

**A WEB-BASED MANAGEMENT INFORMATION SYSTEM FOR  
STUDENTS' HOSTELS**

**CASE STUDY: KIU MAIN HOSTEL**

**BY**

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**A GRADUATION PROJECT SUBMITTED TO THE SCHOOL  
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## DECLARATION

I Mugisha Brian here by declare that this graduation project is my original work and has never been submitted to any university or institution for an academic award. Any resemblance to any other project is therefore a fluke of ideas.

Signature... Mugisha .....

MUGISHA BRIAN

Date 21<sup>st</sup> July 2010 .....

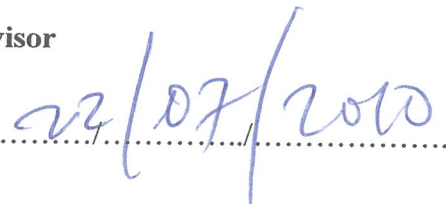
## APPROVAL

This is to certify that this project report titled “A web-based management information system for students’ hostels” has been brought to completion under the supervision of the undersigned and it is ready to be submitted to the board of examiners.

Signature.....

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Supervisor

Date .....

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Along with all authors, none is an artistic island onto himself we are all influenced by others, sometimes knowingly and at other times unknowingly. I give thanks to God first for giving me good health, good judgment, intelligence and the ability to carry out studies as well as coming up with this project successfully.

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## List of Acronyms

<b><i>KIU</i></b>	<i>Kampala International University</i>
<b><i>DBMS</i></b>	<i>Database Management System</i>
<b><i>MIS</i></b>	<i>Management Information Systems</i>
<b><i>SQL</i></b>	<i>Structure Query Language</i>
<b><i>WMIS</i></b>	<i>Web-based Management Information Systems</i>
<b><i>HTML</i></b>	<i>Hyper Text Manipulation Language</i>
<b><i>i.e.</i></b>	<i>That is</i>

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

A web-based management information system is a specific type of data processing system on the integration of computer systems with the aim to furnish database management with information that may be of assistance in record keeping, file sharing, efficient communication, control, planning, monitoring, implementation, maintenance and making decisions practiced over a network or Internet. Web-based management of data is being used in most areas where data is collected from scattered parts to a centralized database, for example in the Banks for Financial transactions that use Financial management information system, Human Resource that use Human resources management information systems which is concerned with activities related to workers, managers, and other individuals employed by the any organization, Business that use marketing management information system, Manufacturing management information systems and many others. These MIS systems collect data from scattered areas to a centralized database through Web-based technologies (Schwabe, 1998) [12].

A Web-based Information System (WIS) is developed in an environment of Internet, utilizing the World-Wide-Web to get the public universal or private restricted accesses. WIS technology can be used for electronic commerce, scientific investigations, resource management, asset management, archaeology, environmental impact assessment, urban planning, cartography, criminology, geographic history, marketing, logistics, prospectivity mapping, and other purposes. For example, in electronic commerce WIS is used in product selection that is the range of available products is taken from the production database, pricing information to present prices are the same as in the accounting database, on-line ordering where orders are used to steer production and delivery directly, production and delivery tracking and after-sales support that is documentation (updates) and problem reports are handled through the Web, WIS allow

emergency planners to easily calculate emergency response times in the event of a natural disaster, WIS might be used to find wetlands that need protection from pollution, or WIS can be used by a company to site a new business location to take advantage of a previously underserved market, Web-based Information System provides easy navigation to give appropriate support to user tasks, e.g., how to organize the information items in such a way that the user can navigate them easily and implementing security from an authorised users from system and its data (Schwabe, 1998) [12].

And due to rapid growth of intuitions and universities there has been a wide range Hostel Businesses that have reached to some extent of stretching one Hostel to have many isolated branches in different areas caused by the rapid increase in the number of students. And data has been inefficiently managed because each branch manages its data on they own way, which makes it difficult for Hostels to store, analyse, control, manage and maintain their data, and insecurity of data is highly experienced by these mushrooming hostels due to lack an efficient system.

And by use of Management Information System which is a system that manages projected information appropriately and summarized, Hostels are being able to store, analyse, control, manage and maintain data. And these data is controlled in a database where all branches of certain Hostel use one database which is centralised, data is entered and sent to the database through individual computers at branch level through integration of computer systems connected to internet or a local network, and this whole system is called A Web-based Information System and this provides record keeping, file sharing, efficient communication, control, planning, monitoring, implementation, maintenance and making decisions practiced over a network or Internet (Ndhlovu, 1995) [5].

## **1.2 Case Study Description**

Kampala International University (KIU), commenced operation as a private University in October 2001. The university offers both undergraduate and post-graduate programs on full-time

area. Main Hostel of Kampala International University (GARANG HOSTEL) is owned by the university managing director Hajji Hassan Basajabaraba. Situated besides the main campus, in a colorful flat building it started in 2001 along with the University providing accommodation services for both male and female students of the University of All Nationalities However it later turned into a one sex hostel meant for only female students. GARANG HOSTEL was named after the Southern Sudan's former president DR JOHN GARANG and was officially opened by GEN JAMES WANNI IGA the speaker of southern Sudan legislative council assembly.

And data is being collected, managed and stored inefficiently in the hostels, like many of the hostels use paper filling in collecting data and these paper forms used by scattered hostels are of different formats thus data being entered differently. It is also difficult to transport data or documents from scattered hostels every time changes are made to the centre and sorting data is manually which leads to many data errors and consume a lot time handling paper by paper, There fore this project was intended to develop a web-base management information system to efficiently collect data from scattered hostels and then process it and control it centrally.

### **1.3 Statement of the problem**

A multi-branched hostel has many hostels scattered, this makes it difficult to collect, store and control the data from these scattered hostels and other challenges like report generation resulting from isolated data of these scattered branches. Time is wasted in managing files, poor data management and many others, resulting into data redundancies and inconstancies, And mostly the core problem faced by many businesses with isolated data is insecurity, due lack of a centralized database where data access can be controlled from unauthorized users, which result loss of the back born of a business that is data.

## **1.4 Objectives**

### **1.4.1 Main Objective**

This was basically to improve performance in hostel records management through increased accessibility and responsiveness.

### **1.4.2 Specific Objectives**

This was specifically meant;

- To carry out system study and identify user and system requirements.
- To identify system specification with the help of system requirements.
- To develop a centralized web-based system for efficient data management of student hostel.
- To test and validate the developed system.

## **1.5 Justification**

Continued lack of an efficient network-based system for multi-branched hostel leads to low performance and profitability which may result into collapse of businesses. This comes from poor data management and customer dissatisfaction.

There fore this project lead to the development of a web-based information system that enables easy collection and centralized data control from different branches of the hostel and easy accessibility of information, changes or modifications to information and disseminated automatically within the system to ensure that very discipline involved is working with the most up-to-date information.



## 1.6 Scope

This project was basically developed to capture, store, control all data about employees, students against their hostels and after generates the required reports. And with today's large, multinational corporations, computerization it is a must for a business to have a computerized system to be successful. There fore a web-based management information system based on web technology was developed to increase the functionality of computers by being networked together through networking, that is, a client server which makes users browse information using Web browsers from server computer that controls database and grants access to authorized users of the database.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Nyerere, (1968) [3], asserted that Universities must also make their contributions to the world of knowledge. He says,” We must not establish in our new young countries, institutions of higher learning which simply receive, they must give as well.” He hastens to add, “In all things there are priorities and we have to look at immediate future, immediate present and decide what it is that universities in our kind of societies can at present most usefully give to the world of which we are part.”

It must be noted that this development doesn't come easy as Mwiria, (1992) [4], states that “African Universities have experienced serious decline in the last decade. The symptoms of this decline include among others reduced vigor in recruitment and promotion and complaints by the employer regarding inability of undergraduates to perform.”

#### **2.2 Management of Information Systems**

Management Information System is a system in which management or others having an established need to know and are provided with historical information, information on current status and projected information appropriately summarized, a decision making too (Fitzgerald, 1987) [1].

The relating the applications of MIS techniques in the paper entitled Management Information Systems in Support of planning in Africa. And the Characteristics of Management and advances reasons why most countries in Africa and some countries in Africa and some countries of the developed world have not gone far in implementing the concept beyond the computer for such routine applications as pay roll, general accounting and personnel inventory. it emphasizes that

there is a need for examination centers concerned with the role of MIS in the provision of accurate, timely and authentic data for decision making purposes (Ndhlovu, 1995) [5].

