to postgraduate/master. With its potential KIU has attracted many students from neighboring countries like Kenya, Tanzania, Rwanda, DRC Congo, Ethiopia, Somalia and others. This implies that during university closure most of the students travel back home for their holidays. It is during this period that the University conducts their Examination marking Session so that the results for the previous semester are ready in time. Usually before the opening of the next semester or academic year, the results are ready and published.

Students find it difficult and time consuming to travel back to University for their results.

## **1.2 PROBLEM STATEMENT.**

KIU Population is about 50% of foreign students with the remaining population being Ugandans of which most of students come from Up-Country,so these students and parents have difficulties in accessing their results,because they will have to travel back to the University which is expensive considering the distance from one's home area to the University.

The current system in place is a paper based system, where results are printed out on papers and pinned at different faculties so that students can access them.

## **1.3 OBJECTIVES**

The general objective of developing OSRS are as follows:

1.3.1 To develop an online system which will make it easier for students to easily access their results and offer better service to the students.

### **1.3.2 SPECIFIC OBJECTIVES.**

1. To study the current system, analyse the system and make recommendations for the new system.
2. To design a database for students results.

3. To develop a database driven website which will store and retrieve student results when they are needed.
4. To test the database.

#### **1.4 RESEARCH QUESTION**

Is it possible to design a database driven website which will store students results, display the results and update students with current information?

#### **1.5 SCOPE OF THE PROJECT**

The study will cover the area of Computer studies.

The study was confined to departments at the university that mostly deal with the issue of students examination results. These departments are like ICT and faculties. It was analyzed and saw how the implementation of online results system would benefit the students and the university.

#### **1.6 SIGNIFICANCE OF THE PROJECT**

This study raised awareness among students and other people on how they can easily access results and utilize KIU website by updating them with current information. This helped students to know how their performance and prepare themselves for the coming semester or academic year. Like incase a student has retakes, by knowing their results at the right time it will help him/her to decide on how many course units they should register for the next semester in order to clear the retakes. This is also cost effective as it reduces time wastage for

students to come back to school to check for their results instead they will rely on KIU website.

### 1.7 JUSTIFICATION OF THE STUDY

The reason for implementing Online Result System (ORS) is to help students to know their academic performance. This enables students to prepare for what they are going to do the coming academic year.

### 1.8 CONCEPTUAL FRAMEWORK.

The model of this system based on a client server architecture where by a client who is a student, sends a request to a web server and a server reply for the results like a students requests to view the database which have results, they may be asked to click to download the results and be requested to enter username and passwords to view individual results. When a client/student request for the page, the request is sent to the server and the web server process the results which are kept in Mysql database. Mysql is used it is the standard query language for interacting with databases. It is an open source, SQL database server that is more or less free and fast.

This can be illustrated below.

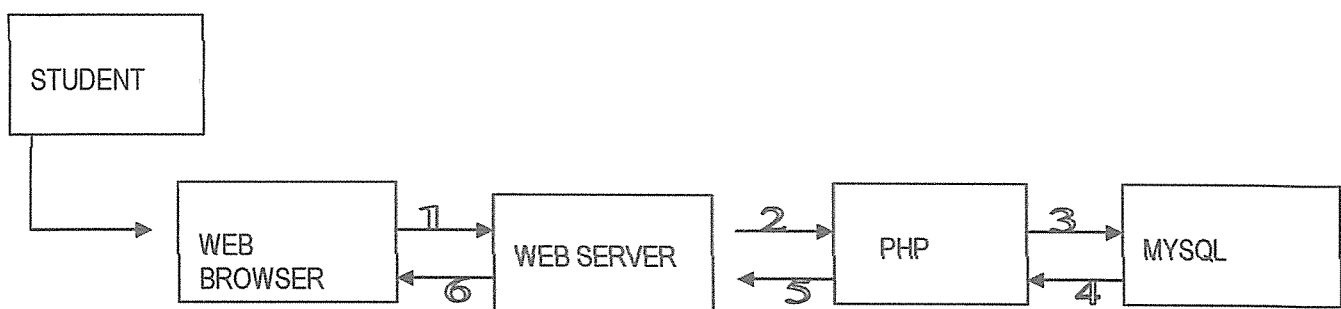


Fig1: The Database architecture consists of the web browser, web server, scripting engine and database server

### Explanation

- A student makes a request using hyper text transfer protocol (HTTP) request for a particular web page. for example a student may request a page to results.
- The web server receives request. It retrieves the file and passes it to the php for processing.
- The PHP engine begins parsing the script. Inside the script is the command to connect to the database and execute a query. php opens the connection to the Mysql server and sends on the appropriate query.
- Mysql server receives the database query and processes it and sends the results back to PHP engine.
- The Php engine finishes running the script, which will usually invoke formatting the query results in Html. it then returns the resulting Html to the web server.
- The web server passes the Html back to the browser, where the student can see the results

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

Information Technology plays an important role in our today's society, Information Technology applies in all areas like hospitals, Banks, schools and even at home. This chapter introduces literature review, it discusses the different sources that were used to obtain information. This chapter discusses problem area, how the proposed system will be implemented, various fact finding techniques that will be used, development tools and lastly conclusion about the whole chapter.

#### **2.2 SCOPE OF LITERATURE REVIEW**

Literature review will cover various sources of information that will be used. These are listed below:

- Textbooks
  - System analysis and Design methods 5<sup>th</sup> Edition
  - Databases Management Systems Second Edition
  - Computer Concept
- Internet
- Microsoft Encarta

#### **2.3 RECENT DEVELOPMENT**

Online Results system has been very effective and beneficial, in Tanzania the National Examination Council recently started using this system for secondary students where students are able to view their O'level and A 'level final examination results and this has been easier for students as they do not need to go to their various schools where they have completed their studies but with this system they can view their result in

Tanzania National Examination website at any time when the results are released provided they have their national examination number.

## **2.4 PROBLEM AREA**

The problem area focuses on the traditional way of releasing results to students which is a paper based, where students have to wait for their results for so long or they find results when they open the university when they come back from holidays. It is also difficult for people who are processing those results since they have to compile results for all students.

In addition it is also taxing as sometimes results are released two months after the beginning of a new semester or academic year. This waste a lot of time as sometimes other students misses their results which make it difficult for one to make a follow up since it needs a lot of time. This inconveniences students as if one finds out he/she has not performed well or has failed she/he has to plan to retake and that means they have to attend classes for the previous courses which they did not clear, however if the system would have been implemented it would have helped students to prepare themselves before coming back to university incase someone has failed will not need to carry out many units so as to clear and concentrate with previous course units which they have failed.

## **2.5 APPLICATION AREA**

According to parsons (2000) web enabled databases allow one to access a database over the internet by using a standard web browser.

This means that you have a web page that grabs information from a database (the web page is connected to the database by programming,) and inserts that information into the web page each time it is loaded.

If the information stored in the database changes, the web page connected to the database will also change accordingly (and automatically) without human intervention.

This is commonly seen on online banking sites where you can log in (by entering your user name and password) and check out your bank account balance. Your bank account information is stored in a database and has been connected to the web page with programming thus enabling you to see your banking information.

Database driven web site programming can also be called (or characterized as): 'server side programming' Raghu and Johannes(2000) The reason it is so called is because the 'action' or magic that allows the web pages to connect to the database is actually taking place on the server.

Database driven sites can be built using several competing technologies, each with it's own advantages. Some of those technologies/tools include:

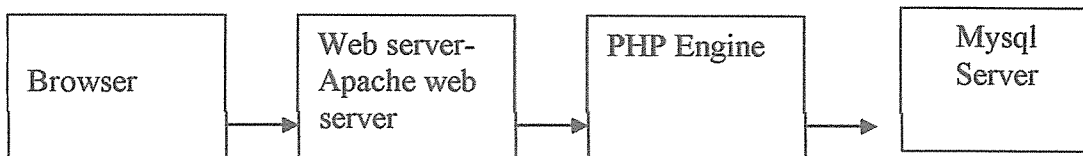
1. PHP
2. JSP
3. ASP
4. PERL
5. Cold Fusion

The application area is concentrated on designing a database that will be storing results of all students in their respective faculties, where by a database will have a connection with a website, they will communicate to each other, so that when a student wants to view their results or in



other words when they request for a page the website will communicate with the database so as to retrieve the information about that particular student. The system will be authenticated with the use of passwords that means when a student wants to view his/her results, he/she will be prompted with a password screen before he gains access to their results.

This is illustrated by a diagram below:-



## 2.6 DATA COLLECTION TECHNIQUES

According to Jeffrey(2000) Fact finding technique is the formal process of using research, interviews, questionnaires, observation, document analysis and other techniques to collect information about problems requirements and preferences.

For my case I will use questionnaires and interviews. These techniques are briefly discussed below.

### Questionnaire

Questionnaires are special documents that allow the researcher to collect information and opinions from respondents. The use of questionnaires is the most efficient method of gathering information. Some of advantages of using questionnaires are:-

- Most questionnaires are answered quickly. People can complete and return questionnaires at their convenience.
- Questionnaires provide relatively inexpensive means of gathering data from a large number of individuals.

- Responses can be tabulated and analyzed quickly.

