

**A PUBLIC MONITORING AND EVALUATION WEB-
APPLICATION FOR THE BREWERY INDUSTRY
IN UGANDA: A CASE OF NILE
BREWERIES (U) LTD**

BY

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UNIVERSITY.**

AUGUST, 2011

DECLARATION

I NAKIBIRA WINNIE do hereby declare that this research report is my original work and other works cited or used are clearly acknowledged. This work has never been submitted to any other institution(s) of higher learning for any academic or other award.

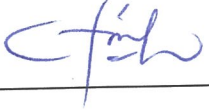
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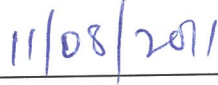
APPROVAL

This report has been submitted for examination under my approval as the university supervisor.



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(supervisor)



Date

DEDICATION

I dedicate this book to my beloved parents Mr. and Mrs. Mulindwa and to my brothers and sisters for their infinite moral support, financial support and for all the advice they have given to me throughout this research

ACKNOWLEDGMENT

I thank the Almighty God who has given the wisdom and ability to successful finish this research project. I wish to express my sincere gratitude to my supervisor, Mr. Ssegawa E. James Kiggundu who has unconditional guided me through all the stages of development of this project. I also wish to thank all my Lectures at Kampala International University for their continuous support through all the three years I have been under their guidance. I would like to give special thanks to my friends and classmates of computer studies of Kampala International University (2008 - 2011) for their support and good company throughout the three years we have been together.

May God bless you all.

LIST OF ACRONYMS /ABBREVIATIONS

MTTI.....	Ministry of tourism, trade and industry
UNBS.....	Uganda National Bureau Standards
HTML.....	Hyper Text Mark - up Language
UIRI.....	Uganda Industrial Research Institute
RAM.....	Random Access Memory
LCD.....	Liquid Crystal Display
SAB.....	South African Breweries
SCADA.....	Supervisory Control and Data Acquisition

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ABSTRACT

The study particularly establishes an electronic centralized distributed system to monitor and evaluate the activities of all brewery industries in Uganda.

Due to the massive loss of lives of alcoholics in Uganda in 2010, the researcher saw that there was need for the ministry to come up with a more flexible and yet sustainable system to monitor activities of all brewery industries in the country.

Over 87% of the respondents from the UNBS and the brewery industries agreed that the old system of monitoring the brewery activities was not effective at all. The study therefore focuses at all the possible procedures to come up with such a system and these procedures are:

Investigating the old system to identify its weaknesses and strong points; determining requirements for the system that will monitor and evaluate its performance and development of the application. Here, the researcher took a deeper look into the companies' production activities, how they package, and the ingredients used for producing these beers as a measure to curb poor products and contamination. The researcher therefore used MYSQL and Dream Weaver software to develop the centralized distributed web-application to monitor all brewery activities in all companies in the country.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study was about how the monitoring and evaluation of brewery industrial activities could be done electronically rather than the manual way that has always been done through the Uganda National Bureau of Standards. Nile Breweries (U) Ltd has been used as the researcher's case study. It is a private company whose core business is beer brewing. It is a subsidiary of SAB (South African Breweries) Miller and it is located along Kampala-Jinja High way in Njeru town.

1.1 Background

In the operational regard of a potentially restrictive government policy and legislation, the brewing industry in Uganda has gradually grown. Nile Breweries (U) Ltd is one of the top most beer producing company in Uganda with three golden medals (Herbert .K, 2011). Member brands of Nile Breweries (U) Ltd include Nile special, chairman ESB, eagle lager, eagle extra, castle malt lager, castle light and so on. The family of beverages generally referred to as "beer" has been brewed for centuries. Beers are obtained by the yeast fermentation of malted cereal grains, to which hops ingredients and water have been added. In 1600 A.D, brewing evolved from a cottage craft into a modern industry where large breweries exported their beers worldwide. The true origin of beer can only be conjectured as early attempts at brewing occurred around 7000 B.C. in Mesopotamia. It is generally accepted that the modern beers as we know them today date to the 1600s. Nevertheless online applications on brewery information started way back in 1975 in Milwaukee, Wisconsin, a city famed for its breweries (Anne, 2010). The researcher considered the operations of one major brewing company throughout this research report; this helped provide an over all outlook of the brewing industry in Uganda since 1946 to date.

1.2 Statement of the problem

For a long time now, the ministry of tourism, trade and industries has not had a centralized monitoring system for industries in the country. The ministry can not estimate the consumption of beers and other related alcohols, their circulation in the country and the provisions of raw materials these industries have (recipe management). According to the SPS (National Sanitary and Phytosanitary) policy draft (2011), the ministry through the UNBS sets standards for

industrial production, through the UIRI, it carries out industrial research: there has been no close body in the ministry however, that does the monitoring of industrial processes in the country because of a narrow technological know how in the ministry and UNBS in particular. The ministry has therefore not been effective in monitoring the activities in the brewing industry and many alcohol consumers lost their lives in 2010 in the districts of Wakiso, Mpigi and Kalangala due to the careless alcoholic producers and contamination. The researcher looked at it useful to come up with an electronic monitoring and evaluation system in order to facilitate the supervision of the activities of the brewery industries in Uganda.

1.3 Objectives

The objectives are classified into the goal/ purpose as the main objective and the particular tasks as the specific objectives and they include:

1.3.1 Main objective

The main purpose of this study was to provide a vigilant national web-application for brewery industries for monitoring and evaluation of brewery activities in Uganda.

1.3.2 Specific objectives

- (i) To investigate the existing system to identify its weaknesses in monitoring brewery activities in Uganda.
- (ii) To determine requirements for the system that will monitor and evaluate the performance of brewery industries.
- (iii) To design and implement through development of the application that will capture data about the brewery activities.

1.4 Scope

The scope of the study included both geographical and research scope as shown below:

1.4.1 Geographical Scope

Nile breweries (U) Ltd is located in Njeru town along the Kampala-Jinja Highway, which is 83 km from Kampala City.

1.4.2 Research Scope

This study concentrates on the brewery products of each company, ingredients of each product, the alcoholic content of each product, their quantities on the market, their packaging and prices, customers, employees, systems administrators, analysts and management of UNBS.

1.5 Significance

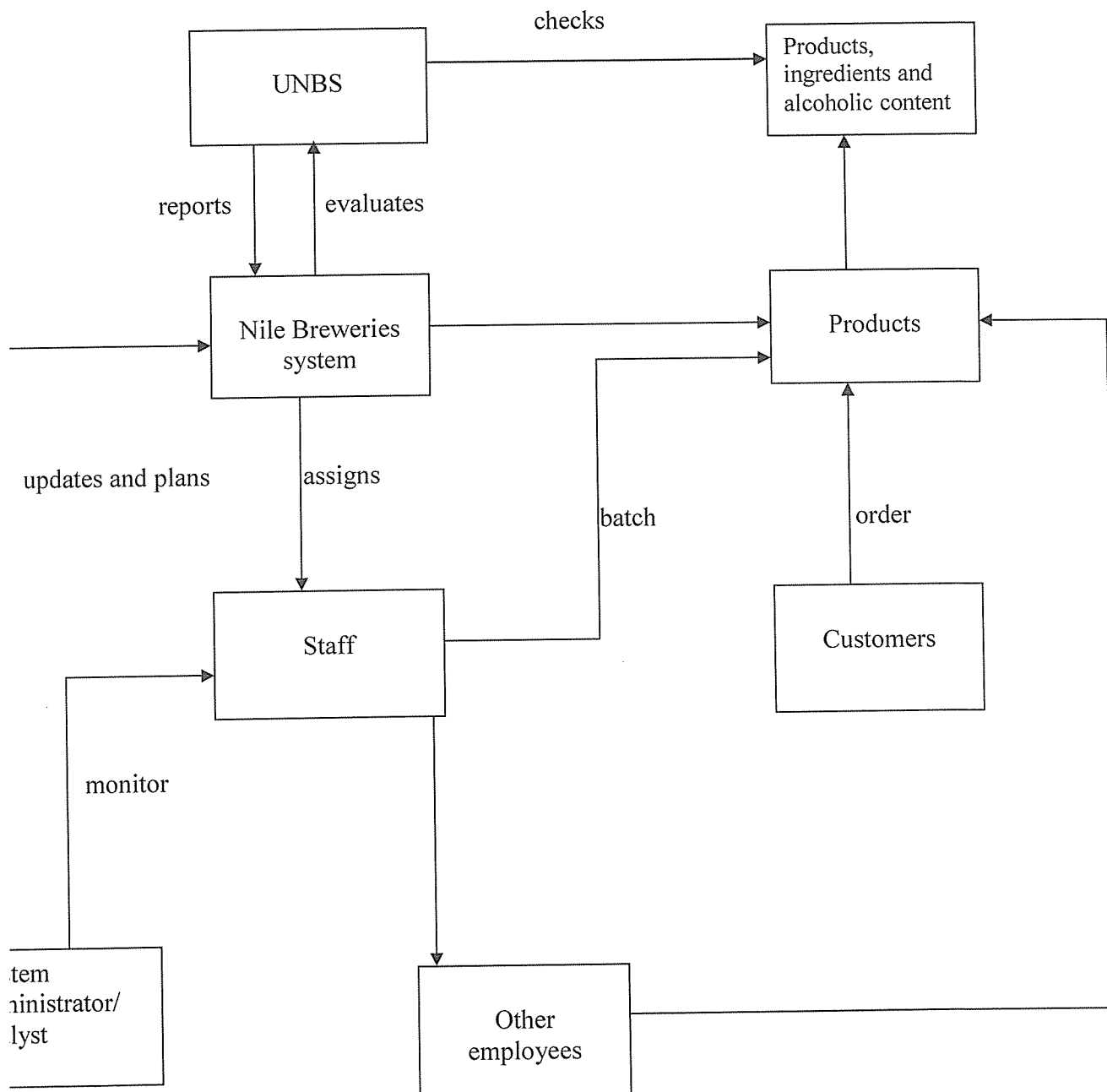
This research is of great importance to the ministry of tourism, trade and industries because it monitors the core operations in the brewery industries.