The significant benefits to be gained from devoting time and energy to the more efficient and effective use of information include; the unraveling of a complicated matrix of relationships and inter connections, which become apparent whenever information is considered across the whole of the department, the provision of solutions to problems which the unraveling reveals and the establishments of a regime which will help to perpetuate effective management of Information (Davis, 1982) [2].

Communication on computerizing management systems highlighted the benefits that computerization of management systems (MIS) brings; Improved decision making through provision of relevant and timely information, Early warning of performance problems, Senior staff freed up to allow focuses of planning, Quick and easy access to information, Fewer paper records clogging in the office (Hicks, 1998) [11].

## **2.3 Web-based Management Information System**

Factors determining that success of any information system include the structure of the information and how it evolves over time. A web-based structure is fundamentally capable of dealing with this, communicating with different messages to the users (e.g. a request message), sharing and adding value to information becomes possible when a user is able to locate and access the information. Web-based systems improve the way you interact with clients, suppliers and business partners, in managing their data, keeping records, communicating efficiently, controlling, monitoring, and maintenance of the information on an existing site (Davenport, 1998) [10].

### **2.3.1 Characteristics of Web-based management information system**

There is a greater ability to share different file formats, more information can be shared through a web-based management information system.

Incompatible platform requirements are low. Developing a web-based management information system requires common operating systems such as Windows, Windows NT, Mac OS, UNIX, AIX etc.

Web-based management information system operates only under an integration of computers or a network of computers or Internet.

Web-based management information system has a centralized database which is usually controlled by database manager of that particular organization.

### **2.3. 2 Components of Web-based management information system**

Networked Computers; This is a group of computers interconnected together for the purpose of communicating, data sharing, and other shared resources like printers, fax telephones and scanners.

Data; The records collected and transferred into data which also in processed to become information.

Software and hardware; Operating System, Modem/Internet Connection, Printer and Software: Apache Web Server, MySQL, PHP, ACCESS and many others.

People; This include analysts, programmers, database managers and end-users

DBMS; this refers to the compressive software tools that allow users to create, maintain and manipulate an integrated base of data to produce relevant information. These are used by data base designers to program and hence design a data base in a conceptual manner (Schwabe, 1998) [12].

### 2.3.3 Applications of Web-based management information system

- i. **Finance:** The financial management information system provides financial information to all financial managers within an organization including the chief financial officer. The chief financial officer analyzes historical and current financial activity, projects future financial needs, and monitors and controls the use of funds over time of all the branches (Rossi, 1998) [12].
- ii. **Manufacturing:** More than any functional area, operations have been impacted by great advances in technology. As a result, manufacturing operations have changed. For instance, inventories are provided just in time so that great amounts of money are not spent for warehousing huge inventories. Because transitions are web-based through their sites in some instances, raw materials are even processed on railroad cars waiting to be sent directly to the factory. Thus there is no need for warehousing (Rossi, 1998) [12].
- iii. **Marketing:** A web-based management information system supports managerial activity in the area of product development, distribution, pricing decisions, promotional effectiveness, and sales forecasting. More than any other functional areas, marketing systems rely on external sources of data. These sources include competition and customers (Rossi, 1998) [12].
- iv. **Human resources:** web-based management information systems are concerned with activities related to workers, managers, and other individuals employed by the organization. Because the personnel function relates to all other areas in business, the human resources management information system plays a valuable role in ensuring organizational success (Rossi, 1998) [12].

### 2.3.4 Advantages of Web-based management information system

Managers can strengthen supervision and monitoring at all levels, It leads to greater efficiency and flexibility, and multiple uses of records, Access to information is possible from anywhere and at any time through the Internet, Communication, collaboration and decision-making are improved through the increased transparency in the management process, Handling of data is

cost effective and not prone to errors and delays caused in duplication, Updated information on progress is available to all and shared as soon as it is available (Langefors, 1973) [10].

#### **2.3.6 Disadvantages of Web-based management information system**

Web-based management information system personnel must be technically qualified to work with computer hardware, software, and computer information systems, Web-based management information system is expensive, Security to enable accessibility of information to users and Threats like hackers and computer viruses over the network (Langefors,1973) [10].

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 System Study**

System study is the first stage of system development life cycle. This gives a clear picture of what actually the physical system is? System study is about more detailed information and in-depth study in which the identification of user's requirement and the system requirements and the limitations and problems. System study contains the methods and findings to project and recommendations to overcome the limitations and problems in the light of the user's requirements and the system requirements (O'Brien, 1999) [14].

##### **3.1.1 Interview**

Interview is a planned meeting during you obtains information from one person to another. Interviews are used to collect information verbally through questions posed by the researcher. Respondents may be managers or employees of the system under study. In the system investigations, we have both qualitative and quantities forms of information are important, Qualitative deals with the opinion, policies, and narrative descriptions of activities/problems while quantitative description deals with numbers of frequencies, or quantities (Ciborra, 2002) [9].

##### **a) Merits of interviews**

Interviews give the researcher an opportunity to motivate the interviewee to respond freely and openly to questions, also allow the researcher to probe for more feedback from the interviewee, interviews permits researcher to adapt or reword questions for each individual and quick responses from the respondent.

#### **b) Demerits of interviews**

Interviewing is a very time consuming and therefore costly, fact finding approach, Success of interviews is highly dependent on the systems human relation skills and Interviewing may be impractical due to the location of interviewees.

### **3.1.2 Questionnaire**

Questionnaires are the special purpose document that allows the analysts to collect information and opinions from respondents. The document can be mass produced and distributed to respondents who can then complete the questionnaires on their own time. Questionnaires allow the analysts to collect facts from large number of people while maintaining uniform responses, When dealing with the large audience, no other fact finding technique can tabulate the same facts as efficiently (Ciborra, 2002) [9].

#### **a) Advantages of questionnaires**

Most questionnaires can be answered quickly people can complete and return questionnaires at their convenience, Questionnaires produce a relatively inexpensive means for gathering data from a large number from individuals, Questionnaires allow individuals to maintain anonymity and Responses can be tabulated and analyzed quickly.

#### **b) Disadvantages of questionnaires**

The number of respondents is often low, there is no guarantee that an individual will answer or expand on all the questions, Questionnaires tend to be inflexible. It is also not possible for the analyst to observe and analyze the respondent's body language and there is no immediate opportunity to clarify a vague or incomplete answer to any questions.



### **3.1.3 Observation**

It's the fact finding technique where the systems analyst either participates in or watches the persons when perform activities to learn about the analyst.

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 the end user (Ciborra, 2002) [9].

#### **a) Advantages of observation**

Data gathered by observation can be highly reliable some time observations are conducted to check the validity of data obtained directly from individuals, The analyst is able to see exactly what is being done, It's relatively inexpensive compared with other fact finding techniques, Observation allows the analyst to do work measurements, Interruptions are best observed than hearing about them.

#### **b) Disadvantages of observation**

Because people usually feel uncomfortable when being watched, they may unwittingly perform differently when being observed, the work being observed may not involve the level of difficulty or volume normally experienced during that time period, some system activities may take place at odd times, scheduling inconveniences for the analysts, the tasks being observed are subject to various types of interruptions.

## **3.2 System Analysis**

A system is a set of interrelated procedures together with the personnel that jointly the personnel and jointly performs different activities to accomplish a specific objective.

System analysis is the process of analyzing a system with the potential goal of improving or modifying it. It involves the design of a system in order to modifying it for the better. System

analysis therefore entails carrying out a detailed study of the various components of the various components of the system and their relationships, and thus identifies user requirements for the new system (Davis, 1982) [2].

System analysis helps in describing how the system flows and its relationships between the different departments of the company. It decomposes a system into smaller parts for the purpose of studying how those components parts will work.

### **3.2.1 User Requirements**

The key issue in the requirements analysis phase is “what” not “how” requirement; analysis phase, answers the question. What do users need and want form a new system. Functional and Nonfunctional requirements are needed to meet the objectives. The functional requirements are the activities and services the system must provide. Nonfunctional requirement is a description of other features, characteristics and constraints that define a satisfactory system (Fitzgerald, 1987) [1].

### **3.2.2 System Requirements**

This is the technical feasibility determines whether the project activities can be accomplished with the current equipment, existing software and available personnel? If new technology is required, what is the likelihood that it can be developed? The employee Database information system project, called for the purchase of new hardware and software.