Disadvantages of questionnaires are listed below

- The number of respondents is often low
- There is no guarantee that an individual will answer or expand on all the questions

## **Interviews**

Interviews are fact finding technique whereby the researcher collects information from individuals through face to face interaction.

Interview can be used to achieve any or all of the following goals: find fact, verify facts, clarify facts, and get end user involved. The following are advantages of using questionnaires:-

- Interview gives a researcher an opportunity to motivate the interviewee to respond freely and openly to questions. By establishing rapport, a researcher is able to give interviewee a feeling of actively contributing to the system object
- Interview allow the researcher to probe more feedback from the interviewee

## **Disadvantages**

- It is very time consuming and therefore costly fact finding approach
- Success of interview may be highly dependent on the system analyst's human relations skills.

## **Observation**

Observation is the fact finding technique where the researcher participates in or watches a person perform activities to learn about what is taken place. This technique is often used when the validity of data collected through other methods is in question or when the complexity of certain aspects of the system prevents a clear explanation by end users. Observation can be very useful and beneficial fact finding technique. Below are advantages of using observation as a method of data collection.

- Data gathered by observation can be highly reliable. Sometimes observations are conducted to check the validity of data obtained directly from individuals.
- Observation is relatively inexpensive compared with other fact-finding techniques

Observation also has some disadvantages, these are

- Because people usually feel uncomfortable when being watched, they may perform differently when being observed.
- Some system activities may take place at odd times, causing a scheduling inconveniences for a researcher.

## **Document analysis**

This is the fact finding techniques which have the following

- Reports from previous surveys
- Company rules and regulations
- Sales literature and other company into booklets
- Job description
- Training manuals

## 2.7 DEVELOPMENT METHODOLOGY (SDLC, PROTOTYPING, JAD)

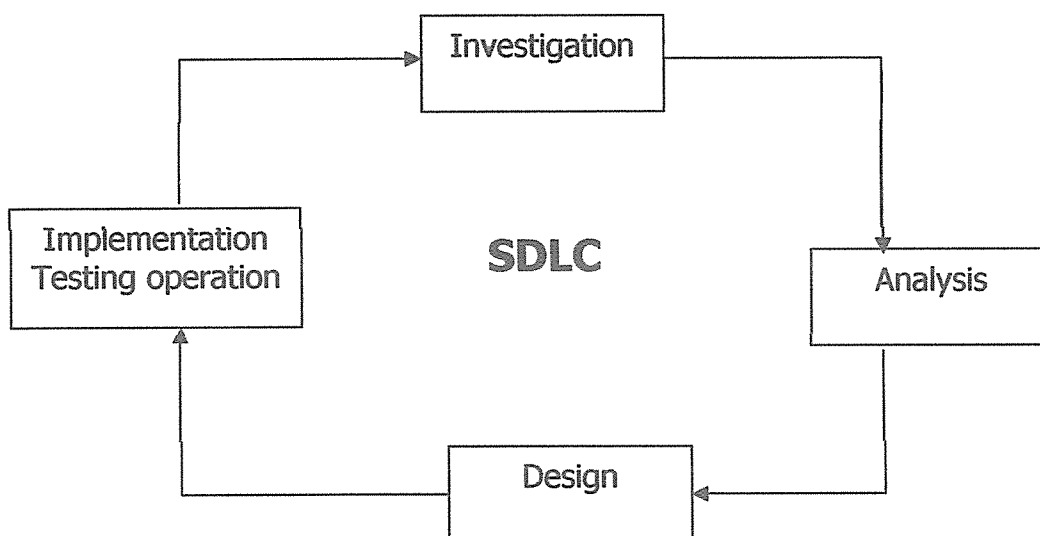
(According to Jeffrey et al) System development life cycle involves phases through which a system goes or passes from the time of initiation up to the time the system is put in operation and finally obsolescence. SDLC has three primary objectives

- To ensure that highly quality system are delivered
- Provides strong management controls over system project
- Maximize the productivity of the systems staff

Below is the illustration of the system development life cycle stages which are:-

- Investigation
- Analysis
- Design
- Implementation

Fig 2.1 : development life cycle stages



### **Preliminary investigation**

Management determines there is a problem with the existing information system; System analyst does initial study to determine the preliminary costs and constraints.

### **Analysis**

The system analyst investigates the problems in the existing system and the requirements for the new system.

### **Design**

Analyst creates a detailed diagrams, charts, models and prototypes of components of the proposed new system

### **Implementation**

Data, people and procedures are converted from the old system to the new, final documentation is compiled, users are trained, the new system is put into operation

### **Prototyping**

Prototyping is the process of quickly putting together a working model (a prototype) in order to test various aspects of a system design, illustrate ideas or features of the system and gather array user feedback. When a prototype is sufficiently refined and its needs the functionality and other design goals then the system is put into operation.

### **The following are advantages of prototyping:**

- it may provide the proof of concept necessary to attract funding
- Early visibility of the prototype gives users an idea of what the final system will look like.
- It encourage active participation among users and producers of the system

- It enables a higher output from the users

However the use of prototyping has its disadvantages, these are listed below:


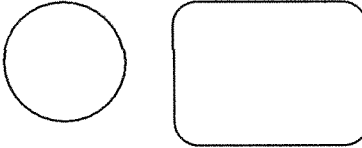


- users expectation on the prototype may be above its performance
- There is a possibility of causing system to be left unfinished
- Prototyping is not suitable for large application

## 2.8 DESIGN TECHNIQUES AND TOOLS (DFD'S, UML, UMBRELLO)

According to Raghu (2000) Data flow diagram (DFD) is used to model the flow and transformation of data through the system. It also shows the relationship between the data and external entities such as people and organizations outside the system. The graph symbols (DFD's) aid communication between the analyst and the user and portioning of the system into smaller components make the system easier to understand.

The following symbols are used to draw DFDs

Fig 2.2 : Data flow diagram symbols

- Data flow 
- Process/transform 
- Stores/files 
- Sources/sinks 

DFD shows transformation of data from input to output through a process that may be described logically and independently of the physical components of the system

## UML

According to Whitten (2000) Unified Modeling Language is a set of modeling conventions that is used to specify or describe a software system in terms of objects. UML does not prescribe a method for developing systems, only a notation that is now widely accepted as a standard for object modeling. UML offers different groups of diagram to model a system much like a set of blue print used for constructing a house. The various UML diagrams and their purposes are as follows:-

- Use CASE diagrams-use CASE diagrams graphically depict the interactions between the system and external systems and users. In other words, they graphically describe who will use the system and in what ways the user expects to interact with the system. The use of CASE narrative is used in addition to textually describe the sequence of steps of each interaction.
- Class Diagrams  
Class diagrams depict the system's object structure. They show object classes that the system is composed of as well as the relationship between those classes.
- Object diagrams  
Object diagrams are similar to class diagrams, but instead of depicting object classes, they model actual object instances-showing the current values of the instances' attributes. The object diagram provides the developer with snapshot of the system's object at one point in time.
- Sequence diagrams  
Sequence diagrams graphically depict how objects interact with each other via messages in the execution of a use case or operation. They

illustrate how messages are sent and received between objects and in what sequence.

- Collaboration diagrams

Collaboration diagrams are similar to sequence diagrams but they do not focus on the timings or "sequence" of messages. Instead, they present the interaction (or collaboration) between objects in a network

## **2.9 DEVELOPMENT TOOLS (OPERATING SYSTEM, PROGRAMMING LANGUAGES, DBMS, WEB SERVER)**

The development tools to be used will be operating system, DBMS, and web server

### **Operating system**

Operating System abbreviated OS sometimes called the executive. The software responsible for controlling the allocation and usage of hardware resources such as memory, central processing unit (CPU) time, disk space, and peripheral devices. The operating system is the foundation on which applications, such as word-processing and spreadsheet programs, are built.

Examples include Windows 2000 and Windows XP, Linux. (Microsoft ® Encarta Encyclopedia)

Windows XP service pack 2 will be used, this is because of the following benefits:-

The security features and innovations in Windows XP Service Pack 2 (SP2) with Advanced Security Technologies are all about helping users like you take a proactive approach to improving the protection of your computer, your information, and your privacy. These security improvements extend to Internet Explorer and Outlook Express, and give you new, easier ways to better protect your computer while you browse or use e-mail.



**Safer Browsing with Internet Explorer.** The improvements in Internet Explorer for Windows XP SP2 can help to:

- make browsing more enjoyable with dramatically fewer pop-up ads
- assist you better protection from potentially harmful download
- other stronger security fro your PC with-in built security enhancement

**Safer E-Mail Handling with Outlook Express.** The Outlook Express improvements in Windows XP SP2 can help to:

- Screen unsafe e-mail attachments that could potentially spread viruses.
- Block some images that might confirm your e-mail address to spammers

### **Help to Protect Your PC from Potentially Harmful Downloads**

If a site attempts to download a program to your computer without your authorization, Internet Explorer in Windows XP SP2 uses the Information Bar to let you know. The Information Bar shows up to notify you, and then it disappears when you move on to another Web page.

### **In addition**

Windows XP Service Pack 2 with Advanced Security Technologies is all about helping you take a proactive approach to improving the protection of your computer, your information, and your privacy. The Internet Explorer and Outlook Express enhancements, including pop-up ad blocking and protection from potentially harmful downloads and attachments, will help you to enjoy new, easier ways to protect your computer while you browse the Web and use e-mail. ([www.microsoft.com](http://www.microsoft.com))

## DBMS- Mysql

According to Raghu (2000) Mysql is software that enables a user to create, maintain and manage electronic databases this category of software is known as a database management system (DBMS). A DBMS acts as an intermediary between the physical database and the user of that database.