The vigilant system that has been produced therefore increases the efficiency of the ministry in that it gives an automatic electronic interaction between the UNBS and all brewery industries in Uganda.

To the research world, the system has provided a way to automate the distribution of beers in the country and also monitoring of the raw materials used in the production of beers in these companies and also widened the researcher's knowledge on new technologies.

The research's core values to the brewing industry are: the sustainability of the value chain, fraternity, promotion of the brewing industry and enabling all the competitors in the market to work together in areas relating to their trade and professional interests.

Conceptual framework for the monitoring system



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter gives an overall view of what other scholars have said and written about this study. This chapter basically reviews current monitoring systems and distributed database systems in general.

2.1 Definitions, Terminologies and Concepts

A **distributed database** refers to a database in which portions of that database are stored on multiple computers within a network. Users have access to the portion of the database at their location so that they can access the data relevant to their tasks without interfering with the work of others. A centralized distributed database management system manages the database as if it were all stored on the same computer (www.searchoracle.techtarget.com, on 08/08/2011). A distributed database is also defined as a database that consists of two or more data files located at different sites on a computer network. Because the database is distributed, different users can access it without interfering with one another. However, the DBMS must periodically synchronize the scattered databases to make sure that they all have consistent data. (www.webopedia.com, on 08/08/2011). It was also defined as a database maintained in physically separated locations and supported by a computer network so that it is possible to access all parts of the database from various points in the network (www.answers.com, on 08/08/2011)

SCADA (supervisory control and data acquisition) generally refers to industrial control systems: computer systems that monitor and control industrial, infrastructure, or facility-based processes, (www.en.wikipedia.org/wiki/SCADA), on 08/08/2011. SCADA generally refers to the control system of the industry which is a computer system which controls and monitors a process. This process can be infrastructure, facility or industrial (www.scadasystems.net, on 08/08/2011)

MySQL is the world's most popular open source database software, with over 100 million copies of its software downloaded or distributed throughout its history. With its superior speed, reliability, and ease of use, MySQL has become the preferred choice for Web, Web 2.0, SaaS,

ISV, Telecom companies and forward-thinking corporate IT Managers because it eliminates the major problems associated with downtime, maintenance and administration for modern, online applications. Many of the world's largest and fastest-growing organizations use MySQL to save time and money powering their high-volume Web sites, critical business systems, and packaged software — including industry leaders such as Yahoo!, Alcatel-Lucent, Google, Nokia, YouTube, Wikipedia, and Booking.com. (www.mysql.com)

Dreamweaver is Haverford's supported web editor. It has features for both the beginning and advanced web page creator. Dreamweaver integrates many aspects of Web development, including page creation, site management, and web server tools, giving the user a good perspective of an entire web site. Dreamweaver also supports JavaScript and Cascading Style Sheets, along with other advanced functions. Here is a brief summary of some of the elements that Dreamweaver offers:

Site Management - An integrated file transfer client and visual site map allow site navigation, file linking, and uploading/synchronization of your site.

Template - Templates allow users to quickly edit all common elements, such as navigation bars, throughout a whole site.

Cascading Style Sheets - CSS allow users to quickly change the appearance of text elements throughout the site.

JavaScript Behaviors - Dreamweaver behaviors are JavaScripts that you can apply without having to deal with the necessary code. (www.haverford.edu, on 08/08/2011)

2.2 Current monitoring systems in general

According to MacDonald.A, (2010). most of the current monitoring systems have been developed using distributed database systems. These monitoring systems require that data can be replicated and moved dynamically to ensure availability. MacDonald.A, further suggests that the system must be able to identify what resources are available and this requires a resource monitoring framework to collect and collate monitoring data. Monitoring systems should have the following features:

The internal ID number of a process that is used to identify messages that belong to a work process in the system log; Work process types; Work process for executing dialog steps in user

transactions; Update process for making (time-critical) database changes; Update process for executing (not time-critical) database changes; For locking or releasing SAP lock objects (www.help.sap.com, on 25/03/2011).

Some distributed database systems basically control data acquisition and supervision and among these systems are the SCADA systems. These generally refer to industrial control systems: computer systems that monitor and control industrial, infrastructure, or facility-based processes. A SCADA system always refers to a system that coordinates, but does NOT control processes in The discussion on real-time control is muddled somewhat by newer telecommunications technology, enabling reliable, low latency, high speed communications over wide areas (Wallace, 2008). The term SCADA usually refers to centralized systems which monitor and control entire sites, or complexes of systems spread out over large areas (anything between an industrial plant and a country). Most control actions here are performed automatically by Remote Terminal Units or by programmable logic controllers. Host control functions are usually restricted to basic overriding or supervisory level intervention. For example, a programmable logic controller may control the flow of cooling water through part of an industrial process, but the SCADA system may allow operators to change the set points for the flow, and enable alarm conditions, such as loss of flow and high temperature, to be displayed and recorded. The feedback control loop passes through the Remote Terminal Units or programmable logic controllers, while the SCADA system monitors the overall performance of the loop. These monitoring systems basically cover small portions of activities within an industry. However, the researcher's system focuses at a country level; monitoring the core beverage industrial activities.

2.3 System requirements determination

As online systems and data transfer rates of speed have increased during the last decade, distributed database administrators have practically used online platforms. These kind of web-based interfaces become rather popular for many investors. Many people likely recall the days of literally moving from place to place to monitor their businesses, however this feels as if it were ages ago with this research. Here are a few things to consider when choosing a software for your online system.

The researcher also recommends that the software requirements of online distributed database systems differ and lists a variety below for server software requirements as in the install guide, (www.technet.microsoft.com.aspx);

Software requirements

- (i) Windows server 2008 64-bit or windows server 2008 R2 standard, Enterprise or Datacenter Editions.
- (ii) SQL Server 2008 64-bit Standard or enterprise Editions SP1 Or later
- (iii) Webserver (Internet Information Server 7)
- (iv) Windows share point services 3.0 SP1
- (v) Windows share point services 3.0 language pack (if installing other languages other than English)
- (vi) Microsoft.NET 3.5 Framework 4.0
- (vii) Windows Installer 4.5
- (viii) Windows Powershell 2.0 (if positioning Exchange Server 2010 mailboxes)

Windows share point services 3.0 SP2 has more features than those that are embedded in SP1, and also SQL server 2008 SP2 is a later version and so it basically has better features.