The hardware requirements for the system to the system includes; Memory capacity 256MB RAM, Hard disk 40GB, Pentium 4 processor supporting front side bus (FSB) speeds up to 533/400MHZ, LCD monitor 17 inch, UPS

The Software requirements describe the software that is used for the design of the system and also the software packages that are involved. The project designer affirms that the database information system will operate using the following. There is a wide variety of programming

languages to choose from when designing a system. These include; Q basic, Java, C, C++, SQL, PHP among others (Fitzgerald, 1987) [1].

### **3.3 System Specification**

The users are very important in a computer system that is to say management information system. The project designer endeavored to ensure that the proposed information system doesn't receive resistance from the users by designing a system through system specifications with help of user requirements. Once Management Information System is developed and fully functional, a positive response is highly expected from the users. This produces a system, that is, user friendly with the fundamentals of the system (Davis, 1982) [2].

### **3.4 System Development**

The system is designed using Structure Query Language (SQL) for the database and the interface will be designed using PHP a server-side scripting language. Different options are provided in the system interface which will include report generation tool, help function, system query tool and others. Also the system manual shall be provided to help user understand different functions incorporated into the system, system requirements and the operation (Fitzgerald, 1987) [1].

#### **3.4.1 Language**

There is a wide variety of programming languages to choose from when designing a system. These include; Q basic, Java, C, C++, SQL, PHP among others. To design a web-based computerized room allocation system, the author chose to use SQL for the database and PHP as already stated because of their open software status and many other reasons as looked at below.

### **3.4.2 What Is Open Source?**

PHP and My SQL are all part of the open source group of software programs. The open source movement is basically a collaboration of some of the finest minds in computer programming. By allowing the open exchange of information, programmers from all over the world contribute to make a truly powerful and efficient piece of software available to everyone. Through the contributions of many people to the publicly available source code, bugs get fixed, improvements are made, and a “good” software program becomes a “great” one over time.

### **3.4.3 PHP**

PHP stands for Hypertext Preprocessor (and, yes, we’re aware PHP is a “recursive acronym” probably meant to confuse the masses). Its flexibility and relatively small learning curve (especially for programmers who have a background in C, Java, or Perl) make it one of the most popular scripting languages around. PHP’s popularity continues to increase as businesses and individuals everywhere embrace it as an alternative to Microsoft’s ASP language and realize that PHP’s benefits most certainly outweigh the costs (three cheers for open source).

### **3.4.4 MySQL**

Another open source favorite, MySQL is the database construct that enables PHP and Apache to work together to access and display data in a readable format to a browser. It is a Structured Query Language server designed for heavy loads and processing of complex queries. As a relational database system, MySQL allows many different tables to be joined together for maximum efficiency and speed.

### **3.4.5 Browsers**

The browsers that supported the system include Mozilla Fire fox, Internet Explorer 5.5 (IE), Opera6 and Flock on the Microsoft Windows Environment and iceweasel web browser, Konqueror web browser for the Linux Environment. The server that was used in the course of the system development is the local host and the software for accepting the hyper text transport protocol HTTP will be the Wamp-server which is entirely Apache webserver.

### **3.5 Test and Validation**

Exhaustive testing was conducted using secondary data of mostly quantitative nature from University Hostels files to be used in order to understand different factors concerning data management in the Hostels and remove bugs from the system development. Testing answered the question, “Does the system produce the desired results under known conditions?” And believe that this approach of Testing and Validation of response times or periods of the system worked and fully loaded.

## **CHAPTER FOUR**

### **SYSTEM DEVELOPMENT**

#### **4.1 System Design**

This is concerned with system construction, using the identified requirements, for the system to perform the required functions. It looks at the data requirements, software construction and the design of the interface, database and Data Structures (Fitzgerald 1987) [1].

##### **4.1.1 Conceptual Design**

The conceptual database design describes how the data elements in the database are to be grouped. The design process identified relationships among data elements and the most efficient way of grouping data elements together to meet information requirements. The process also identifies redundant data elements and the groupings of data elements required for specific application programs. Groups of data are organized, refined, and streamlined until an overall logical view of the relationships among all the data elements in the database emerges.

##### **4.1.2 Logical Design**

Logical design requires a detailed description of the business information needs of the actual end users of the database. Ideally, databases will be part of an overall organizational data planning effort. It is also a process of constructing a model of the information used in an enterprise, based on the specific data model for example relational relationship but independent of a particular DBMS and other physical consideration.

#### 4.1.3 Physical Design

This refers to the process of product description of implementation of the database on the secondary storage. The description of storage structures and access to the data are clearly outlined at this level. The physical design shows how the database is actually arranged on direct access storage device.

#### 4.1.4 Data Structures

a) Table.1 Showing Rooms Table details

Field Name	Data Type	Size	Description
<u>Room No</u>	Int	11	Room identification number
Floor	Int	11	Floor of the building
Capacity	Int	11	The number of people it can contain
Status	Varchar	20	Status
Charge	Varchar	30	Fee
Partially Occupied	Varchar	30	Current position
Empty	Varchar	10	Empty
Booked	Varchar	10	Booked
Hostel Id No	Int	11	identification number

b) Table.2 Showing Applicants Table details

<b>Field Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Description</b>
<b><u>Room No</u></b>	<i>Int</i>	<i>11</i>	<i>Room identification number</i>
<i>First Name</i>	<i>Varchar</i>	<i>30</i>	<i>Names</i>
<i>Other Names</i>	<i>Varchar</i>	<i>30</i>	<i>Names</i>
<i>Entry Date</i>	<i>Date</i>		<i>Date of entry</i>
<i>Expiry Date</i>	<i>Date</i>		<i>Date of exit</i>
<i>Address</i>	<i>Varchar</i>	<i>50</i>	<i>Location of a Hostel</i>
<i>Course</i>	<i>Varchar</i>	<i>30</i>	<i>Study course</i>

c) Table.3 Showing Occupants Table details

<b>Field Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Description</b>
<b><u>Id No</u></b>	<i>Int</i>	<i>11</i>	<i>Identification number</i>
<i>First Name</i>	<i>Varchar</i>	<i>30</i>	<i>Names</i>
<i>Other Name</i>	<i>Varchar</i>	<i>30</i>	<i>Names</i>
<i>Nationality</i>	<i>Varchar</i>	<i>30</i>	<i>Country</i>
<i>Gender</i>	<i>Varchar</i>	<i>30</i>	<i>Gender</i>
<i>E Mail</i>	<i>Varchar</i>	<i>30</i>	<i>E-mail address</i>
<i>Telephone No</i>	<i>Int</i>	<i>11</i>	<i>Contact number</i>
<i>Year of Study</i>	<i>Varchar</i>	<i>30</i>	<i>Year of Study</i>
<i>Room No</i>	<i>Int</i>	<i>11</i>	<i>Room identification number</i>



d) Table.4 Showing Staff Table details

<i>Field Name</i>	<i>Data Type</i>	<i>Size</i>	<i>Description</i>
<b><u>Staff Id</u></b>	<i>Int</i>	<i>11</i>	<i>Staff identification number</i>
<i>First Name</i>	<i>Varchar</i>	<i>30</i>	<i>Names</i>
<i>Other Names</i>	<i>Varchar</i>	<i>30</i>	<i>Names</i>
<i>Telephone No</i>	<i>Int</i>	<i>11</i>	<i>Contact number</i>
<i>E mail Address</i>	<i>Varchar</i>	<i>50</i>	<i>E-mail</i>
<i>Position</i>	<i>Varchar</i>	<i>30</i>	<i>Position</i>
<i>Gender</i>	<i>Varchar</i>	<i>10</i>	<i>Gender</i>
<i>Hostel Id No</i>	<i>Int</i>	<i>11</i>	<i>Hostel identification number</i>

e) Table.5 Showing Hostel Table details

<i>Field Name</i>	<i>Data Type</i>	<i>Size</i>	<i>Description</i>
<b><u>Hostel Id No</u></b>	<i>Int</i>	<i>11</i>	<i>Hostel identification number</i>
<i>Name</i>	<i>Varchar</i>	<i>30</i>	<i>Name of the Hostel</i>
<i>Entry Date</i>	<i>Date</i>		<i>Date of entry</i>
<i>Expiry Date</i>	<i>Date</i>		<i>Date of exit</i>
<i>Address</i>	<i>Varchar</i>	<i>50</i>	<i>Location of a Hostel</i>

#### 4.1.5 Entity Relationship Model (ER Diagram)

Entity relationship analysis is of the conceptual modeling methods used to identify relationship between different entities within the system to avoid duplication of data.