Mysql is a multithreaded application performs many tasks at the same time as if multiple instances of that application were running simultaneously.

## Web Server

**A web server** is software that sends out web pages in response to requests from web browsers. A page request is generated when a visitor clicks a link on a web page in the browser, selects a bookmark in the browser, or enters a URL in the browser's address text box.

<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=31730>

In general terms, a computer equipped with the server software that uses Internet protocols such as HTTP and FTP to respond to Web client requests on a TCP/IP network. In reality it is a bit more complicated than that, and because of this nature that it works all the time responding to requests, stability of the web server is a major issue.

Popular web servers include Microsoft Internet Information Server, Microsoft Personal Web Server, Apache HTTP Server, Netscape Enterprise Server, and Sun ONE Web Server. Apache web server

## Advantages of Apache

Apache offers various advantages to users, developers and Web administrators:

- **Features.** Apache has various useful features, including implementation of the latest protocols.
- **Customizable.** Apache's modular architecture allows you to build a server that is "made to measure."
- **Administration.** Apache configuration files are in ASCII, have a simple format, and can be edited using any text editor. They are transferable, so one can effectively clone a server. One can control the server from command line, which makes remote administration very convenient.
- **Extensible.** Apache server and API source code are open to public. If there is any feature that you want but does not exist in Apache, you can write your own server module to implement it.
- **Efficient.** A lot of effort has been put into optimizing the Apache's C code for performance. As a result, it runs faster and consumes less systems resources than many other servers.
- **Portability.** Apache runs on a wide variety of operating systems, including all variants of UNIX, Windows 9x/NT, MacOS (on PowerPC), and various others.
- **Stability/Reliability.** Apache's source code is open to public. When any bugs are found, they are often quickly communicated, and rapidly fixed. Updates are made and announced thereafter. This has resulted in Apache becoming more and more stable, and hence reliable, server over the time.

## PHP

PHP stands for Hypertext preprocessor and is a Server Side language , this means that PHP scripts are executed from the web server and not the user's browser. PHP, however, works in an entirely different way. A web page containing PHP code is "pre-processed" by the PHP engine, called an interpreter, and the results of this processing are passed back to the web server and on to the visitor's web browser. As only the results of the PHP processing are sent to the browser, the code that generated them remains hidden, and is therefore much more secure. This kind of pre-processing is called **server-side scripting**, and while it doesn't provide the same kind of dynamic effects as JavaScript, PHP pages can be called dynamic.

Given the example of a user authentication system: one page of PHP code, can process a username and password, determine if these values are valid or invalid and based on this determination, send the user to a login failure page, or to a successful login page.

([Http://dev.mysql.com/tech-:](http://dev.mysql.com/tech-:) Advanced PHP)

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter introduces methodologies used in the study. This clearly discusses the various techniques used, how data was presented, the development methodology used and their development tools.

#### **3.2 Study design**

The study design was conducted to university students where students and various departmental staff were involved.

#### **3.3 Organizational units**

The different units which were involved in this study were Examination/Academic Office that is where the results are compiled, faculties to prove if a particular student had registered or he/she belongs to a particular faculties and the last unit was accounts to prove if a particular student has paid tuition fee

#### **3.4 Study population**

Data collection technique targeted on various groups: students, and staff like accountants, secretaries, and in academic department. students were able to tell or to give a clear picture of problems they were really facing on the current system, secretaries were also involved, accountants are responsible for verifying if a particular student has finished paying her/his tuition fee plus any necessary payment which needed to be paid to the university, example accommodation like hostel fee, this is incase a student is residing in the university hostels. The research also targeted on staff in academic department who are responsible for compiling results.

### **3.5 Sample size**

During this phase the sampling technique was used to choose respondents who were able to give reliable information. Students were expected to give information concerning how the system affects them, operational staffs were able to tell how cumbersome the current system was, in addition secretaries and examination office.

### **3.6 Research instruments**

Before beginning the research project an introduction letter was secured from the university administration for carrying out the research. After studied the system the following techniques were used. These were interviews and questionnaires.

#### **3.6.1 Structures interviews**

The researcher used interviews while carrying out investigation. This is an online results systems, it is easier for someone to freely give his/her opinion about the system, as compared to the other finding technique. Face to face interaction made the researcher to understand the system clearly and got feedback more easily.

The questions were in form of open ended questions and closed ended questions, so as to give the interviewee the chance to express how they feel about the current system. One of the questions asked was, "Are you happy with the current system or are you satisfied with the system? Throughout the process of gathering data, emphasis was given on confidentiality of respondent's information as a top priority in order to elicit the support and co-operation of the respondents.

#### **3.6.2 Questionnaires**

Question was another fact finding technique which was used during investigation, the researcher gave questionnaires to students and staff

and ask them to fill at their own convenient time. The questions were in form of closed ended and open ended.

### **3.7 Data collection and presentation**

The research instruments included interview and questionnaire schedules composed of open ended and close ended, and multiple choice questions. Open ended multiple choices and close ended allowed respondents to give diverse views and opinions while the close ended and multiple choice questions allowed respondents to give specific responses.

### **3.8 Data analysis and analysis of user requirements**

Analysis of data involved analyzing questionnaires and interviews. The design involved according to system requirements. A network architecture design was made to show how the various components of the system were interconnected.

### **3.9 Development methodology**

The research followed SDLC phases which are Planning, analysis, design and implementation.

Planning phase – the research was conducted to find out if there was a need for this system, and how valuable it was to the University. A feasibility study was conducted.

Analysis stage - at this stage information and build analysis models. Several tools were used to analyzing data.

Design stage - during this stage the output, input, file, system processing and general program design were used to show how each components was catered like on output showed the devices which were be used to output information like printers, video display, disks. input determine what inputs were needed.

File design shows how data were stored and the medium used for storing data.

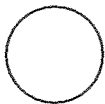
Implementation- the system was tested to verify if it performed according to what was required.

### 3.10 Design techniques and Tools

Various tools were used during development stage, data flow diagram was used .Data flow diagram is a graphic tool which is used to describe and analyze the use of data through a system. Different symbols used were:



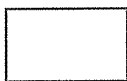
Arrows is used to represent how data flow



Oval or rectangle show how processing is carried out or how is done



Represents how files are stored



Represents the origin and destination or in other words this symbol represents source/sinks

### 3.11 Development tools

The application was developed using open source software and the following tools will be used.

#### 3.11.1 Operating systems

There are various operating systems, for this system the researcher used Windows XP service pack 2, this because of the following benefits:

(SP2) with Advanced Security Technologies are all about helping users like you take a proactive approach to improving the protection of your computer, your information, and your privacy. These security



improvements extend to Internet Explorer and Outlook Express, and give you new, easier ways to better protect your computer while you browse or use e-mail.

**Safer Browsing with Internet Explorer.** The improvements in Internet Explorer for Windows XP SP2 can help to:

- make browsing more enjoyable with dramatically fewer pop-up ads
- assist one better protection from potentially harmful download
- other stronger security your PC with-in built security enhancement

**Safer E-Mail Handling with Outlook Express.** The Outlook Express improvements in Windows XP SP2 can help to:

- Screen unsafe e-mail attachments that could potentially spread viruses.
- Block some images that might confirm your e-mail address to spammers

### 3.11.2 Browser

Browsers allow users to access Web information by locating documents on remote computers that function as Web servers, various browsers are Netscape navigator, Microsoft internet explorer, mozilla, mosaic. Microsoft Internet Explorer was used as it more secured, it can block sites which can be harmful to the system, and also more protection, it is fast and provides reliability.

### 3.11.3 Programming languages and tools

PHP was used as a programming language to interpret the request made from the World Wide Web, process these requests, interact with other programs on the server to fulfill the requests and indicate to the web server exactly what to serve to the client's browser.

#### 3.11.4 Database Management Systems

MySQL relational database was used to provide a great way to store and access complex information. This is a relational database system, since it is an open source it is free to use it as it does not require one to acquire a license to use it.

#### 3.11.5 Application web server

A web server is software that sends out web pages in response to requests from web browsers. A page request is generated when a visitor clicks a link on a web page in the browser, selects a bookmark in the browser, or enters a URL in the browser's address text box.

Apache web server was used as our web server this because Apache offers various advantages to users, developers and Web administrators:

- **Features.** Apache has various useful features, including implementation of the latest protocols.
- **Customizable.** Apache's modular architecture allows you to build a server that is "made to measure."
- **Administration.** Apache configuration files are in ASCII, have a simple format, and can be edited using any text editor. They are transferable, so one can effectively clone a server. One can control the server from command line, which makes remote administration very convenient.

## CHAPTER 4

### SYSTEM ANALYSIS AND DESIGN

#### 4.0 INTRODUCTION

This chapter deals with Analysis and design of the system, which includes Data flow Diagrams, and shows the Entities used in the system, relationships between these entities and attributes for all entities, generally it includes the Conceptual, Logical and Physical modeling of the database.