Client software requirements;

- (i) Windows XP Professional SP2 or later (32 bit); Windows vista business and enterprise SP1 or later, Windows 7 professional, ultimate and Enterprise (32 or 64 bit)
- (ii) Windows installer 3.1 or later (only needed if running windows XP SP2)
- (iii) Microsoft office outlook 2007 Service pack 2
- (iv) Net programmability support for microsoft office outlook (www.forums.Forefrontsecurity.com, Retrieved on 26/03/ 2011)

However, Microsoft office outlook 2010 Service pack 1 has more improved features than that of 2007 and also Windows vista SP2 has better features.

Hardware requirements;

According to (Kreutzer, 2010) system requirements for an online system should include the following hardware requirements; Minimum 1GHZ processor; 120MB available hard disk Space and a monitor. It should however be noted that Liquid crystal Display (LCD) monitors produce better graphics than the ordinary TFT and CRT monitors and therefore would give better interface for the system. Nevertheless, a distributed database should have the following requirements:

- (i) Sharing: Users should be able to share and access data without regard for its actual location.
- (ii) Administration: Changes in the availability of machines, the availability of resources and access patterns require that data must be replicated and moved dynamically.

- (iii)Utilization: To utilize unused resources effectively on workstations, the system must be able to identify what resources are available.
- (iv)Compatibility: The proposed system should provide some ACID transactions as a centralised solution, with comparable query response time.

System components

Database: A database instance is run on every peer in the system. Users connect to global schema, allowing them to access data from all instances in that database system.

Resource monitor: A resource monitor is on each machine, allowing the system to determine which machines are available and to provide estimates on their uptime, availability and bandwidth.

2.4 Design and implementation of a distributed database

According to Johnson-Throop (2009), any systems with a distributed cognition and methodology can be designed by identifying the system problems, generating the design requirements and implementation specifications of the replacement prototype. He argues that in distributed system development, the system developer provides a unique framework to describe the interactions, processes and knowledge structures critical to the design of distributed information systems. Designing a distributed system not only requires an in-depth understanding of the numerous technical knowledge management activities, but also an inclusion of the social, cultural, organizational and cognitive aspects that occur within the organisation of research (Rinkus.S, 2009).

It should however be noted that, a distributed database in the researcher's view should be able to create daily reports, and also keep all the relevant records for the daily activities in the areas of study. This system is a rather unique system in the ministry of tourism, trade and industries and in Uganda at large. The system automates the work of the ministry. The researcher however used the literature from those many scholars to build on her system.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This section describes the steps and procedures that were followed in order to accomplish the project. However it also describes how information was collected and analyzed and how the system was designed, developed and implemented.

3.1 Research Design

This study took a survey design for both a probabistic and non-probabistic approaches of the research and both the administrators of the system and the system's intended users were involved in the interviews. The data collected was analyses using both Microsoft office excel and SPSS. However, the researcher used more of excel than SPSS because she had little knowledge of the software.

3.2 Target/ parent population

The researcher targeted 50 people from the case industry and 5 people from the Uganda National Bureau of Standards. The targeted people from the industry included the production's manager, sales and marketing manager, database manager and two system users. From the ministry, the researcher targeted the two system users and three administrators from the Uganda National Bureau of Standards.

3.3 Sampling Techniques

The researcher used both random sampling and cluster sampling especially where she had to choose a few people for the interviews and also due to time factor, gave out a number of questionnaires to respondents from the ministry and the case industry respectively. These questionnaires were then collected by the researcher at a later date and analysis was made. It is important to note that random sampling was more efficient than cluster sampling since a few questionnaires had been answered.

3.4 Sample Size

The researcher used a sample of 3 people from the Uganda National Bureau of Standards and other 3 people from Nile Breweries (U) Ltd. Five people were interviewed and five were given questionnaires. It is also good to note that interviews were more efficient than questionnaires

since here; answers were got instantly because respondents were hesitant to fill the questionnaires as they claimed they did not have enough time.

3.5 Research instruments/ fact finding methods

The researcher used both interviews and questionnaires to carry out the research. Appointments were made with various respondents from the respective areas of research and then fixed dates for interviewing each of the respondents. Also an interview guide was prepared and administered to the respondents so as to enable them to give their views freely. This technique was chosen because:

- (i) It permits clarification of questions
- (ii) It has high response rate than written questionnaires
- (iii) It is suitable for use with both literate and illiterates
- (iv) It gives a full range and depth of information
- (v) It establishes relationships with clients
- (vi) It is very flexible with clients

Note that the interview guide is particularly useful in obtaining information that cannot be obtained by other methods (Bell, 1992).

On the last day of interviews at the respective research areas, the researcher then gave out questionnaires to other five respondents. These questionnaires were then collected by the researcher at a given date and data was analyzed. The researcher however used more of interviews than questionnaires to analyze the research data because a few questionnaires had been answered by the time the researcher picked them from the respective research areas.

3.6 Data Analysis

To analyze the research data, Microsoft office excel and SPSS were used. It is important to note that the researcher used more of Microsoft office excel than SPSS because she had less knowledge of the latter software.

3.7 Modeling and design tools

Both class diagrams and data flow diagrams were used in the design of the system. Class diagrams were used to identify what areas data was to be captured from. These class diagrams basically represent the different departments in the company and what each department basically does. Class diagrams illustrate the company structure and the relationships between the different

entities. Class diagrams were used because they are relatively simple, user friendly and can provide a unified view of data, which is independent of any other data model.

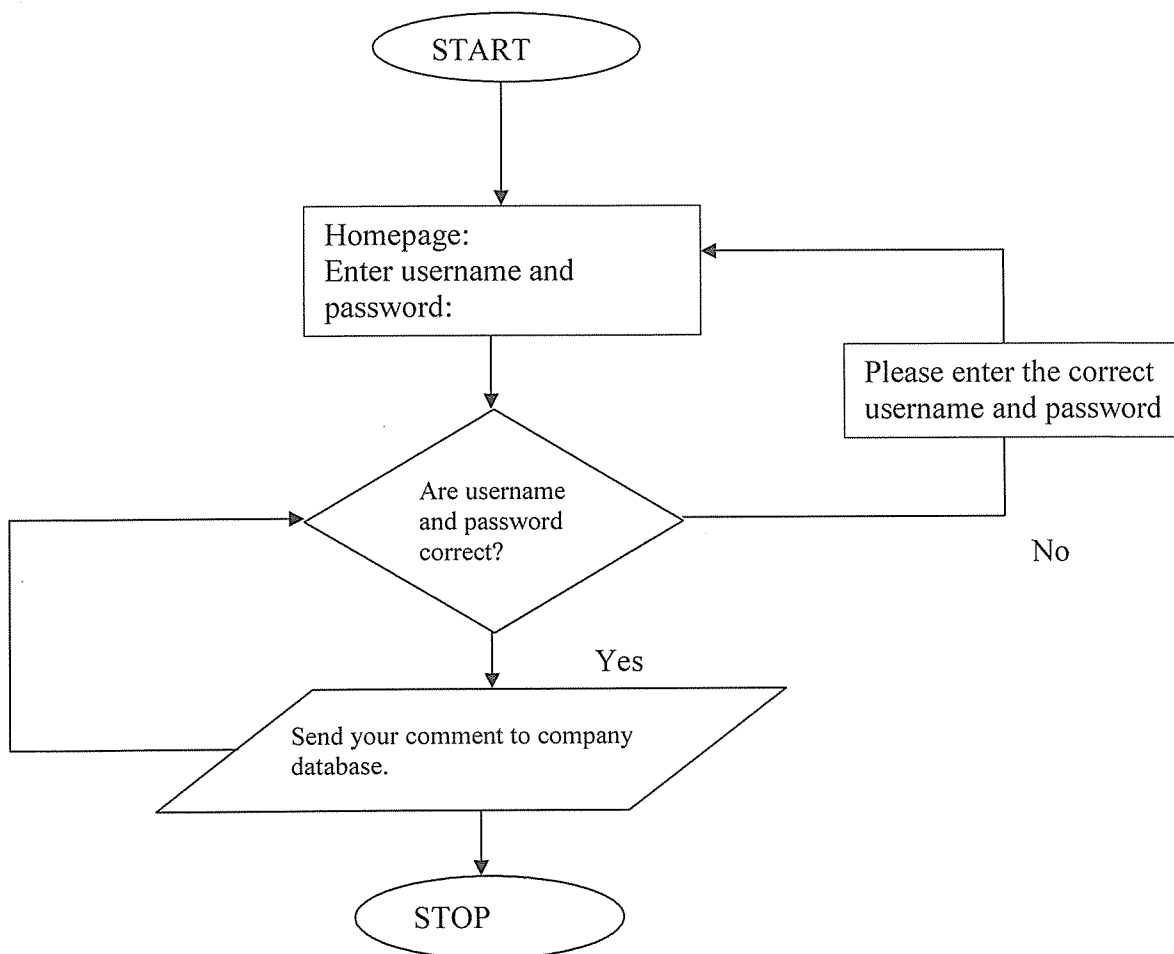
Data flow diagrams

Data flow diagrams were also used to basically identify the entities and attributes in the system and also show the relationships between different entities. Data flow diagrams show the flow of information between the beverage companies and the ministry of tourism, trade and industries.