Fig.1 above shows Entity Relationship Model (ER Diagram)

4.5 Implementation

This tests the whole system by linking together all the pages of the systems, Validate that all the response times or transaction periods specified in the functional specifications can be met by the system especially when it is fully loaded. Involves how a user browses through system.



This is the public viewer page where you can login as student or staff member.



File Edit View Favorites Tools Help

http://localhost/HOSTELS/search\_room\_php.php

Google

Home Page

Page Tools

**KIUI** EXPLORING THE HEIGHTS

**KAMPALA INTERNATIONAL UNIVERSITY**

**ACCOMMODATION SERVICES**

July 6, 2010

**LOGOUT**

- Occupants
- Applicant
- Home

hostel_id_no	name	address
2002G	West Branch	Ishaka
2002H	Main Branch	Kansanga Road

**Hostel id No**

room_no	floor	capacity	status	charge	empty	booked
2002H/001	2	2	double	600000	NO	NO
2002H/009	1	1	Single	500000	Yes	Yes
2002H/016	4	1	Single	4000000	No	Yes
2002H/020	3	2	Double	700000	No	Yes
2002H/022	4	1	Single	700000	Yes	NO

Local intranet 100%

Students search for the Rooms from this page to get Room number and other information like status, charge, booked or not booked and many others as in the page above and they linked back to their corresponding registration forms.



Address <http://localhost/HOSTELS/student.php> Go Links

**KIU** ACCOMMODATION SERVICES  
EXPLORING THE HEIGHTS


July 12, 2010

Book a Room of choice by filling your details and Room number

Occupants

Click [Search](#)

Logout



**Welcome To Kampala International University**

**Applicant's Registration Form**

First Name

Other Names

Entry Date

Expiry Date

Address

Course

Room No

**Registration Successfull!**

Done Local intranet

If registration is successfully, it's indicated in the form that registration is successful!

**KIU** ACCOMMODATION SERVICES  
EXPLORING THE HEIGHTS

July 12, 2010

Book a Room of choice by filling your details and Room number

Occupants

Click [Search](#)

Logout



**Welcome To Kampala International University**

**Applicant's Registration Form**

First Name

Other Names

Entry Date

Expiry Date

Address

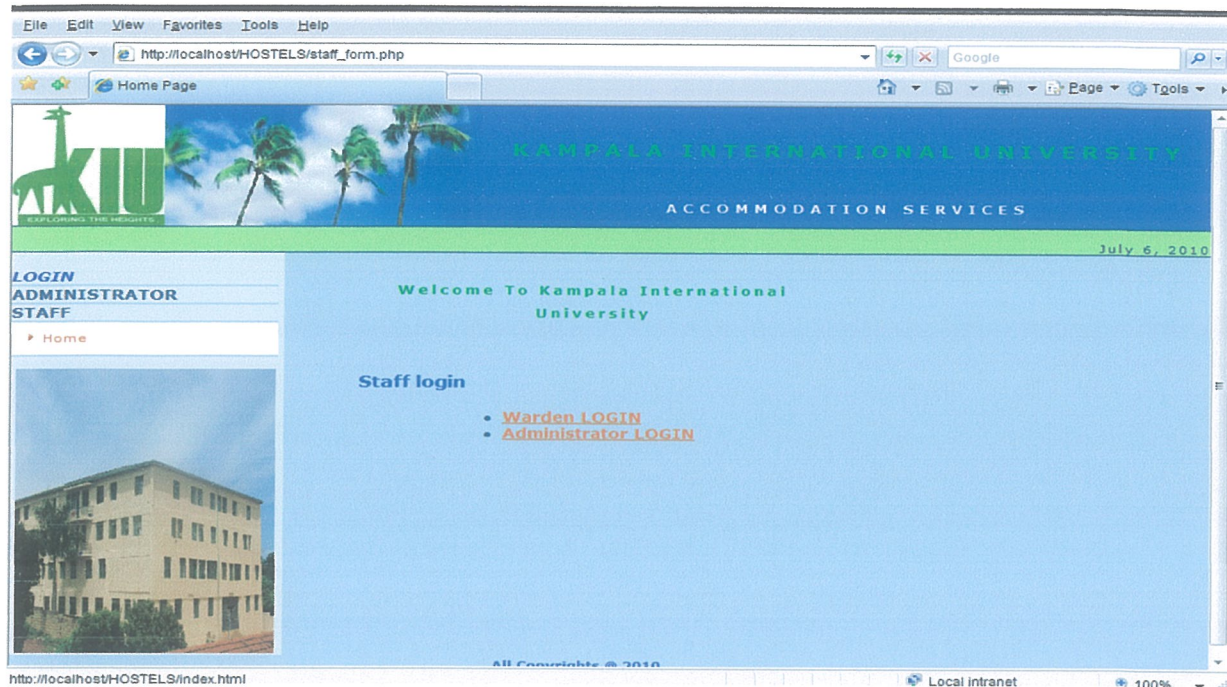
Course

Room No

**Registration Failed!**

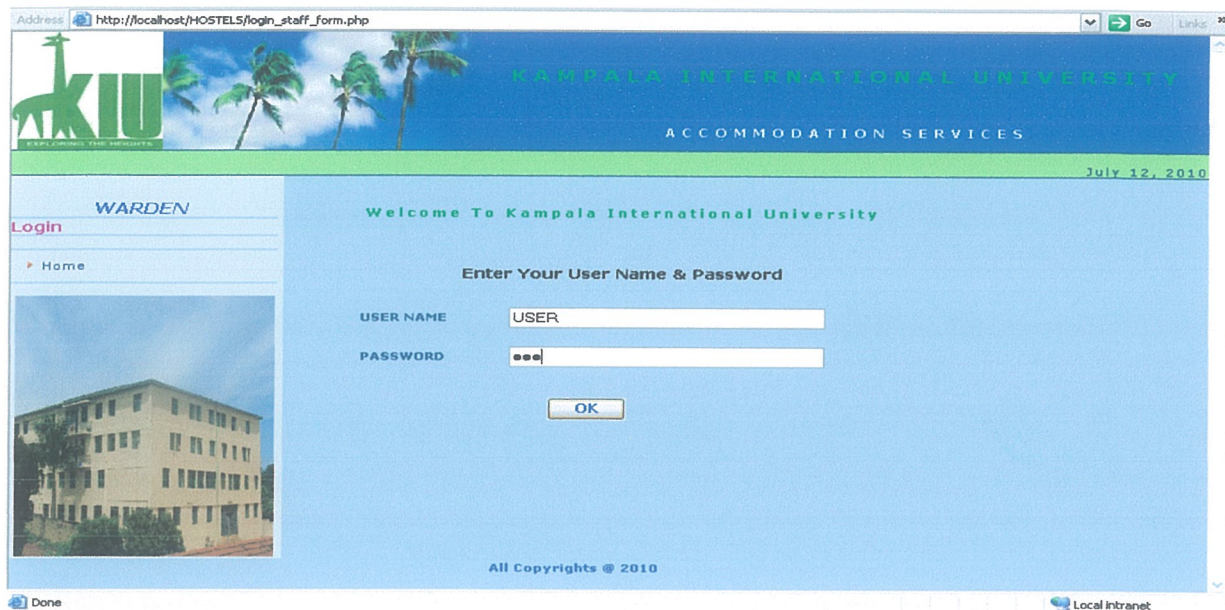
Student's registration failed because of incomplete record entered in the form; to register successfully you have to enter all the information as required.





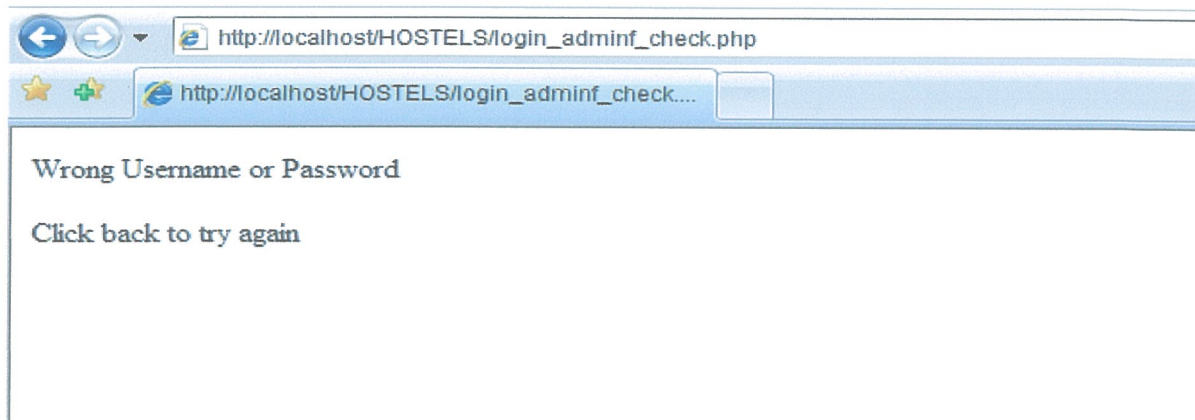
Staff login page according to their Positions i.e. Administration or wardens.