#### 4.1 Analysis

##### 4.1.1 Current System Process

#### CONTEXT DIAGRAM FOR THE CURRENT SYSTEM

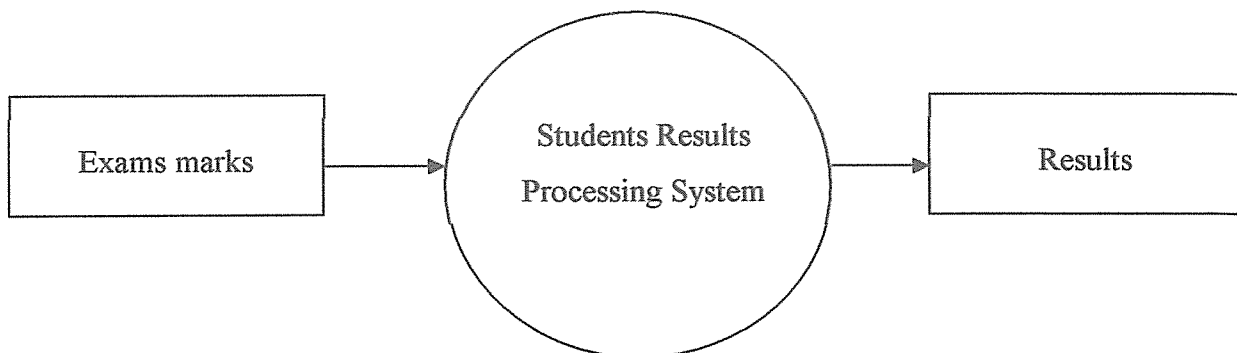


Fig 4.1 Context Diagram for the current system

#### 4.1.2 Data flow Diagram for The Proposed System

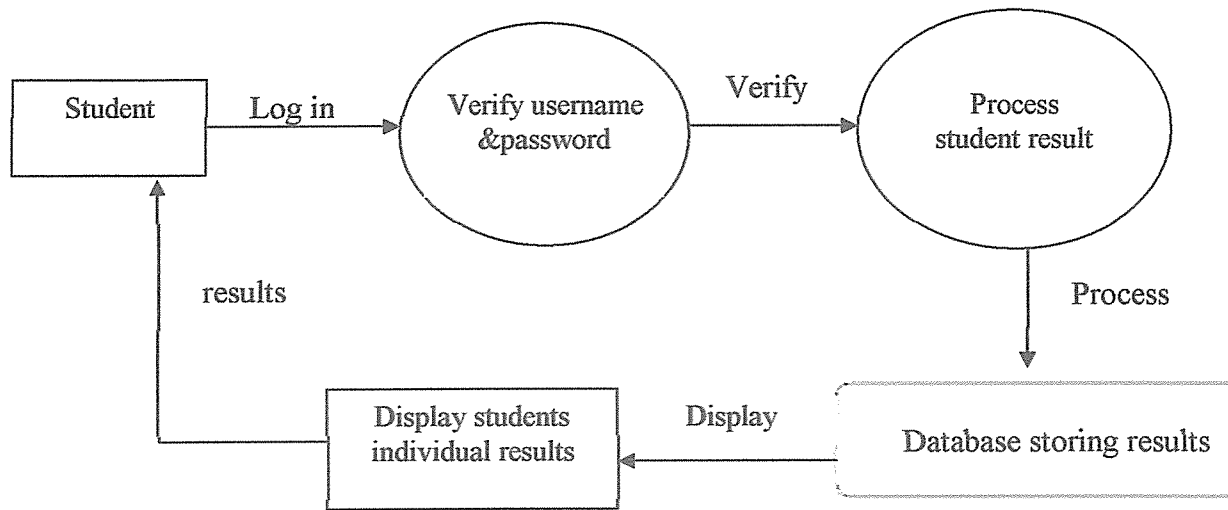


Figure 4.2 Data flow Diagram for the proposed system

## 4.2 Design

### Logical design

This is the relationship between the different entities are shown, clearly showing how the entities are presented and the flow of data in the system. It is shown below by use of Data flow Diagram

#### Entities

Table 4.1: Courses

| FIELD NAME | DATA TYPE | SIZE | CONSTRAINTS | DESCRIPTION  |
|------------|-----------|------|-------------|--------------|
| Coursecode | Varchar   | 5    | Primary key | Course code  |
| Coursename | Varchar   | 25   | required    | Course name  |
| facultcode | Varchar   | 5    | Foreign key | Faculty code |

Table 4.2: Faculties

| FIELD NAME | DATA TYPE | SIZE | CONSTRAINTS | DESCRIPTION  |
|------------|-----------|------|-------------|--------------|
| Facultcode | Varchar   | 5    | Primary key | Faculty code |
| Facultname | Varchar   | 25   | Required    | Faculty name |

Table 4.3: students

| FIELD NAME    | DATA TYPE | SIZE | CONSTRAINTS | DESCRIPTION                   |
|---------------|-----------|------|-------------|-------------------------------|
| Regno         | Varchar   | 17   | Primary key | Registration number           |
| First_name    | Varchar   | 15   | Required    | First name                    |
| Last_name     | Varchar   | 15   | Required    | Last name                     |
| Date_of_Birth | Date      |      | Required    | Date of Birth                 |
| Gender        | Char      | 1    | Required    | Gender                        |
| Address       | Varchar   | 25   | Required    | Address                       |
| nationality   | Varchar   | 15   | Required    | Nationality                   |
| Year_admitted | Numeric   | 4    | Required    | Year the student was admitted |
| username      | Varchar   | 20   | Foreign key | Account_code                  |

Table 4.4: Accounts

| FIELD NAME | DATA TYPE | SIZE | CONSTRAINTS | DESCRIPTION  |
|------------|-----------|------|-------------|--------------|
| username   | Varchar   | 20   | Primary key | Account_code |
| password   | Varchar   | 20   | Required    | Password     |
| Firstname  | Varchar   | 15   | Required    | First name   |
| lastname   | Varchar   | 15   | Required    | Last name    |

Figure 4.5: Results

| FIELD NAME    | DATA TYPE | SIZE | CONSTRAINTS | DESCRIPTION                  |
|---------------|-----------|------|-------------|------------------------------|
| Regno         | Varchar   | 17   | Primary key | Registration number          |
| First_name    | Varchar   | 17   | Required    | Student's first name         |
| Last_name     | Varchar   | 17   | Required    | Student's last name          |
| Coursename    | Varchar   | 35   | Required    | Course name                  |
| Academic_year | Varchar   | 9    | Required    | Academic year                |
| Semester      | numeric   | 2    | Required    | Student's current semester   |
| Courseunit1   | numeric   | 2    | Required    | Course unit1 marks           |
| Courseunit2   | numeric   | 2    | Required    | Course unit2 marks           |
| Courseunit3   | numeric   | 2    | Required    | Course unit3 marks           |
| Courseunit4   | numeric   | 2    | Required    | Course unit4 marks           |
| Courseunit5   | numeric   | 2    | Required    | Course unit5 marks           |
| Courseunit6   | Numeric   | 2    | Required    | Course unit6 marks           |
| GPA           | Float     | 2    | Required    | Students Grade point average |

#### 4.2.1 Entity Relationship Diagrams

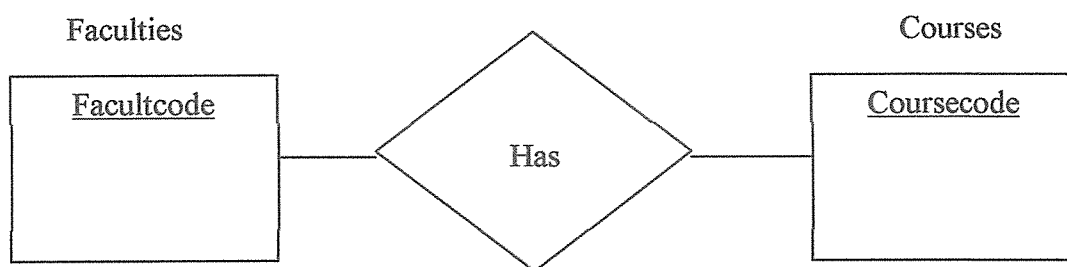


figure 4.3: relationship between faculties and courses

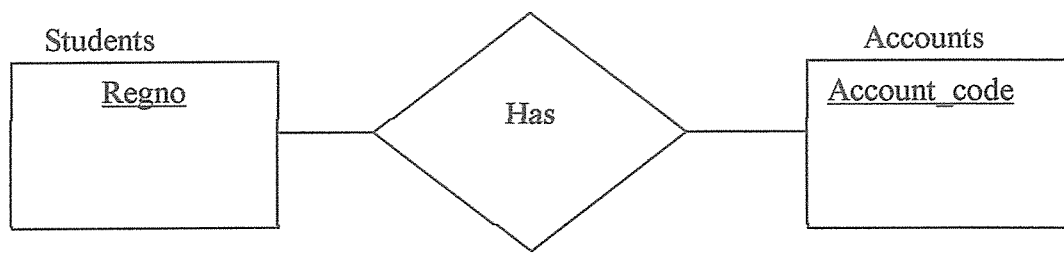


Figure 4.4: Relationship between students and users accounts

## **CHAPTER 5**

### **IMPLEMENTATION AND TESTING**

#### **5.0 INTRODUCTION**

System implementation takes different forms, at this stage of the software development process it involves turning the requirements into technological terms. Implementation includes coding individual components of the system and finally integrating them together in order for the system to perform the expected task. In addition the individual components are realized as a program unit and verified or tested against the requirements. This is described below:

- Module/unit testing- it involves testing separate components as they designed to ensure they work well.
- Integration and system testing – it involves linking separate components and testing them. This determines whether the system operates well.
- End user testing- it involves testing of the system by the users before the system being accepted for operating. This makes it easier to identify errors in the system

#### **5.1 System Requirements:**

After testing the system, it has to be installed for use, therefore it has their requirement which involves hardware and software requirements.