Data flow diagrams were used here because:

- (i) Data flow diagrams show a great overview of the companies, the system and its components.
- (ii) Data flow diagrams are easier to understand than class diagrams.
- (iii) It provides a detailed representation of the system components.

Decision or Conceptual model/ Data flow diagram:



3.8 Development tools

The researcher used both Mysql and Dream weaver for developing the system. Dream weaver as the interface and MYSQL as the database.

MySQL

MySQL, is a popular database software used by most website and online system developers.

Mysql was used because of the advantages it has over other database management systems:

- (i) Mysql is a free source and therefore it is cheap.
- (ii) It can run on many different platforms such as Windows, Linux, and Unix
- (iii) Mysql provides back up capabilities unlike access.
- (iv) It supports large databases. MySQL handle databases up to 50 million rows and more
- (v) It is customizable. The open source GPL license allows programmers to modify the Mysql software to fit their own specific environment.

Dream Weaver

Dream Weaver was used as the interface of interaction with the system because of the following reasons;

- (i) Dream weaver is embedded with both PHP and HTML. This gives the researcher options of developing his interface.
- (ii) The codes in dream weaver are easy to understand and change in order to convert the template into the unique web site
- (iii) It is compatible with most operating systems that is; all windows, Linux and Vista.

CHAPTER FOUR

SYSTEMS ANALYSIS, MODELLING AND DESIGN

4.0 Introduction

This chapter specifically focuses on the problems of the old monitoring system by the ministry and the changes that can be made to make a better monitoring system.

4.1 Systems Analysis

This section basically focuses at the performance of the existing system, its strengths and weaknesses and it also looks at the newly implemented system and gives an overall comparison.

4.1.1 Critical Analysis of the old system

The current monitoring and evaluation system of the brewery industry is manual. Checking the standards of beer is done by the Uganda National Bureau of Standards, according to the National sanitary and Phyto-sanitary policy (2011/12-2015/16) and the tax collected from the goods produced is basically collected by the URA tax officials through auditing the accounts of the industry. One would think that may be the Uganda Industrial Research institute does the monitoring but according to the act of parliament (July 2003), UIRI's main aim is industrial research and boosting other small scale industries. The ministry of tourism, trade and industries does not have a close monitoring and evaluation tool of all activities that take place in the brewery industries which makes their work very tedious hence loss on quality control.

4.1.2 Weaknesses of the existing system

From the previous section, the researcher identifies the loopholes in the existing system and they are summarized right here below:

- (i) There is no central monitoring of all industrial processes by the ministry
- (ii) The process of beer distribution is done manually
- (iii) There is no recipe management by the ministry.

Monitoring here is done by sending agents to the beverage industries to see how things happen. The UNBS sends these agents to check on the standards of the beverage products; to check if all raw material needs and standards of production are met. This system is not reliable because monitoring is done once in a blue moon. Therefore as long as the industry carries out its recipes correctly that particular day, it is assumed that for the rest of the year, everything goes on as that particular day, which is literally wrong. The selling and distribution of beer is not monitored and

therefore the ministry cannot tell at a particular time the rate of consumption of beer within the country. Only a few processes are monitored within this system and there is no guarantee that the quality of beer can be correctly stated with random sampling of processes.

4.1.3 Efficiency Of The Designed System

The designed system provides a specialized interface on which to monitor all industries in their respective categories. The designed system is faster in producing results than the existing system which is manual. With the designed system, there is no need of moving to the industrial premises in order to monitor their activities or production processes; one just has to log onto the system with a password and there monitoring is done online. The designed system is very secure and it gives no room to cases of impersonation: only authorized personnel can access the system/ interface. All activities in the designed system are automated that is, storage, retrieval and reporting of data on the stock of beverages.

4.2 System Requirements

This section looks at the overall outlook of the designed system. It encompasses the user requirements analysis, functional and non-functional requirements and system software and hardware.

4.2.1 Software and hardware requirements

System software requirements that were used are:

- (i) Windows vista operating system/ Windows 7 ultimate, 64 bit
- (ii) Dream Weaver software
- (iii) Database management system Mysql server 2008 R2
- (iv) Mozilla Firefox 4.0
- (v) Apache server software

System hardware requirements that were used were:

- (i) Processor speed 1.66GHZ
- (ii) 2 GB RAM
- (iii) Bandwidth 100MBps Ethernet Network card speed
- (iv) Hard disk space 200 GB
- (v) Cat5 cables
- (vi) RJ45
- (vii) Monitor LCD color display

4.2.2 User Requirements

It is very important to get users of the system fully involved to make sure the system is conforming to their needs. The system users in the ministry and those in the case company were therefore contacted during the study and were asked what they expected of the system. The fully designed system must be able to fulfill the following user requirements:

- (i) Fast in producing results from queries
- (ii) Provide attractive user interfaces with easy navigation through out the system
- (iii) Easy to learn and use
- (iv) Faster, flexible and convenient
- (v) Restrict access of unauthorized users
- (vi) Store data and produce reports timely and accurately

Functional requirements

The functional requirements of a system capture its intended behavior. This behavior is expressed as services, tasks or functions the system is required to perform. Therefore the designed system is able to carry out the following:

- (i) Product distribution monitoring within all the brewery companies in the country
- (ii) Recipe management
- (iii) Production monitoring
- (iv) Automated storage, retrieval and reporting of data concerning the stock of beers

Non-functional requirements

Non-functional requirements are those functions that specify criteria used to judge the operation of a system, rather than specific behaviors. The system exhibits software quality attributes such as accuracy, performance, cost, security and modifiability plus usability, i.e. easy to use by the intended users. Non-functional requirements help to achieve the functional requirement of the system. Some of the non-functional requirements of this system are:

- (i) Accurate manipulation of figures
- (ii) The system is very fast
- (iii) The system is cheap to maintain
- (iv) The system is highly encrypted and therefore very secure
- (v) The system is not very sophisticated and therefore easy to learn and user friendly