Authentication form



## Authentication form

By entering a correct username and password you login successfully to other pages but in case of wrong username or password a message page displays automatically as below.



You can Click back to try correct username and password in order log on successfully!



**Update Records**

- Applicants
- occupants
- Rooms
- Home

**Welcome To Kampala International University**

**Room Entry Form**

Room No: 2002H/016

Floor: 3

Capacity: 2

Status: Double

Charge: 600000

Partially Occupied: Yes

Empty: No

Booked: No

Hostel Id Number: 2002H

Room Registration Successful!

All Copyrights @ 2010

This is the warden page with options of adding new rooms, updating students' records and their rooms and he or she is able to get a report.

**EXPLORE THE HEIGHTS**

**ACCOMMODATION SERVICES**

July 14, 2010

- REPORT SINGLE ROOM
- REPORT DOUBLE ROOMS
- REPORT BOOKED ROOMS
- REPORT EMPTY ROOMS
- Home

**Edit Room Records**

Room No: 2002H/002

Floor: 1

Capacity: 1

Status: Single

Charge: 600000

Partially Occupied: Yes

Empty: No

Booked: Yes

Hostel Id Number: 2002H

Thank you! Information updated.

**Delete a record**

Room Number:

Hostel Id No:

**Quick view of updates**

Hostel Id No:

Rooms update form; any Staff member can add new, update and delete a record



Address: http://localhost/HOSTELS/admin\_form.php

Go Links


**KIU**  
EXPLORING THE HEIGHTS

ACCOMMODATION SERVICES

July 12, 2010

**UPDATE**

- HOSTEL BRANCHES
- STAFF MEMBERS
- Home



Welcome To Kampala International University  
Staff Registration Form

Staff\_Id: 206

First Name: KASASA

Other Names: IBRAH

Telephone No: 0775678234

E mail Address: kasasaibrahim@yahoo.com

Position: WARDEN

Gender: MALE

hostel Id No: 2002H

Staff member added Successfully

Submit Reset

Done Local intranet

Administrator page with top level options like registering new Staff members and adding new branches to the Hostel, he or she can also generate Reports automatically by pressing report button.

File Edit View Favorites Tools Help

http://localhost/HOSTELS/report5.php

Google

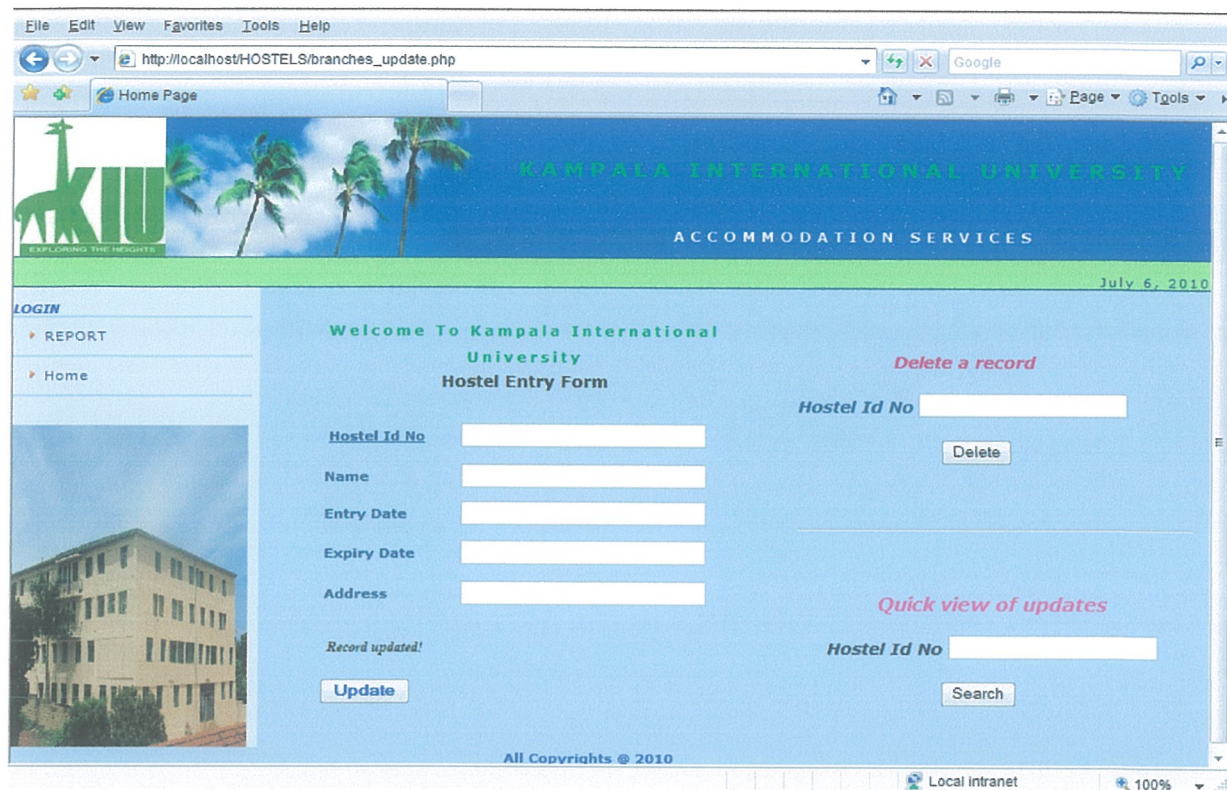
http://localhost/HOSTELS/report5.php

**LIST OF ALL STAFF MEMBERS**

staff_id	first_name	other_names	telephone_no	e_mail	position	gender	hostel_id_no
201	Kahule	dan	778900765	kahuledann@gmail.co.uk	warden	Male	2002H
202	Nabasa	Daina	782345456	nabasadaina.k@yahoo.com	Janitor	Female	2002H
203	Karungi	Rita	701789899	karungirati@gmail.co.uk	Janitor	female	2002H
204	Tugume	Alias	715111234	tugumealias@yahoo.co.uk	Janitor	Male	2002H
301	Kasaja	Andrew	791788906	kasajeandy@yahoo.com	Warden	Female	2002G
302	Namata	Calo	752345789	namata.cal@gmail.uk	Janitor	Female	2002G
303	Muginda	Robison	772345456	mugindar.kaaz@yahoo.com	Janitor	Male	2002G

A report showing Staff members





Branch update form; you can Hostal information in this page like updating, deleting and quick searching for updated records.

The screenshot shows a web browser window with the URL `http://localhost/HOSTELS/report4.php`. The page has a green background and is titled "LIST OF ALL BRANCHES OF KIU MAIN HOSTEL". It displays a table with the following data:

hostel_id_no	name	entry_date	expiry_date	address
2002G	West Branch	2004-07-06	0000-00-00	Ishaka
2002H	Main Branch	2002-02-06	0000-00-00	Kansanga Road

A Report showing branches



SINGLE ROOMS		
Hostel Id No	Room No	Status
2002H	2002H/002	Single
2002H	2002H/005	Single
2002H	2002H/006	Single
2002H	2002H/009	Single
2002H	2002H/012	Single
2002H	2002H/016	Single
2002H	2002H/022	Single

A report showing single rooms

DOUBLE ROOMS		
Hostel Id No	Room No	Status
2002G	2002G/003	Double
2002G	2002G/005	Double
2002G	2002G/010	Double
2002G	2002G/012	Double
2002H	2002H/001	double
2002H	2002H/003	Double
2002H	2002H/004	Double
2002H	2002H/007	Double
2002H	2002H/008	Double
2002H	2002H/010	Double
2002H	2002H/013	Double
2002H	2002H/014	Double
2002H	2002H/015	Double

A report showing double rooms



EMPTY ROOMS		
Hostel Id No	Room No	Empty
2002G	2002G/003	Yes
2002G	2002G/010	Yes
2002G	2002G/012	Yes
2002H	2002H/002	Yes
2002H	2002H/004	Yes
2002H	2002H/007	Yes
2002H	2002H/009	Yes
2002H	2002H/012	Yes
2002H	2002H/013	Yes
2002H	2002H/022	Yes