##### **5.1.1 Hardware requirements**

- Pentium IV, 1.5 GHZ processor
- 256MB RAM
- 20 GB hard drive
- 40x CD Rom drive
- VGA Monitor



- Keyboard and Mouse
- Uninterruptible Power Supply (UPS) 220 – 240 volts

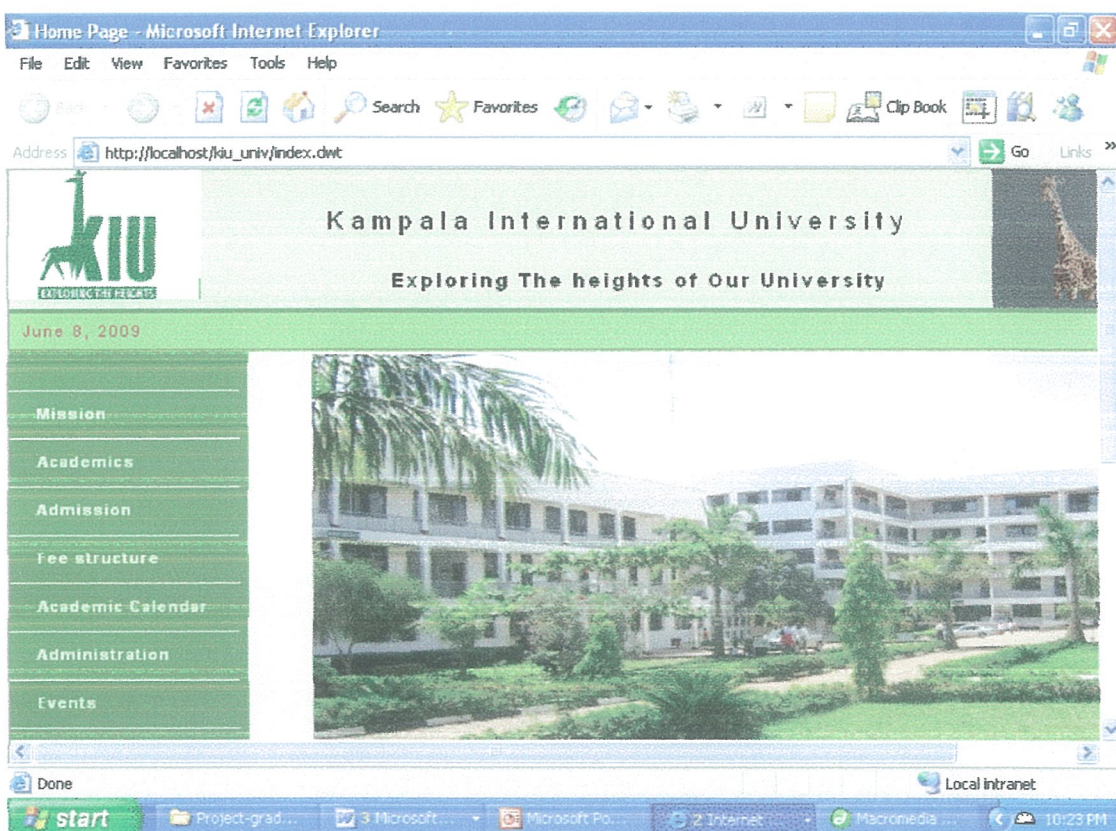
### 5.1.2 Software Requirements

- Windows XP professional and above
- MySQL
- Web Server(Apache Web server)
- Wamp Server
- Web Browser
- Macromedia Dreamweaver
- Internet connection

### 5.3 Sample Screen shots

Note: for one to browse on the website one must have wamp server and mysql in order to establish the connection and integrate each other

Figure 5.1 : Home page



When a user wants to view their results one has to use the Download results link. After clicking user\_registration page will be displayed which asks a user to register if a user not yet registered or to click on the login link to continue. A user will have to enter the information requested then will proceed to the login page. users details will be stored in the database in login table.

Below is the user\_registration page

Fig 5.2 user registration page



If a user registered doesn't exist in the database login page will open in order login. Below is the login Page

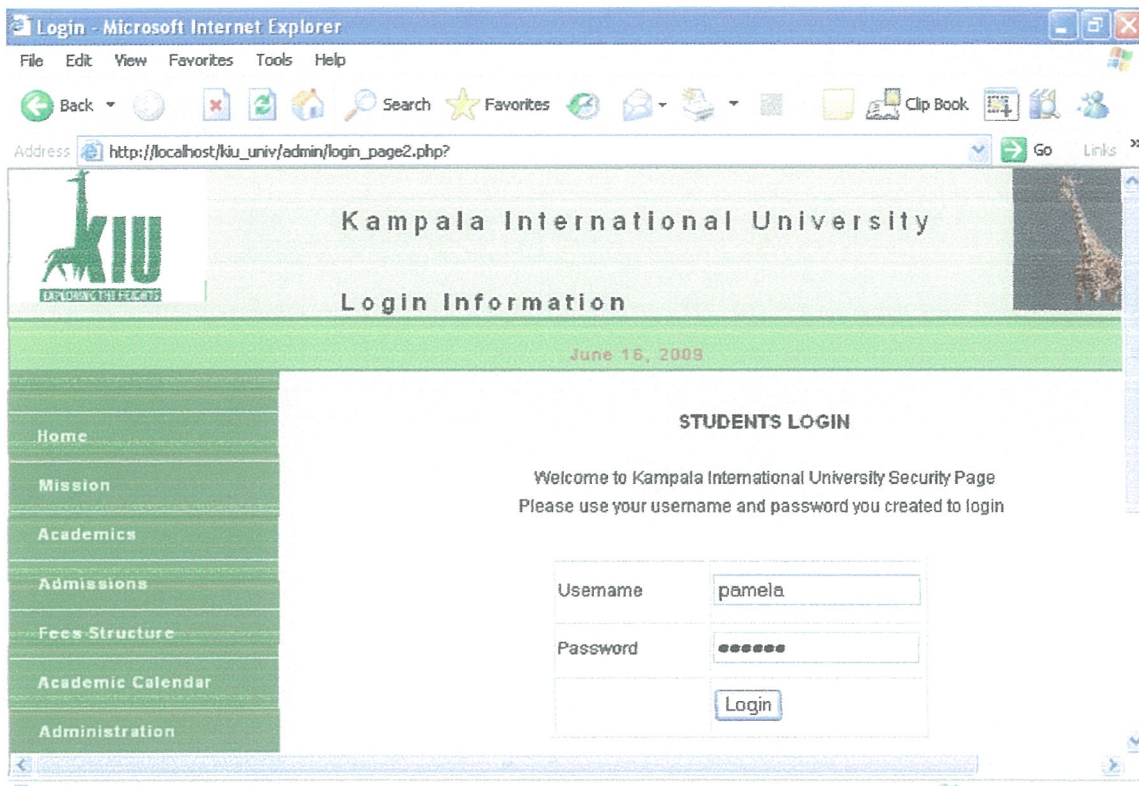
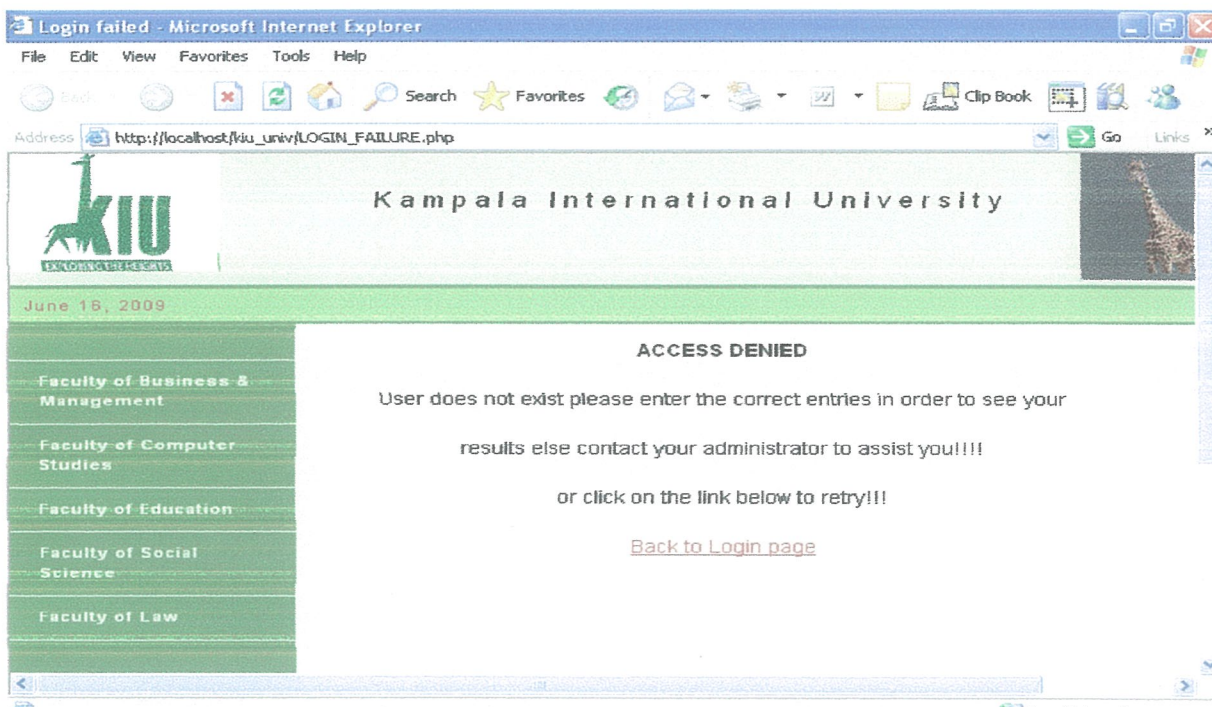