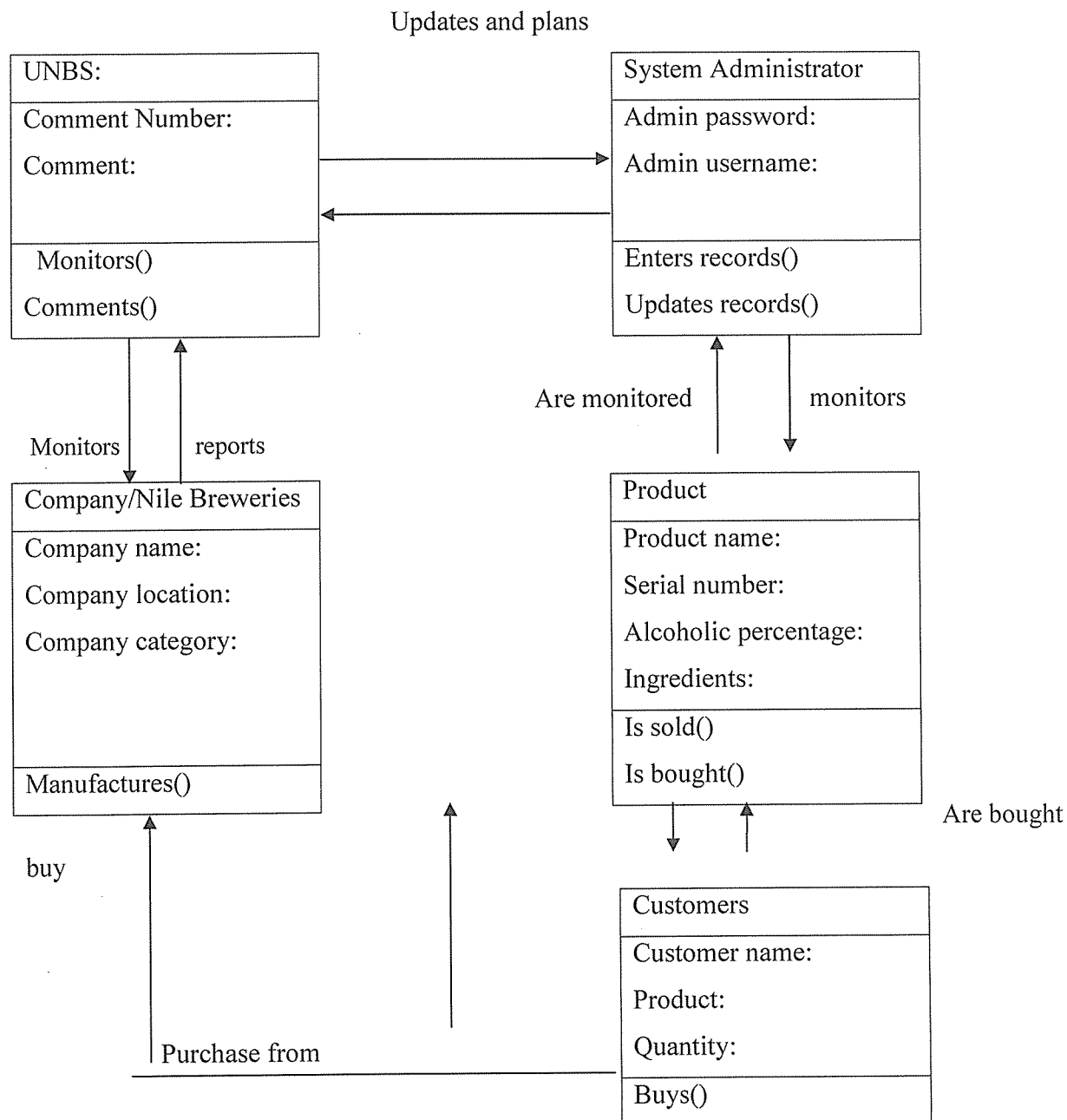
4.3 System Design

This system was designed basing on the logical and physical paradigms:

4.3.1 Logical Design

This design of the system basically showed the layout of the system, that is; the structure of the system depicting the entities involved and their logical relationships and referential integrity to ease the capture and storage of data about them.

CLASS DIAGRAM FOR THE WEB-APPLICATION



4.3.2 Relational Database Design

The researcher has incorporated all system entities and attributes here. The database has been designed using a database design tool called mysql so as to store all the manipulated data automatically.

Outlook of the Database/ Tables within the database

Table 4.1 Login Table (For logging into the system)













































































































































	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	<u>USERNAME</u>	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	PASSWORD	varchar(15)	latin1_swedish_ci		No			      

Table 4.2 Table for Uganda Breweries

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	<u>Product Number</u>	int(15)			No			      
<input type="checkbox"/>	Product	char(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	Alcohol_Percentage	float			No			      
<input type="checkbox"/>	Price_in_UGX	int(15)			No			      
<input type="checkbox"/>	Serial_Numbers	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	Quantity_on_the_market	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	Areas_of_distribution	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	Ingredients	text	latin1_swedish_ci		No			      
<input type="checkbox"/>	Packaging	text	latin1_swedish_ci		No			      
































































This table shows the status of products from Uganda breweries.

Table 4.3 Table for Nile Breweries

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	<u>Product Index</u>	int(15)			No			      
<input type="checkbox"/>	Product	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	Alcohol_Percentage	float			No			      
<input type="checkbox"/>	Price_in_UGX	int(15)			No			      
<input type="checkbox"/>	Serial_Numbers	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	Quantity_on_the_market	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	Areas_of_distribution	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/>	Ingredients	text	latin1_swedish_ci		No			      
<input type="checkbox"/>	Packaging	text	latin1_swedish_ci		No			      

This table shows the status of goods from Nile Breweries

Table 4.4 Table for Parambot Breweries

Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/> <u>Product_ID</u>	int(15)			No			      
<input type="checkbox"/> Product	char(15)	latin1_swedish_ci		No			      
<input type="checkbox"/> Alcohol_Percentage	float			No			      
<input type="checkbox"/> Price_in_UGX	int(15)			No			      
<input type="checkbox"/> Serial_Numbers	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/> Quantity_on_the_market	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/> Areas_of_distribution	varchar(15)	latin1_swedish_ci		No			      
<input type="checkbox"/> Ingredients	text	latin1_swedish_ci		No			      
<input type="checkbox"/> Packaging	text	latin1_swedish_ci		No			      

This table shows the status of products from Parambot Breweries

Actual System Design Features

- (i) Document search tool. This feature enables the user to look up the interface that they want to use at the moment.
- (ii) Document up loader. This enables storage of data into the system.
- (iii) Check in/ check out. This feature gives the user an interface

4.4 Physical design

This is the interface of interaction of the user and the system. It is the basic design that the user is most interested in.

4.4.1 Pre-implementation phase.

Under this section, the newly designed system was tested by the researcher to find out if it really conforms to the user's requirements. Comparisons are then made between the current system and the newly designed system. The newly designed system performed better than the old system, that is, was more efficient than the old system.

Overview of the designed system:

The designed system basically automates the breweries monitoring system. In this system, the user looks at all the major activities in the breweries industry, analyses each activity and the raw materials involved in the production and makes general comments, pluses and deltas on these activities. The user then can post these comments either to the companies' databases or to their respective emails.

The new system has the following capabilities:

- (i) Input of data in form of comments.
- (ii) Retrieval of records

(iii)Restriction of users- high encryption

1.4.2 High level application design

Every application in the system represents a company in the breweries management system and its contribution to the production of beer; the products, ingredients for the products, areas of distribution and the alcoholic percentages of all products. All these applications are connected to one interface- one system. The applications enable the administrator/ user to input data inform of comments and retrieve data as required.

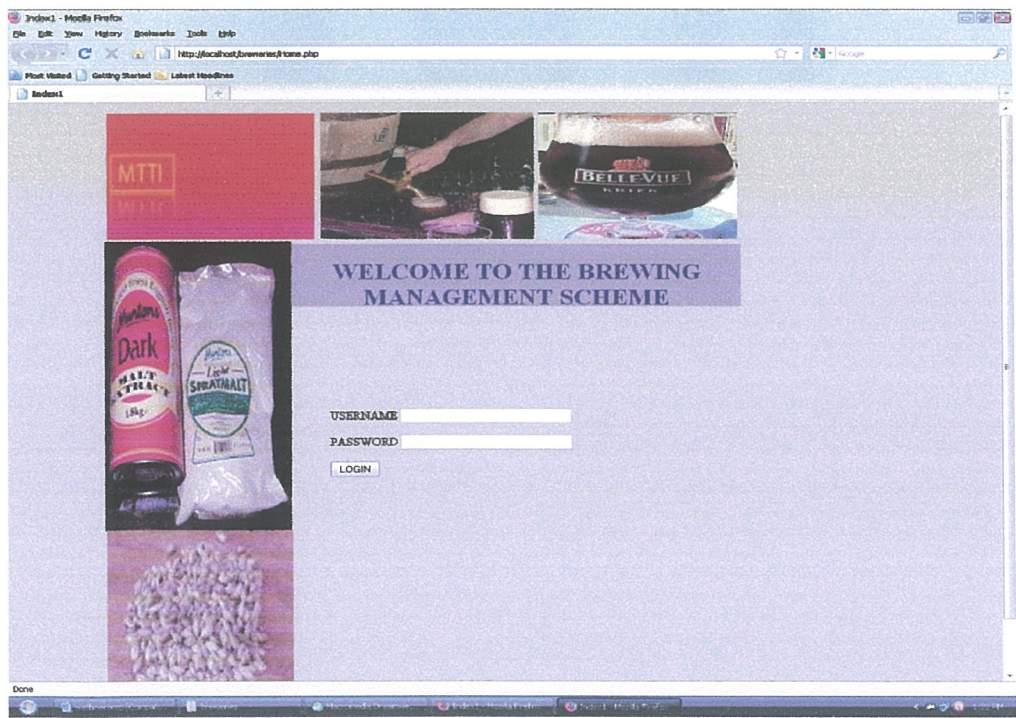
Below are the different outlooks of the interfaces of the system. They help explain what the system does.