A report showing empty rooms

BOOKED ROOMS		
Hostel Id No	Room No	Booked
2002H	2002H/005	Yes
2002H	2002H/006	Yes
2002H	2002H/009	Yes
2002H	2002H/010	Yes
2002H	2002H/014	Yes
2002H	2002H/015	Yes
2002H	2002H/016	Yes
2002H	2002H/020	Yes

A report showing booked rooms

Partially Occupied ROOMS		
Hostel Id No	Room No	Partially Occupied
2002G	2002G/005	Yes
2002H	2002H/001	Yes
2002H	2002H/003	Yes
2002H	2002H/004	Yes
2002H	2002H/009	Yes
2002H	2002H/013	Yes

A report showing partially occupied rooms

## **CHAPTER FIVE**

### **DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 DISCUSSION**

The project clearly benefit businesses with resources of networked computers and access to internet or any network infrastructure, multi-branched hostels can conduct their businesses as one business, which is the very important role or enjoyment of the actual use of web-based management information system, employees like database administrator who is hired to control ,manage and maintain the system benefits cause they employed, institutions and universities will also benefit because they can easily access information of the students against their hostels and the students who can access internet to search for rooms and do some booking of rooms of their choice. But the project can not benefit business or hostel on small scale that is like single branched hostels and others hostels which can not access network infrastructures to connect internet.

#### **5.2 CONCLUSION**

This project about the Web-based management information system has been carefully carried out. The system that I developed is user friendly and performs tasks ranging from data capture, processing, storage, retrieval reports and last but not least the system guarantees security in terms of limiting unauthorized persons who would access the package, however further research is highly inevitable for the growing technology on the global scale. I further emphasize with no limitations that the research carried out calls out for the adoption of a clearly defined a Web-based management information system for purposes of consistency in record capturing, record tracking as well as reports.

### **5.3 RECOMMENDATIONS**

Although too much work was done to design and implement a Web-based management information system, there is still need for future requirements of upgrading the designed system in order to keep on giving out the required result at the required time. The project designer recommends that, the designed system should be used effectively in order to perform well its functionality. This should be done through training the users of the system especially those who have no idea about the use of computers; the researcher also recommends the use of other programming tools that would be in position to enhance more functionality in order to improve the system, putting a standby generator, purchase of antivirus to prevent the computer programs from being damaged by computer viruses another threats, hiring database administrator to control, manage and maintain the system.



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## APPENDICES

### Appendix 1 Codes

#### a) DATABASE CODE

```
<?php
$connection=mysql_connect("localhost", "root", ""); //connection string
$sql="create database students_records"; //db selection
mysql_query($sql, $connection) //query execute
?>
```

#### b) TABLES' CODES

```
<?php
$connection=mysql_connect("localhost", "root", ""); //connection string
mysql_select_db("students_records", $connection); //db selection
//A query for creating table
$sql="create table applicants(id int not null,
Room_No int(11) primary key,
First_Name varchar(30),
Other_Names varchar(30),
Entry_Date Date,
Expiry_Date Date,
Address varchar(30),
Course varchar(30))";
mysql_query($sql, $connection) //query execute
?>
```

```
<?php
$connection=mysql_connect("localhost", "root", ""); //connection string
mysql_select_db("students_records ", $connection); //db select
$sql="create table Hostels(id int not null,
Hostel_id_No int(11) primary key,
```

```

Name varchar(30),
Entry_Date Date,
Expiry_Date Date,
Address varchar(30));
mysql_query($sql, $connection) //query execute
?>

```

```

<?php
$connection=mysql_connect("localhost", "root", ""); //connection string
mysql_select_db("students_records ", $connection); //db select
$sql="create table occupants(id int not null,
Id_No int(11) primary key,
Room_No int(11),
First_Name varchar(30),
Other_Names varchar(30),
Nationality varchar(30),
Gender varchar(10),
EMail_Address varchar(50),
Telephone_No int(11),
Year_of_Study varchar(30))";
mysql_query($sql, $connection) //query execute
?>

```

```

<?php
$connection=mysql_connect("localhost", "root", ""); //connection string
mysql_select_db("students_records ", $connection);
$sql="create table staff(id int not null,
Staff_Id int(11) primary key,
First_Name varchar(30),
Other_Names varchar(30),

```

```

Telephone_No int(11),
Email_Address varchar(50),
Position varchar(30),
Gender varchar(10));
mysql_query($sql, $connection) //query execute
?>

```

```

<?php require("include/connection.php"); //connection string
$sql="INSERT INTO Hostels values(
'$_POST[id]',
'$_POST[hostel_id_no]',
'$_POST[name]',
'$_POST[entry_date]',
'$_POST[expiry_date]',
'$_POST[address]')";
mysql_query($sql, $connection) //query execute
?>

```

#### c) DELETE CODE

```

<?php require("include/connection.php");//connection string
$sql = "Delete from applicants_tables WHERE room_no='$_POST[room_no]'";
$result = mysql_query($sql,$connection); //query execute ?>
<?php require("include/connection.php");
$sql = "Delete from hostels WHERE hostel_id_no='$_POST[hostel_id_no]'";
$result = mysql_query($sql,$connection); //query execute
?>

```

```

<?php require("include/connection.php");//connection string
$sql = "Delete from occupants_table WHERE id_no='$_POST[id_no]' and room_no='$_POST[room_no]'";
$result = mysql_query($sql,$connection); //query execute

```

?>

```
<?php require("include/connection.php");//connection string
```

```
$sql = "Delete from rooms_table WHERE room_no='$_POST[room_no]' and  
hostel_id_no='$_POST[hostel_id_no]'";
```

```
$result = mysql_query($sql,$connection); //query execute
```

?>

```
<?php require("include/connection.php");//connection string
```

```
$sql = "Delete from staff_table WHERE staff_id='$_POST[staff_id]' and hostel_id_no='$_POST[hostel_id_no]'";
```

```
$result = mysql_query($sql,$connection); //query execute
```

?>

#### d) LOGIN CODE

```
<?php
```

```
$host="localhost"; // Host name
```

```
$username="root"; // Mysql username
```

```
$password=""; // Mysql password
```

```
$db_name="students_records"; // Database name
```

```
$tbl_name="admin_login"; // Table name
```

```
// Connect to server and select database.
```

```
mysql_connect("$host", "$username", "$password")or die("cannot connect");
```

```
mysql_select_db("$db_name")or die("cannot select DB");
```

```
// username and password sent from form
```

```
$username=$_POST['username'];
```

```
$password=$_POST['password'];
```

```
// To protect MySQL injection (more detail about MySQL injection)
```

```
$username = stripslashes($username);
```

```
$mypassword = stripslashes($password);
```

```
$username = mysql_real_escape_string($username);
```

```
$password = mysql_real_escape_string($password);
```

```

$ssql="SELECT * FROM $tbl_name WHERE username='$username' and password='$password'";
$result=mysql_query($ssql);

// Mysql_num_row is counting table row
$count=mysql_num_rows($result);

// If result matched $myusername and $mypassword, table row must be 1 row
if($count==1){

// Register $myusername, $mypassword and redirect to file "login_success.php"
session_register("username");
session_register("password");
header("location:admin_form.php");}
else {echo "Wrong Username or Password";
echo "<p>";echo "Click back to try again";}
?>

```

```

<?php
$host="localhost"; // Host name
$username="root"; // Mysql username
$password=""; // Mysql password
$db_name="students_records"; // Database name
$tbl_name="staff_login"; // Table name
// Connect to server and select database.
mysql_connect("$host", "$username", "$password")or die("cannot connect");
mysql_select_db("$db_name")or die("cannot select DB");

// username and password sent from form
$username=$_POST['username'];
$password=$_POST['password'];

// To protect MySQL injection (more detail about MySQL injection)
$username = stripslashes($username);
$mypassword = stripslashes($password);
$username = mysql_real_escape_string($username);

```

```

$password = mysql_real_escape_string($password);

$sql="SELECT * FROM $tbl_name WHERE username='$username' and password='$password'";

$result=mysql_query($sql);

// Mysql_num_row is counting table row
$count=mysql_num_rows($result);

// If result matched $myusername and $mypassword, table row must be 1 row
if($count==1){

// Register $myusername, $mypassword and redirect to file "login_success.php"
session_register("username");
session_register("password");
header("location:update_rooms.php");}

else {echo "Wrong Username or Password";

echo "<p>";

echo "Click back to try again";}

?>