Fig 5.3 login page

If username and password provided does not match with the one in the database a login failure page will be displayed requesting a user to provide correct entries. Below is login failure page fig 5.4



If a student/user provides correct entries then another page will be displayed asking a user to enter registration number

Fig 5.5 login succeeded

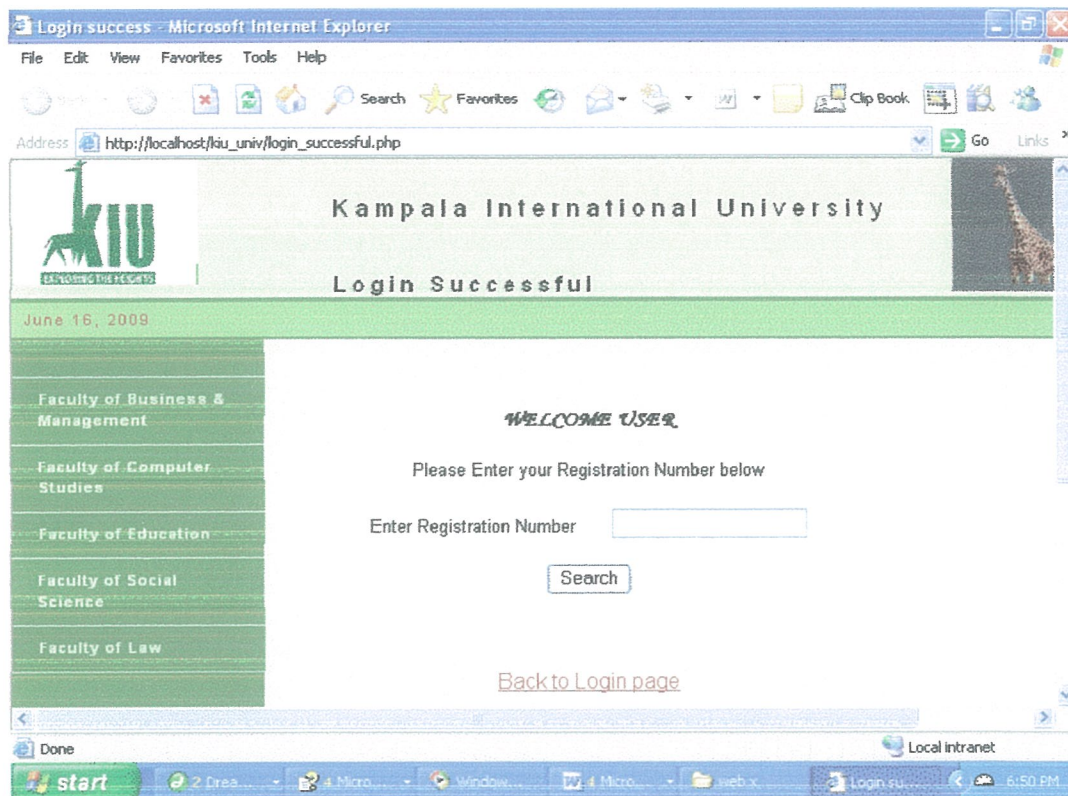
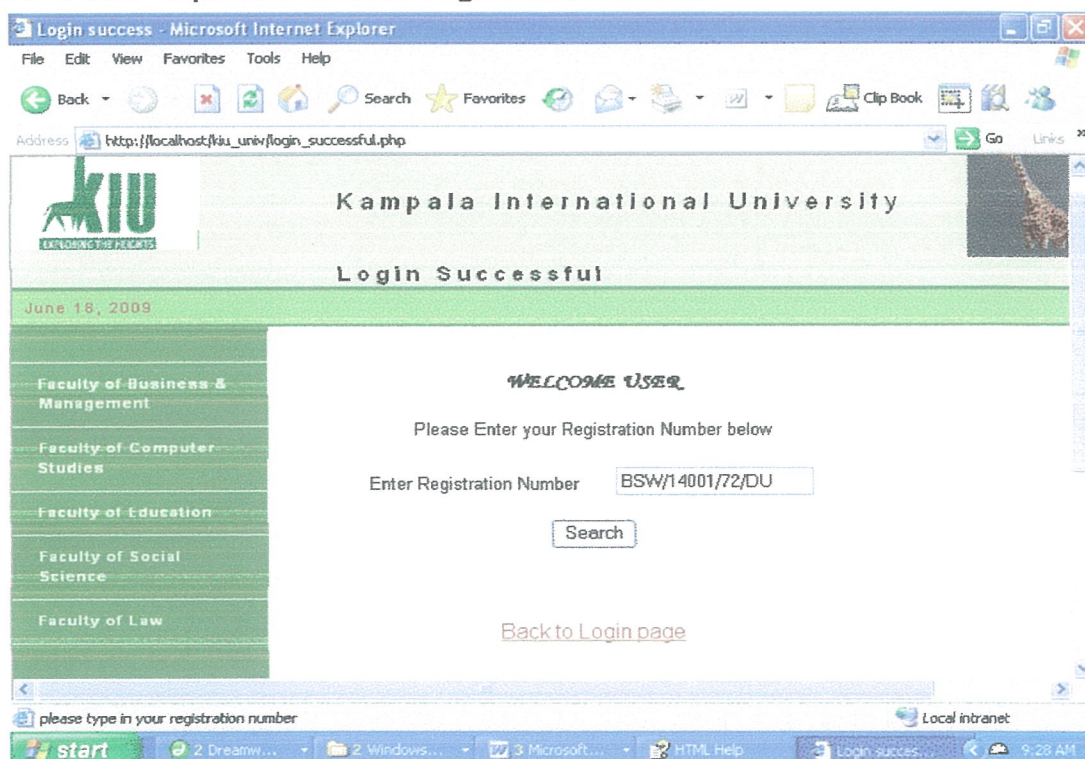


FIG 5.6 user requested to enter registration number





Students results will be displayed on the students browser as shown below

Fig 5.7 students results

The screenshot shows a Microsoft Internet Explorer window titled "Results - Microsoft Internet Explorer". The address bar displays "http://localhost/kiu\_univ/results.php". The page content includes a sidebar with links: Home, Mission, Academics, Admissions, Fees Structure, Academic Calendar, Administration, Events, and Comments. The main content area displays the student's name "Neema Mbega" and "Academic Year: 2008/2009 semester: 1". Below this is a table of results:

|                     |                                   |
|---------------------|-----------------------------------|
| Registration Number | BSW/14001/72/DU                   |
| Course Name         | Bach. of Social work & Social Adm |
| Course unit1        | 70                                |
| Course Unit2        | 70                                |
| Course Unit3        | 75                                |
| Course Unit4        | 65                                |
| Course Unit5        | 80                                |
| Course Unit6        | 80                                |
| GPA                 | 4.33                              |

The taskbar at the bottom shows the "start" button and several open windows: "Windows", "GRADUATI...", "Macromed...", and "Results...". The system clock indicates "12:11 PM" on "June 18, 2009".

Sample report

To see the rest of records click or previous to go back

Fig 5.8 List of students

The screenshot shows a Microsoft Internet Explorer window titled "Students information - Microsoft Internet Explorer". The address bar displays "http://localhost/kiu\_univ/students\_list.php". The page content includes a sidebar with links: Mission, Academics, Admission, Fee structure, Academic Calendar, Administration, Events, and Comments. The main content area displays the "Kampala International University" logo and the title "LIST OF STUDENTS". Below this is a table of student information:

|               |                 |
|---------------|-----------------|
| Regno         | BBA/10100/61/DF |
| firstname     | Emma            |
| lastname      | Kiambe          |
| Date_Birth    | 1982-05-20      |
| Gender        | F               |
| Nationality   | Tanzanian       |
| year admitted | 2007            |

Below the table are navigation links: "Next", "Previous", "Last", and "First". The taskbar at the bottom shows the "Done" button and the "Local intranet" status. The system clock indicates "June 19, 2009".