The login interface

This interface allows the user to interact with the system as it focuses on the authentication and authorization to all those with the valid privileges of access.

Figure 1: The Login Form

The login is strictly for the personnel in charge of monitoring.



he MDI Interface.

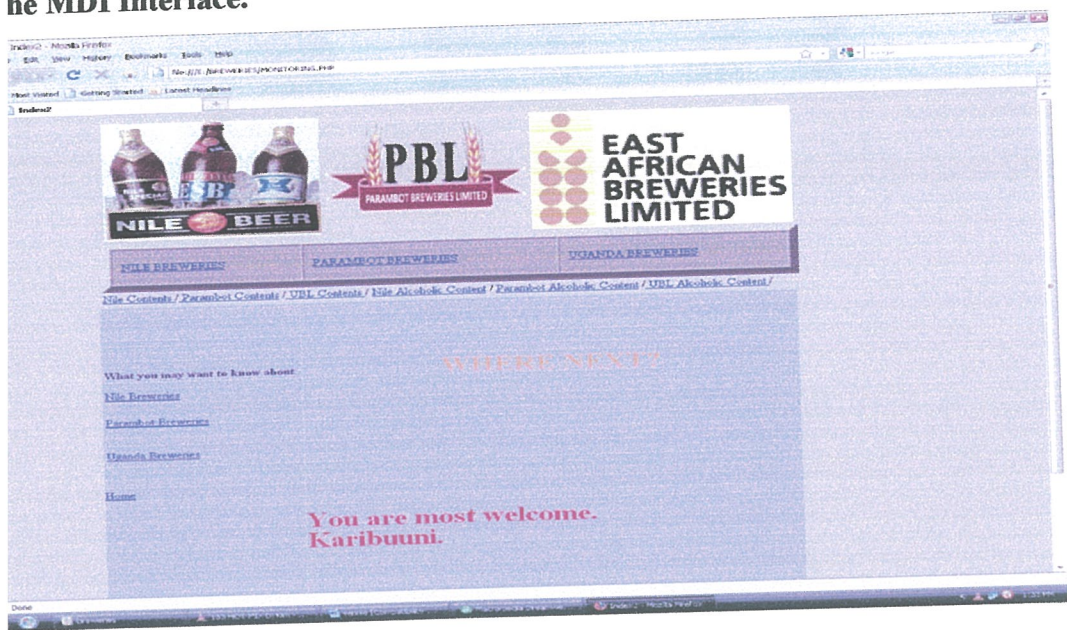


Figure 2: Page for choosing where to go

Here, the administrator and the people in charge of inserting details in the forms choose where to go next.

The Nile breweries Form

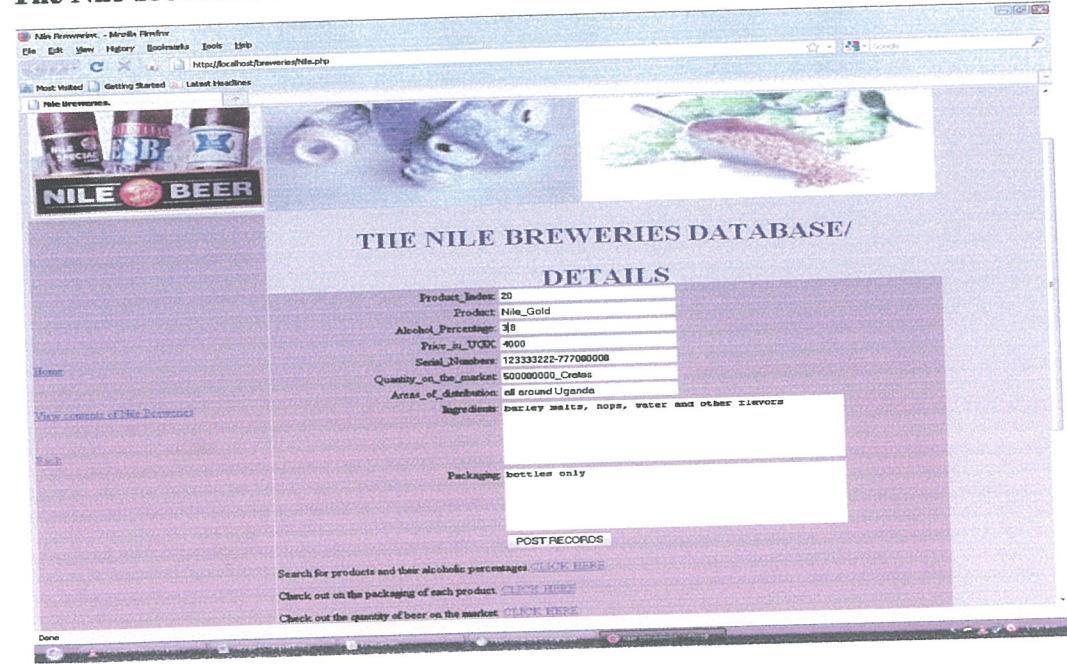


Figure 3: Outlook of the Nile breweries Form.

Below the form, are links that help the user to view the alcoholic percentages, packaging and quantities of products in the company. We shall later view these queries in the Parambot breweries form.

Contents in the Nile breweries database

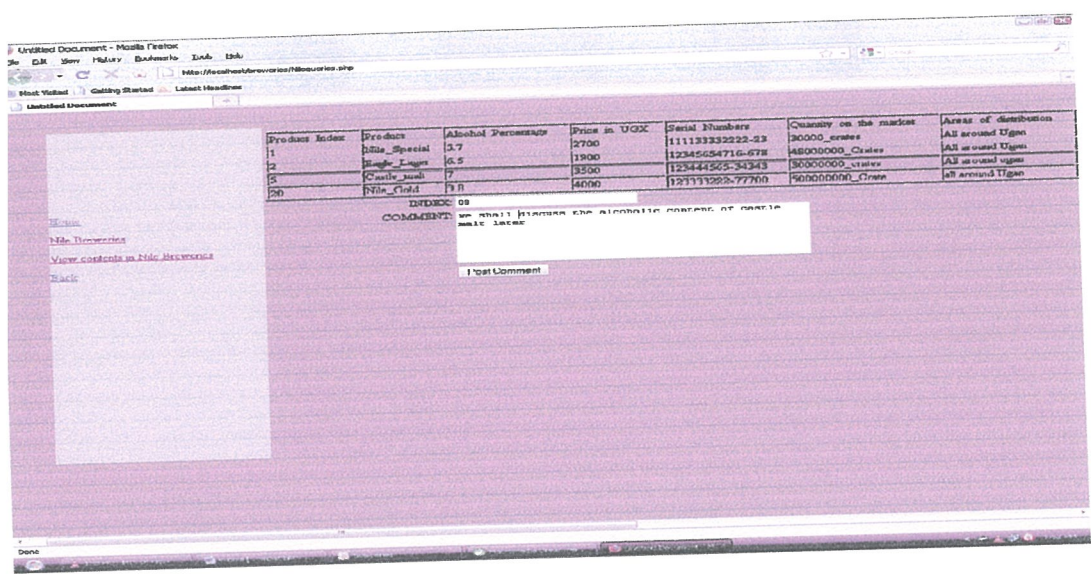


Figure 4: Outlook of the contents in the Nile breweries database and a monitoring form for the MTTI administrator

The administrator views all contents in the database and sends a comment to their database