```

```

<?php require("include/connection.php"); //connection string

$sql="UPDATE staff_table SET

first_name='$_POST[first_name]',

other_names='$_POST[other_names]',

telephone_no='$_POST[telephone_no]',

e_mail='$_POST[e_mail]',

position='$_POST[position]',

gender='$_POST[gender]',

hostel_id_no='$_POST[hostel_id_no]'

WHERE staff_id='$_POST[staff_id]' ";

mysql_query($sql, $connection) //query execute

?>

```

e) INSERT CODE

```
<?php require_once("include/connection.php"); //connection string
$sql="INSERT INTO Occupants_table values(
'$_POST[id]',
'$_POST[id_no]',
'$_POST[first_name]',
'$_POST[other_names]',
'$_POST[nationality]',
'$_POST[gender]',
'$_POST[e_mail]',
'$_POST[telephone_no]',
'$_POST[year_of_study]',
'$_POST[room_no]')";
require("occupants_form.php");
?>
```

f) REPORT CODE

```
<style type="text/css">
<!--body {background-color: #63B894;}-->
</style>
<div align="center">
<p>&nbsp;</p>
<p><strong><u>LIST OF STUDENTS CONTINUEING STAYING IN THE ROOMS </u></strong></p>
<p></div>
<div align="center"><table width="893" border="1"><tr> <td width="916">&nbsp;<p>
<?php require("include/connection.php");
$sql="SELECT *FROM occupants_table";
$result = mysql_query($sql, $connection);
echo"<table CELLPADDING='5' CELLSPACING='5' >
```

```

<tr>

<th BGCOLOR='#CCCCCC'>id_no</th>

<th BGCOLOR='#CCCCCC'>room_no</th>

<th BGCOLOR='#CCCCCC'>first_name</th>

<th BGCOLOR='#CCCCCC'>other_names</th>

<th BGCOLOR='#CCCCCC'>nationality</th>

<th BGCOLOR='#CCCCCC'>gender</th>

<th BGCOLOR='#CCCCCC'>e_mail</th>

<th BGCOLOR='#CCCCCC'>year_of_study</th>

</tr>";

```

```

while($row=mysql_fetch_array($result)){

echo"<tr>";

echo"<td>".$row["id_no"]."</td>";

echo"<td>".$row["room_no"]."</td>";

echo"<td>".$row["first_name"]."</td>";

echo"<td>".$row["other_names"]."</td>";

echo"<td>".$row["nationality"]."</td>";

echo"<td>".$row["gender"]."</td>";

echo"<td>".$row["e_mail"]."</td>";

echo"<td>".$row["year_of_study"]."</td>";

echo"</tr>";}

echo"</table>";

mysql_close($connection);

```

```

?>

```

#### g) Update Code

```

</p><p>&nbsp;</p></td> </tr></table></div>

<?php require("include/connection.php");//connection string

$sql = "UPDATE applicants_tables SET

first_name=$_POST[first_name]',

```



```

other_names='$_POST[other_names]',
entry_date='$_POST[entry_date]',
expiry_date='$_POST[expiry_date]',
address='$_POST[address]',
course='$_POST[course]'
WHERE room_no='$_POST[room_no]';
$result = mysql_query($sql,$connection);
if($result){
echo "Thank you! Information updated.\n";}
else{
echo"Update Failed";}
require("update_appnts.php");
?>

```

```

<?php require("include/connection.php"); //connection string
$sql="UPDATE hostels SET
name='$_POST[name]',
entry_date='$_POST[entry_date]',
expiry_date='$_POST[expiry_date]',
address='$_POST[address]'
WHERE hostel_id_no='$_POST[hostel_id_no]';
mysql_query($sql, $connection)
require("branches_update.php");
?>

```

```

<?php require("include/connection.php");
$sql = "UPDATE rooms_table SET
floor='$_POST[floor]',
capacity='$_POST[capacity]',
status='$_POST[status]',

```

```

charge='$_POST[charge]',
partially_occupied='$_POST[partially_occupied]',
empty='$_POST[empty]',
booked='$_POST[booked]',
hostel_id_no='$_POST[hostel_id_no]'
WHERE room_no='$_POST[room_no]';
$result = mysql_query($sql,$connection);
?>

```

```

<?php require_once("include/connection.php"); //connection string
$sql="INSERT INTO applicants_tables values(
'$_POST[id]',
'$_POST[first_name]',
'$_POST[other_names]',
'$_POST[entry_date]',
'$_POST[expiry_date]',
'$_POST[address]',
'$_POST[course]',
'$_POST[room_no] )";
require("student_form.php");
?>

```

```

<?php require_once("include/connection.php"); //connection string
$sql="INSERT INTO staff_table values(
'$_POST[id]',
'$_POST[staff_id]',
'$_POST[first_name]',
'$_POST[other_names]',
'$_POST[telephone_no]',
'$_POST[e_mail]',

```

```

'$_POST[position]',
'$_POST[gender]',
'$_POST[hostel_id_no]');
mysql_query($sql, $connection) //query execute
?>

<?php require("include/connection.php");//connection string
$sql="SELECT *FROM staff_table WHERE staff_id='$_POST[staff_id]'";
$result = mysql_query($sql, $connection);

echo"<table CELLPADDING='2' CELLSPACING='2' >

<tr>

<th BGCOLOR='#CCCCCC'>staff_id</th>
<th BGCOLOR='#CCCCCC'>first_name</th>
<th BGCOLOR='#CCCCCC'>other_names</th>
<th BGCOLOR='#CCCCCC'>telephone_no</th>
<th BGCOLOR='#CCCCCC'>e_mail</th>
<th BGCOLOR='#CCCCCC'>position</th>
<th BGCOLOR='#CCCCCC'>gender</th>
<th BGCOLOR='#CCCCCC'>hostel_id_no</th>

</tr>";

while($row=mysql_fetch_array($result)){
echo"<tr>";

echo"<td>".$row["staff_id"]."</td>";

echo"<td>".$row["first_name"]."</td>";

echo"<td>".$row["other_names"]."</td>";

echo"<td>".$row["telephone_no"]."</td>";

echo"<td>".$row["e_mail"]."</td>";

echo"<td>".$row["position"]."</td>";

echo"<td>".$row["gende"]."</td>";

echo"<td>".$row["hostel_id_no"]."</td>";

```

```

echo"</tr>";}

echo"</table>";

mysql_close($connection);

?>

<?php require("include/connection.php");//connection string

$sql="SELECT *FROM rooms_table WHERE hostel_id_no=$_POST[hostel_id_no]";

$result = mysql_query($sql, $connection);

echo"<table CELLPADDING='2' CELLSPACING='2' >

<tr>

<th BGCOLOR='#CCCCCC'>room_no</th>

<th BGCOLOR='#CCCCCC'>floor</th>

<th BGCOLOR='#CCCCCC'>capacity</th>

<th BGCOLOR='#CCCCCC'>status</th>

<th BGCOLOR='#CCCCCC'>charge</th>

<th BGCOLOR='#CCCCCC'>empty</th>

<th BGCOLOR='#CCCCCC'>booked</th>

</tr>";

while($row=mysql_fetch_array($result)){

echo"<tr>";

echo"<td>".$row["room_no"]."</td>";

echo"<td>".$row["floor"]."</td>";

echo"<td>".$row["capacity"]."</td>";

echo"<td>".$row["status"]."</td>";

echo"<td>".$row["charge"]."</td>";

echo"<td>".$row["empty"]."</td>";

echo"<td>".$row["booked"]."</td>";

echo"</tr>";}

echo"</table>";

mysql_close($connection);