## **CHAPTER SIX**

### **RECOMMENDATIONS AND CONCLUSION**

#### **6.1 INTRODUCTION**

This chapter recommends what the developers strongly feel should be put in place for effective use of the system. It also talks about the general benefits or the strengths of the system once installed in the University. Finally it has the conclusion of the entire project

#### **6.2 RECOMMENDATION**

The University should adopt this system for efficient running of their operations. This is especially in the current age of technology where most activities in an organization should use computers. At the moment the University does not have this system where results are released online.

The system should be updated at least after every three months incase of new development or changes in the system, the website should contain current information. In addition maintenance should be carried out at least twice a year.

For security purposes, modules of editing and deleting should be secured by use of passwords, this has been realized by use of granting most user less privileges of changing data in anyway and instead administrator privileges given to the right person. Data in the system is very vulnerable and can be lost any time, this can happen intentionally or unintentionally and the therefore we strongly recommend backing up of the data regularly, this means having a duplicate copy of entire database in a different location. Use of data recovery software is also highly recommended.

### 6.3 CONCLUSION

The research has been successfully completed, with support being provided by all the concerned people. The system developed if implemented will help the University improve its services. This is because the system makes processing and releasing of students academic results reliable in terms of efficiency. This will also ease the workload of staff who are involved in preparing results.

APPENDIX I  
QUESTIONNAIRE

TITLE: ONLINE STUDENTS RESULT PROCESSING SYSTEM

CASE STUDY: KAMPALA INTERNATIONAL UNIVERSITY

NAME: \_\_\_\_\_

Please answer where appropriate.

1. Are you happy with the current system?  
.....  
.....
2. What are the problems faced while using the current system?  
.....  
.....
3. What do you think should be done to address the problems mentioned above?  
.....  
.....
4. What are the possible measures put in place to cater for the unpredictable disasters that may damage the data in storage?  
.....  
.....
5. How do you rate the performance of the existing system?

Very good ☐ Good ☐ Fair ☐ Poor ☐

Very poor ☐



6. How do you obtain the data from the different departments within this university?

.....  
.....

7. What is the average time needed to process student results?

.....  
.....

8. What are the sources of data input into this system?

.....  
.....

9. How often is the data entered into the system?

Daily ☐ Weekly ☐ Monthly ☐

Others

Explain:.....

.....

10. Which parties are interested in this data after it has been processed?

.....  
.....

Thank you for your cooperation.

## APPENDIX II

### SAMPLE CODES

#### User\_registration.php

```
<?php require_once('../Connections/connection2.php'); ?>
<?php
// *** Redirect if username exists
$MM_flag="MM_insert";
if (isset($_POST[$MM_flag])) {
    $MM_dupKeyRedirect="../USER_EXIST.PHP";
    $loginUsername = $_POST['Username'];
    $LoginRS__query = "SELECT username FROM login WHERE username=" .
    $loginUsername . "''";
    mysql_select_db($database_connection2, $connection2);
    $LoginRS=mysql_query($LoginRS__query, $connection2) or
    die(mysql_error());
    $loginFoundUser = mysql_num_rows($LoginRS);

    //if there is a row in the database, the username was found - can not add
    the requested username
    if($loginFoundUser){
        $MM_qsChar = "?";
        //append the username to the redirect page
        if (substr_count($MM_dupKeyRedirect,"?") >=1) $MM_qsChar = "&";
        $MM_dupKeyRedirect = $MM_dupKeyRedirect . $MM_qsChar
        ."requername=".$_loginUsername;
        header ("Location: $MM_dupKeyRedirect");
        exit;
    }
}
```

```

function GetSQLValueString($theValue, $theType, $theDefinedValue = "",
$theNotDefinedValue = "")
{
    $theValue = (!get_magic_quotes_gpc()) ? addslashes($theValue) :
    $theValue;

    switch ($theType) {
        case "text":
            $theValue = ($theValue != "") ? "'" . $theValue . "'" : "NULL";
            break;
        case "long":
        case "int":
            $theValue = ($theValue != "") ? intval($theValue) : "NULL";
            break;
        case "double":
            $theValue = ($theValue != "") ? "'" . doubleval($theValue) . "'" : "NULL";
            break;
        case "date":
            $theValue = ($theValue != "") ? "'" . $theValue . "'" : "NULL";
            break;
        case "defined":
            $theValue = ($theValue != "") ? $theDefinedValue :
            $theNotDefinedValue;
            break;
    }
    return $theValue;
}

```

```

$editFormAction = $_SERVER['PHP_SELF'];
if (isset($_SERVER['QUERY_STRING'])) {
    $editFormAction .= "?" . htmlentities($_SERVER['QUERY_STRING']);
}

```

```

if ((isset($_POST["MM_insert"])) && ($_POST["MM_insert"] == "userform"))
{
    $insertSQL = sprintf("INSERT INTO login (firstname, username, lastname,
password) VALUES (%s, %s, %s, %s)",
        GetSQLValueString($_POST['firstName'], "text"),
        GetSQLValueString($_POST['Username'], "text"),
        GetSQLValueString($_POST['lastName'], "text"),
        GetSQLValueString($_POST['Password'], "text"));

    mysql_select_db($database_connection2, $connection2);
    $Result1 = mysql_query($insertSQL, $connection2) or die(mysql_error());

    $insertGoTo = "login_page2.php";
    if (isset($_SERVER['QUERY_STRING'])) {
        $insertGoTo .= (strpos($insertGoTo, '?')) ? "&" : "?";
        $insertGoTo .= $_SERVER['QUERY_STRING'];
    }
    header(sprintf("Location: %s", $insertGoTo));
}

?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<!-- DW6 -->
<head>
<!-- Copyright 2005 Macromedia, Inc. All rights reserved. -->
<!-- TemplateBeginEditable name="doctitle" -->
<title>Register for a Username</title>
<!-- TemplateEndEditable -->
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1"
/>

```

```

<script language="JavaScript" type="text/javascript">
<!--

//----- LOCALIZEABLE GLOBALS -----
var d=new Date();
var monthname=new
Array("January","February","March","April","May","June","July","August","Sept
ember","October","November","December");
//Ensure correct for language. English is "January 1, 2004"
var TODAY = monthname[d.getMonth()] + " " + d.getDate() + ", " +
d.getFullYear();
//----- END LOCALIZEABLE -----

function MM_findObj(n, d) { //v4.01
  var p,i,x; if(!d) d=document;
  if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++)
x=d.forms[i][n];
  for(i=0;!x&&d.layers&&i<d.layers.length;i++)
x=MM_findObj(n,d.layers[i].document);
  if(!x && d.getElementById) x=d.getElementById(n); return x;
}

function MM_validateForm() { //v4.0
  var i,p,q,nm,test,num,min,max,errors="",args=MM_validateForm.arguments;
  for (i=0; i<(args.length-2); i+=3) { test=args[i+2];
val=MM_findObj(args[i]);
  if (val) { nm=val.name; if ((val=val.value)!="") {
    if (test.indexOf('isEmail')!=-1) { p=val.indexOf('@');
      if (p<1 || p==(val.length-1)) errors+='- '+nm+' must contain an e-mail
address.\n';

```

```

    } else if (test!='R') { num = parseFloat(val);
    if (isNaN(val)) errors+='- '+nm+' must contain a number.\n';
    if (test.indexOf('inRange') != -1) { p=test.indexOf(':');
    min=test.substring(8,p); max=test.substring(p+1);
    if (num<min || max<num) errors+='- '+nm+' must contain a number
between '+min+' and '+max+'.\n';
    } } } else if (test.charAt(0) == 'R') errors += '- '+nm+' is required.\n'; }
} if (errors) alert('The following error(s) occurred:\n'+errors);
document.MM_returnValue = (errors == "");
}
//-->
</script>
<style type="text/css">
<!--
#Layer1 {
    position:absolute;
    left:2px;
    top:0px;
    width:129px;
    height:97px;
    z-index:1;
}
#Layer2 {
    position:absolute;
    left:185px;
    top:70px;
    width:508px;
    height:21px;
    z-index:2;
}
.style1 {color: #000000}
#Layer3 {

```

```

    position: absolute;
    left: 703px;
    top: -3px;
    width: 92px;
    height: 97px;
    z-index: 3;
}
.style4 {
    font-size: 16px;
    color: #000000;
    font-weight: bold;
    font-family: "Maiandra GD", "OCR A Extended";
}
#Layer4 {
    position: absolute;
    left: 79px;
    top: 396px;
    width: 258px;
    height: 225px;
    z-index: 4;
}
#Layer5 {
    position: absolute;
    left: 175px;
    top: 172px;
    width: 29px;
    height: 41px;
    z-index: 5;
    background-color: #00FF99;
}
#Layer6 {
    position: absolute;

```

```

        left:283px;
        top:200px;
        width:123px;
        height:76px;
        z-index:5;
        background-color: #F4FFE4;
    }
    .style5 {
        color: #000000;
        font-weight: bold;
        font-size: 16px;
    }
    #Layer7 {
        position:absolute;
        left:1px;
        top:639px;
        width:846px;
        height:27px;
        z-index:5;
        background-color: #666600;
    }
-->
</style>
<style type="text/css">
<!--
@import url("../kiu.css");
-->
</style>
<link href="../kiu.css" rel="stylesheet" type="text/css" />
<style type="text/css">
<!--
.style8 {color: #D5EDB3; font-weight: bold; }