The Parambot Form

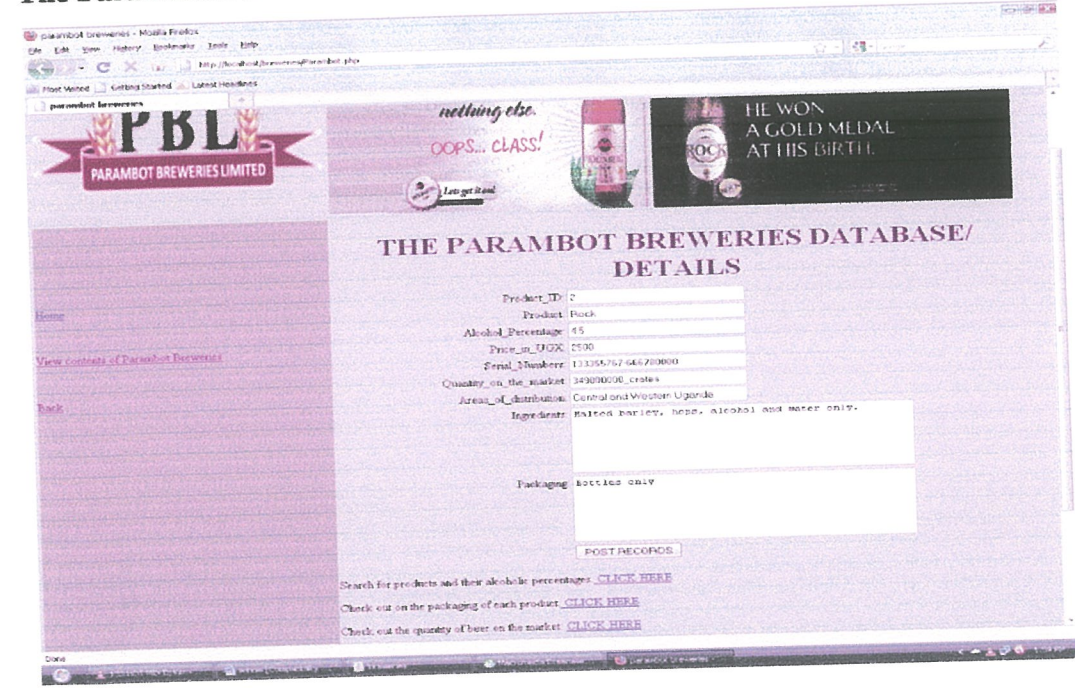
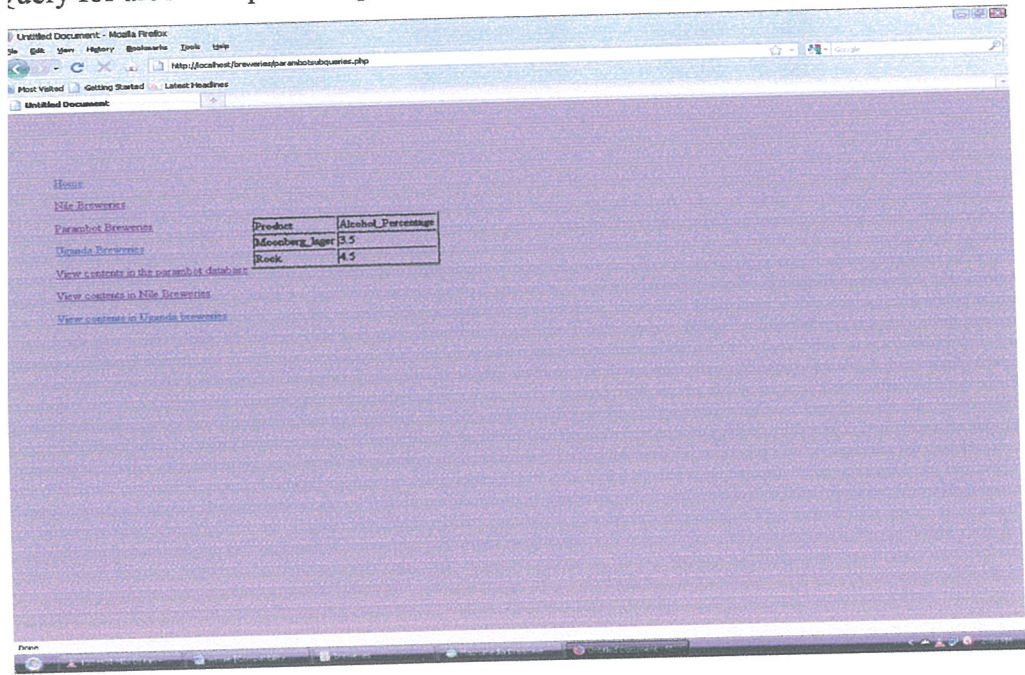


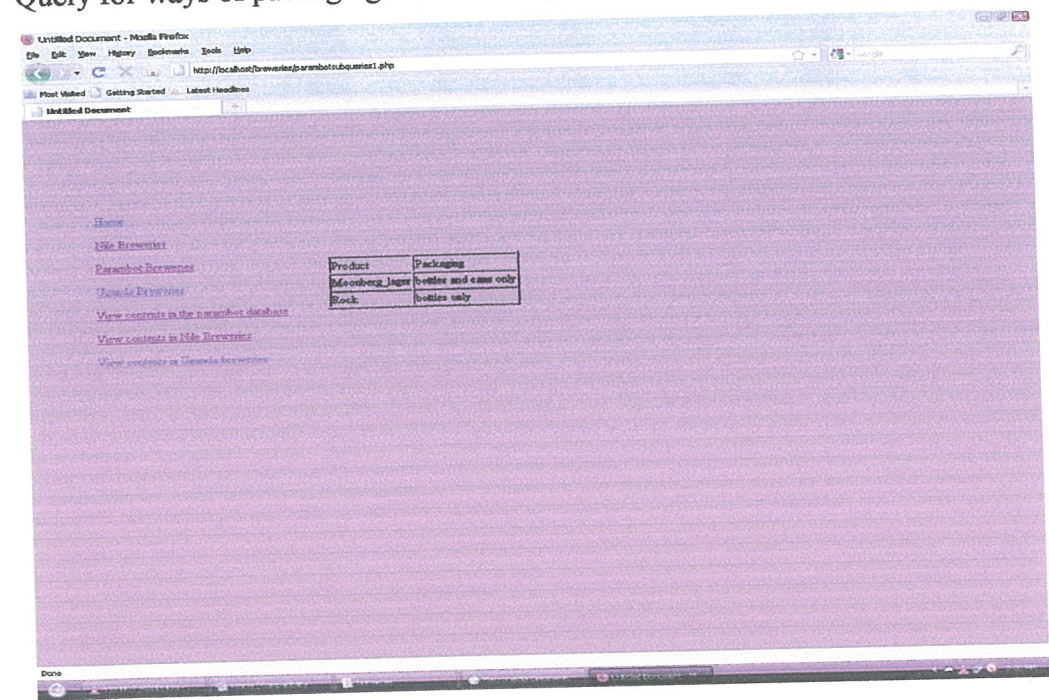
Figure 5: The Parambot Form

The links below the form show the following queries.

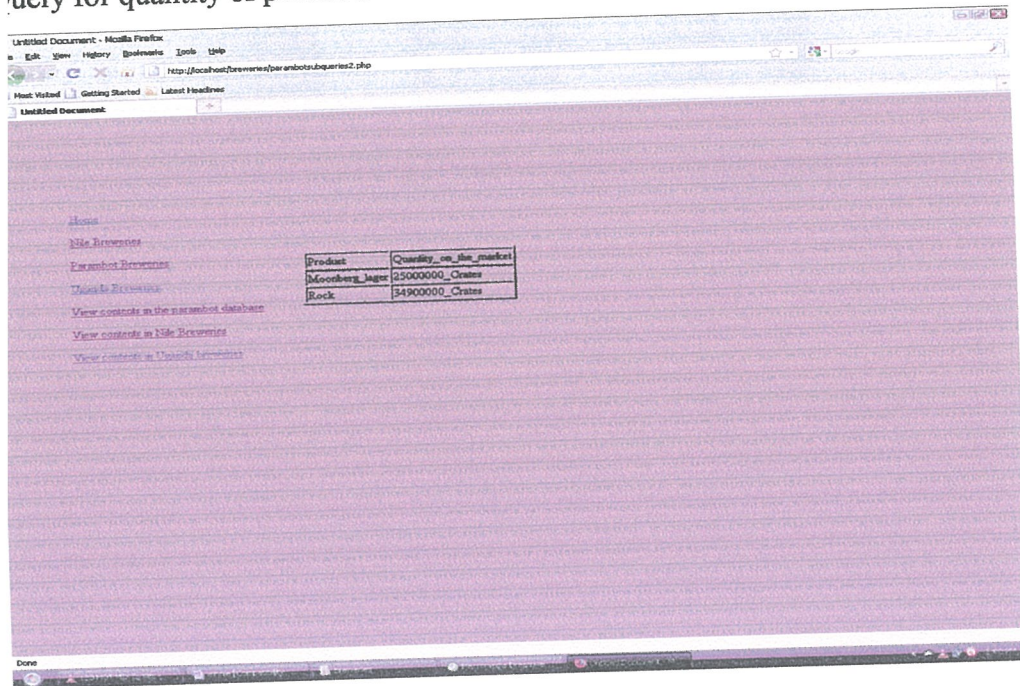
Query for alcoholic percentages of products