```

?>

```
<?php require("include/connection.php");//connection string

$sql="SELECT *FROM occupants_table WHERE id_no=$_POST[id_no]";
$result = mysql_query($sql, $connection);

echo"<table CELLPADDING='2' CELLSPACING='2' >

<tr>

<th BGCOLOR='#CCCCCC'>room_no</th>

<th BGCOLOR='#CCCCCC'>first_name</th>

<th BGCOLOR='#CCCCCC'>other_names</th>

<th BGCOLOR='#CCCCCC'>nationality</th>

<th BGCOLOR='#CCCCCC'>gender</th>

<th BGCOLOR='#CCCCCC'>e_mail</th>

<th BGCOLOR='#CCCCCC'>year_of_study</th>

</tr>";

while($row=mysql_fetch_array($result)){

echo"<tr>";

echo"<td>".$row["room_no"]."</td>";

echo"<td>".$row["first_name"]."</td>";

echo"<td>".$row["other_names"]."</td>";

echo"<td>".$row["nationality"]."</td>";

echo"<td>".$row["gender"]."</td>";

echo"<td>".$row["e_mail"]."</td>";

echo"<td>".$row["year_of_study"]."</td>";

echo"</tr>";}

echo"</table>";

mysql_close($connection);

?>
```

```
<?php require("include/connection.php");//connection string
```

```

$sql="SELECT *FROM applicants_tables WHERE room_no='$_POST[room_no]";

$result = mysql_query($sql, $connection);

echo"<table CELLPADDING='2' CELLSPACING='2' >

<tr>

<th BGCOLOR='#CCCCCC'>room_no</th>

<th BGCOLOR='#CCCCCC'>first_name</th>

<th BGCOLOR='#CCCCCC'>other_names</th>

<th BGCOLOR='#CCCCCC'>entry_date</th>

<th BGCOLOR='#CCCCCC'>expiry_date</th>

<th BGCOLOR='#CCCCCC'>address</th>

<th BGCOLOR='#CCCCCC'>course</th>

</tr>";

while($row=mysql_fetch_array($result)){

echo"<tr>";

echo"<td>".$row["room_no"]."</td>";

echo"<td>".$row["first_name"]."</td>";

echo"<td>".$row["other_names"]."</td>";

echo"<td>".$row["entry_date"]."</td>";

echo"<td>".$row["expiry_date"]."</td>";

echo"<td>".$row["address"]."</td>";

echo"<td>".$row["course"]."</td>";

echo"</tr>";}

echo"</table>";

<style type="text/css"><!--body {background-color: #63B894;}--></style><div align="center"><p>&nbsp;</p>

<p><strong><u>LIST OF ALL ROOMS IN KIU MAIN HOSTEL</u></strong></p> <p> </div> <div
align="center"><table width="756" border="1"><tr><td width="746">&nbsp;<p>

<?php require("include/connection.php");//connection string

$sql="SELECT *FROM rooms_table";

$result = mysql_query($sql, $connection);

echo"<table CELLPADDING='5' CELLSPACING='5' >

```

```

<tr>

<th BGCOLOR='#CCCCCC'>hostel_id_no</th>

<th BGCOLOR='#CCCCCC'>room_no</th>

<th BGCOLOR='#CCCCCC'>floor</th>

<th BGCOLOR='#CCCCCC'>capacity</th>

<th BGCOLOR='#CCCCCC'>status</th>

<th BGCOLOR='#CCCCCC'>charge</th>

<th BGCOLOR='#CCCCCC'>empty</th>

<th BGCOLOR='#CCCCCC'>booked</th>

</tr>";

while($row=mysql_fetch_array($result)){

echo"<tr>";

echo"<td>".$row["hostel_id_no"]."</td>";

echo"<td>".$row["room_no"]."</td>";

echo"<td>".$row["floor"]."</td>";

echo"<td>".$row["capacity"]."</td>";

echo"<td>".$row["status"]."</td>";

echo"<td>".$row["charge"]."</td>";

echo"<td>".$row["empty"]."</td>";

echo"<td>".$row["booked"]."</td>";

echo"</tr>";}

echo"</table>";

mysql_close($connection);

?>

</p><p>&nbsp;</p></td></tr></table></div><style type="text/css">

<!--body {background-color: #63B894;}-->

</style><div align="center"><p>&nbsp;</p>

<p><strong><u>LIST OF ALL STAFF MEMBERS </u></strong></p><p></div>

<div align="center"><table width="893" border="1"><tr><td width="916">&nbsp;<p>

```

```

        <?php require("include/connection.php");//connection string

        $sql="SELECT *FROM staff_table";

        $result = mysql_query($sql, $connection);

        echo"<table CELLPADDING='5' CELLSPACING='5' >

        <tr>

        <th BGCOLOR='#CCCCCC'>staff_id</th>

        <th BGCOLOR='#CCCCCC'>first_name</th>

        <th BGCOLOR='#CCCCCC'>other_names</th>

        <th BGCOLOR='#CCCCCC'>telephone_no</th>

        <th BGCOLOR='#CCCCCC'>e_mail</th>

        <th BGCOLOR='#CCCCCC'>position</th>

        <th BGCOLOR='#CCCCCC'>gender</th>

        <th BGCOLOR='#CCCCCC'>hostel_id_no</th>

        </tr>";

        while($row=mysql_fetch_array($result)){

        echo"<tr>";

        echo"<td>".$row["staff_id"]."</td>";

        echo"<td>".$row["first_name"]."</td>";

        echo"<td>".$row["other_names"]."</td>";

        echo"<td>".$row["telephone_no"]."</td>";

        echo"<td>".$row["e_mail"]."</td>";

        echo"<td>".$row["position"]."</td>";

        echo"<td>".$row["gender"]."</td>";

        echo"<td>".$row["hostel_id_no"]."</td>";

        echo"</tr>";}

        echo"</table>";

        mysql_close($connection);

        ?>

        </p><p>&nbsp;</p></td></tr></table></div>

        <?php require_once("include/connection.php"); //connection string

```



```

$sql="INSERT INTO Rooms_table values(
'$_POST[id]',
'$_POST[room_no]',
'$_POST[floor]',
'$_POST[capacity]',
'$_POST[status]',
'$_POST[charge]',
'$_POST[partially_occupied]',
'$_POST[empty]',
'$_POST[booked]',
'$_POST[hostel_id_no]');"
if (mysql_query($sql, $connection))
{echo "Room Registration Successful!";}
else{echo "Room Registration Failed!";}
require_once("staff_page.php");
?>

```

```

<style type="text/css"><!--body {background-color: #63B894;}--></style><div align="center">

```

```

<p>&nbsp;</p>

```

```

<p><strong><u>LIST OF STUDENTS CONTINUEING STAYING IN THE ROOMS
</u></strong></p><p></div><div align="center"><table width="893" border="1"><tr>

```

```

<td width="916">&nbsp;<p>

```

```

<?php require("include/connection.php");//connection string

```

```

$sql="SELECT *FROM occupants_table";

```

```

$result = mysql_query($sql, $connection);

```

```

echo"<table CELLPADDING='5' CELLSPACING='5' >

```

```

<tr>

```

```

<th BGCOLOR='#CCCCCC'>id_no</th>

```

```

<th BGCOLOR='#CCCCCC'>room_no</th>

```

```

<th BGCOLOR='#CCCCCC'>first_name</th>

```

```

<th BGCOLOR='#CCCCCC'>other_names</th>

<th BGCOLOR='#CCCCCC'>nationality</th>

<th BGCOLOR='#CCCCCC'>gender</th>

<th BGCOLOR='#CCCCCC'>e_mail</th>

<th BGCOLOR='#CCCCCC'>year_of_study</th>

</tr>";

while($row=mysql_fetch_array($result)){

echo"<tr>";

echo"<td>".$row["id_no"]."</td>";

echo"<td>".$row["room_no"]."</td>";

echo"<td>".$row["first_name"]."</td>";

echo"<td>".$row["other_names"]."</td>";

echo"<td>".$row["nationality"]."</td>";

echo"<td>".$row["gender"]."</td>";

echo"<td>".$row["e_mail"]."</td>";

echo"<td>".$row["year_of_study"]."</td>";

echo"</tr>";}

echo"</table>";

mysql_close($connection);

?>

```

Appendix 2

Questionnaires

Sample of the questionnaire

A questionnaire about the design and implementation of a Web-based management information system for student’s hostels;

Date

I am by the names Mugisha Brian undergraduate student of Kampala International University pursuing a Bachelor of information technology. On may final year and I here by carry out a research that will help us to design a Web-based management information system. This system will data capture, processing, storage, retrieval reports and last but not least the system guarantees security in terms of limiting unauthorized persons which will be beneficial both to me and the for student’s hostels. I present this questionnaire to you as a way of seeking information from you on how the hostel’s records have been handled.

Names.....

Address.....

Tel. Number.....

Instructions:

- 1. Tick the appropriate answer.
- 2. Fill the space provided where appropriate.

b) List down the names of the mentioned branches.

i).....

ii).....

iii).....

8. a) What kind of system do you use to keep information about students in hostels;?

a. Database    b. Manual file    c. File processing system    d. Both above

b) What problems do you face in keeping the information of your workers?

.....  
.....  
.....  
.....

9. Would you welcome the introduction of a computerized system to the business? If

Yes give reasons for you answer

.....  
.....  
.....  
.....

**Thank you so much for your great assistance and contribution towards my research**