```



```
-->
</style>
<link href="../../Kiu.css" rel="stylesheet" type="text/css" />
<style type="text/css">
<!--
#Layer8 {
    position:absolute;
    left:209px;
    top:136px;
    width:495px;
    height:306px;
    z-index:6;
}
#Layer9 {
    position:absolute;
    left:351px;
    top:233px;
    width:251px;
    height:151px;
    z-index:7;
}
.style11 {font-size: 16px; font-family: Pristina, "Rage Italic", "Rockwell
Condensed", "Script MT Bold"; color: #000000;}
.style12 {    font-size: 14px;
    font-family: Arial, Helvetica, sans-serif;
    color: #000000;
}
#Layer10 {
    position:absolute;
    left:368px;
    top:264px;
    width:258px;
```

```

        height:125px;
        z-index:7;
    }
    #Layer11 {
        position:absolute;
        left:327px;
        top:262px;
        width:268px;
        height:327px;
        z-index:7;
    }
    .style13 {font-family: Arial, Helvetica, sans-serif}
    .style14 {font-size: 12px}
    .style15 {font-family: Arial, Helvetica, sans-serif; font-size: 12px; }
    .style16 {font-size: 14px}
    .style17 {font-size: 12px; font-family: Arial, Helvetica, sans-serif; color:
    #000000; }
-->
</style>
<!-- TemplateBeginEditable name="head" --><!-- TemplateEndEditable -->
</head>
<body bgcolor="#F4FFE4">
<div id="Layer1"></div>
<div id="Layer3"></div>
<div id="Layer7">
    <table width="859" height="44" border="1">
        <tr>
            <td width="89" height="38"><div align="center"
class="style8"><strong><a href="../index.dwt"
class="style8">Home</a></strong></div></td>

```

```

        <td width="93"><div align="center" class="style8"><strong><a
href="../Mission1.html" class="style8">Mission</a></strong></div></td>
        <td width="87"><div align="center"
class="style8">Admission</div></td>
        <td width="141"><div align="center" class="style8">Fees Structure
</div></td>
        <td width="125"><div align="center" class="style8">Academic Calendar
</div></td>
        <td width="99"><div align="center"
class="style8">Administration</div></td>
        <td width="77"><div align="center" class="style8">Events</div></td>
        <td width="77"><div align="center"
class="style8">Comments</div></td>
    </tr>
</table>
</div>
<div id="Layer8">
    <p align="center" class="style13"><span class="bodyText
style16"><strong>Welcome to the Registration Page</strong></span></p>
    <p align="center" class="style17">    Please enter the following information
to Register

    with us,    <br />
    if you have registered<span class="style17"> please click on the link below
to login</span>    </p>
    <p align="center"><span class="style14"><a href="login_page2.php"
class="style13"><strong>LOGIN    </strong></a></span>
    <p align="left" class="bodyText">&nbsp;</p>
</div>
<div id="Layer11">
    <form action="<?php echo $editFormAction; ?>" id="userform"
name="userform" method="POST">

```



```

<tr>
  <td colspan="2" class="bodyText"><label>
    <div align="center">
      <input name="Submit" type="submit"
onclick="MM_validateForm('firstName','R','lastName','R','Username','R');r
eturn document.MM_returnValue" value="Register" />
    </div>
  </label></td>
</tr>
</table>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
  <input type="hidden" name="MM_insert" value="userform">
</form>
</div>
<table width="113%" border="0" cellspacing="0" cellpadding="0">
  <tr bgcolor="#D5EDB3">
    <td colspan="3" rowspan="2"><div class="style1" id="Layer2">
      <marquee class="subHeader style11">
        <div align="center" class="subHeader style12">Exploring The heights
</div>
      </marquee>
    </div></td>
    <td height="50" colspan="5" id="logo" valign="bottom" align="center"
nowrap="nowrap"><div align="left" class="pageName style1">Kampala
International University </div></td>
    <td width="10">&nbsp;</td>
  </tr>

  <tr bgcolor="#D5EDB3">

```

```

        <td height="51" colspan="5" id="tagline" valign="top"
align="center"><p>&nbsp;</p>
        <p align="left" class="style5">&nbsp;</p></td>
            <td width="10">&nbsp;</td>
</tr>

<tr>
    <td height="3" colspan="9" bgcolor="#5C743D"></td>
</tr>

<tr>
    <td colspan="9" bgcolor="#99CC66"
background="../../mm_dashed_line.gif"></td>
</tr>

<tr bgcolor="#99CC66">
    <td colspan="9" id="dateformat" height="20">&nbsp;&nbsp;<script
language="JavaScript" type="text/javascript">
        document.write(TODAY);    </script>    </td>
</tr>
<tr>
    <td colspan="9" bgcolor="#99CC66"
background="../../mm_dashed_line.gif"></td>
</tr>

<tr>
    <td colspan="9" bgcolor="#5C743D"></td>
</tr>

```

```

<tr>
  <td width="188" valign="top" bgcolor="#5C743D">
    <table border="0" cellspacing="0" cellpadding="0" width="188"
id="navigation">
      <!-- TemplateBeginEditable name="EditRegion1" -->
      <tr>
        <td width="176">&nbsp;<br />
          &nbsp;<br /></td>
        </tr>
      <tr>
        <td width="176"><a href=" ../index.dwt"
class="navText">Home</a></td>
        </tr>
      <tr>
        <td width="176"><a href=" ../Mission1.html"
class="navText">Mission</a></td>
        </tr>
      <tr>
        <td width="176"><a href=" ../Academics1.html"
class="navText">Academics</a></td>
        </tr>
      <tr>
        <td width="176"><a href=" ../Admission.html"
class="navText">Admissions</a></td>
        </tr>
      <tr>
        <td width="176"><a href=" ../fee_structure.html"
class="navText">Fees Structure </a></td>
        </tr>
      <tr>
        <td><a href="javascript:;" class="navText">Academic Calendar
</a></td>

```

```

</tr>
<tr>
  <td><a href="javascript:;" class="navText">Administration</a></td>
</tr>
<tr>
  <td><a href="javascript:;" class="navText">Events</a></td>
</tr>
<tr>
  <td><a href="javascript:;" class="navText">Comments</a></td>
</tr>
  <!-- TemplateEndEditable -->
</table>
<br />
&nbsp;<br />
&nbsp;<br />
&nbsp;<br />    </td>
<td width="43">&nbsp;</td>
<td colspan="6" valign="top"><br />
&nbsp;<br />
<table border="0" cellspacing="0" cellpadding="0" width="611">
<tr>
  <td width="611" class="style4"><p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p class="style1">&nbsp;</p>

```



```

    <p class="style1">&nbsp;</p></td>
  </tr>
</table>

<p><br />
  &nbsp;</p>
  <p><br />
</p></td>
<td width="10">&nbsp;</td>
</tr>
<tr>
  <td width="188" height="39">&nbsp;</td>
  <td colspan="8">&nbsp;</td>
</tr>
</table>
</body>
</html>

```

## APPENDIX III

### INFORMATION SYSTEM PLAN

#### **Information system plan**

Information system plan shows various activities that are carried in each phase. The four phases are planning, analysis, design and implementation

##### Planning

###### Activities:

- Feasibility study
- The system you want to develop
- User requirements
- Cost
- Collection of data

##### Analysis

###### Activities

- user requirements
- problem specification
- report writing

##### Design: activities

- file design
- input
- process
- logical – inner design of the system
- physical – order design of the system
- construction of prototype

##### Implementation

- documentation
- user training

## **System request**

This is the document which will be produced to show the need of a new system which will have the following

Project Name: Online Students Results Processing System

The Business need:

- To design a database driven website that will enable students to access their results
- To design a database which will store students results
- To design a database which will update students information

Expected functionality:

- A database will store and retrieve students results
- A website will provide students results and update them with current information concerning the university

Expected value of the system

The system will be able to provide information to students.

## **Feasibility analysis**

Feasibility analysis is the process by which feasibility is measured. The various categories are:-

### **Technical feasibility**

This stage see how the proposed technology can be practical, for instance the data administrator will be needed so as to train some pf the staff on how to use the system, also at this stage we try to check if the university possess various technology so they will have to acquire computers, do networking installation and host a website.

Economic feasibility- is a measure of cost effectiveness of the project or solution. So we will analyze and see if the University is ready to buy the facilities

Operational feasibility – is a measure of how well the solution will work in the organization. It is measure how people feel about the system

a. Project plan and schedule

| Phase          | Deliverable   | Time      |
|----------------|---|-----------|
| Planning       | <ul style="list-style-type: none"><li>- System specification</li><li>- Feasibility study</li><li>- Data collection</li></ul>                    | February  |
| Analysis       | Analyzing of data   | March     |
| Design         | <p>Designing of the system</p> <ul style="list-style-type: none"><li>- coding</li><li>- testing</li></ul>                                       | March-may |
| Implementation | <ul style="list-style-type: none"><li>- Installation</li><li>- Documentation</li><li>- User training</li><li>- Maintaining the system</li></ul> | June      |

b. Risk assessment

A risk is any problem that may come as one is developing a software and make one not to achieve his objectives.

The risks which we may be likely to encounter are Lack of enough knowledge to use the development tools example how to use Mysql and PHP so we will need to look for someone to train us in order to be able to use this software and also time may not be enough.

## REFERENCES

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