Query for ways of packaging used for the products



query for quantity of products on the market



Contents in the Parambot breweries database

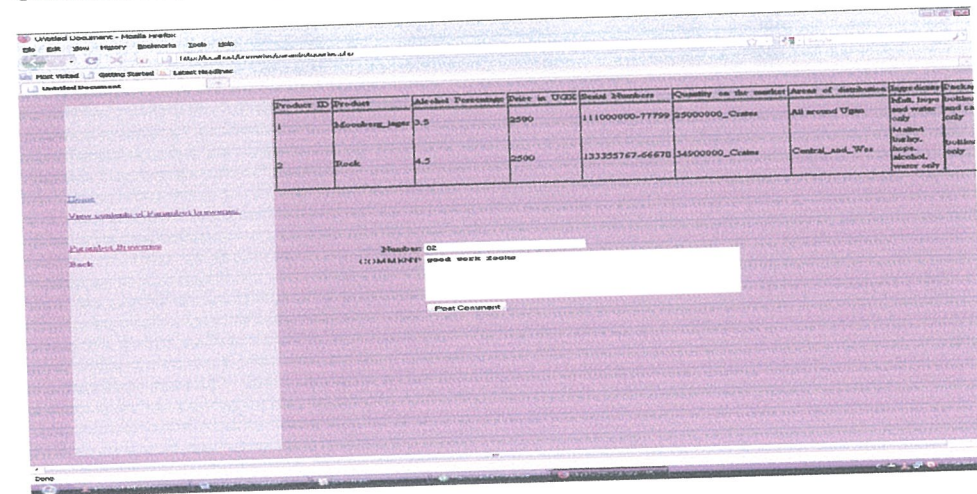


Figure 6: Parambot Database contents

The Uganda Breweries Form

EAST AFRICAN BREWERIES LIMITED

THE UGANDA BREWERIES DATABASE/ DETAILS

Product Number: 11
Product: v&A Sherry
Alcohol_Percentage: 9
Price_in_UGX: 1200
Serial_Numbers: 103444565-643543222
Quantity_on_the_market: 50000000_Botoms
Area_of_distribution: all around Uganda
Ingredients: alcohol, water, added flavors and colors
Packaging: Bottles only

POST RECORDS

Search for products and their alcohol percentage: [CLICK HERE](#)
Check out on the packaging of each product: [CLICK HERE](#)
Check out the quantity of beer on the market: [CLICK HERE](#)

Figure 7: The Uganda Breweries Form

Contents in the Uganda Breweries database

Product Number	Product	Alcohol_Percentage	Price_in_UGX	Serial_Numbers	Quantity_on_the_market	Area_of_distribution	Ingredients	Packaging
1	Tusker	7	3000	12223334221-56	78000000_Crates	All around Ugan	barley malt, hops, maize grits, sugar, water.	cans and bottles
2	Uganda_Warap	7.5	1100	111266669999-99	100000000_Crate	All around Ugan	Sherry flavors and natural spirits	Bottles-1200mls, bottles-500mls and polythene of 50gms only
3	Bell_Lager	5.7	3000	133444565-64343	50000000_Crates	All around ugan	barley malt, water, yeast, alcohol.	Bottles only
4	Tusker	5.7	6000	256756900-76423	50000000_Crates	All around ugan	malt hops and water only	Bottles only
6	Chaiman RSB	6.3	2500	256756900-56423	40000000_Crates	Uganda	malt, hops, water, alcohol, barley	Bottles and cans only
9	Miwanga_Tonzo	0.9	500	256756900-76473	300000000_jerrys	Kawwataka	water, vitamin B	calabashes and jerrycans
11	V&A sherry	9	12000	103444565-64353	500000000_Botoms	All around ugan	alcohol, water, flavors, added colors.	bottles only

ID: 01
COMMENT: good work

Figure 8: The Uganda Breweries database Contents

Here, the administrator is free to comment about the products, their ingredients, alcoholic content, means of packaging and the rest.

4.5 Implementation

Below, are the codes that were used to generate the system interfaces.

The codes for the login are here below:

```
<?php require_once('Connections/win.php'); ?>
<?php
// *** Validate request to login to this site.
if (!isset($_SESSION)) {
    session_start();
}

$loginFormAction = $_SERVER['PHP_SELF'];
if (isset($_GET['accesscheck'])) {
    $_SESSION['PrevUrl'] = $_GET['accesscheck'];
}

if (isset($_POST['textfield'])) {
    $loginUsername=$_POST['textfield'];
    $password=$_POST['textfield2'];
    $MM_fldUserAuthorization = "USERNAME";
    $MM_redirectLoginSuccess = "monitoring.php";
    $MM_redirectLoginFailed = "relogin.php";
    $MM_redirecttoReferrer = false;
    mysql_select_db($database_win, $win);

    $LoginRS__query=sprintf("SELECT USERNAME, PASSWORD, USERNAME FROM login
WHERE USERNAME='%s' AND PASSWORD='%s'",
    get_magic_quotes_gpc() ? $loginUsername : addslashes($loginUsername),
    get_magic_quotes_gpc() ? $password : addslashes($password));

    $LoginRS = mysql_query($LoginRS__query, $win) or die(mysql_error());
```

```

$loginFoundUser = mysql_num_rows($LoginRS);
if ($loginFoundUser) {

    $loginStrGroup = mysql_result($LoginRS,0,'USERNAME');

    //declare two session variables and assign them
    $_SESSION['MM_Username'] = $loginUsername;
    $_SESSION['MM_UserGroup'] = $loginStrGroup;

    if (isset($_SESSION['PrevUrl']) && false) {
        $MM_redirectLoginSuccess = $_SESSION['PrevUrl'];
    }
    header("Location: " . $MM_redirectLoginSuccess );
}
else {
    header("Location: " . $MM_redirectLoginFailed );
}
}
?>

<!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">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Index1</title>
<style type="text/css">
<!--
#Layer1 {
    position:absolute;
    width:570px;
    height:91px;
    z-index:1;
    left: 361px;
    top: 204px;

```

```
background-color: #999999;
}
#Layer2 {
    position: absolute;
    width: 807px;
    height: 188px;
    z-index: 2;
    left: 123px;
    top: 11px;
}
#Layer3 {
    position: absolute;
    width: 238px;
    height: 701px;
    z-index: 3;
    left: 123px;
    top: 201px;
}
#Layer4 {
    position: absolute;
    width: 232px;
    height: 603px;
    z-index: 4;
    left: 699px;
    top: 297px;
}
.style1 {color: #330099}
#Layer5 {
    position: absolute;
    width: 335px;
    height: 611px;
    z-index: 5;
    left: 363px;
```

```

        top: 296px;
    }
    .style5 {font-size: 18px}
    .style6 {color: #FF0000}
    body {
        background-color: #CCCCCC;
    }
    #Layer6 {
        position: absolute;
        width: 236px;
        height: 286px;
        z-index: 6;
        left: 2px;
        top: 417px;
    }
-->
</style>
<script type="text/JavaScript">
<!--
function MM_swapImgRestore() { //v3.0
    var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++) x.src=x.oSrc;
}

function MM_preloadImages() { //v3.0
    var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
    var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
    if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

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_swapImage() { //v3.0
  var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array; for(i=0;i<(a.length-2);i+=3)
    if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc) x.oSrc=x.src; x.src=a[i+2];}
  }
//-->
</script>
</head>

<body onload="MM_preloadImages('images/coldcan.jpg','images/ber brewing equipment.jpg')">
<div id="Layer1">
  <h1 align="center" class="style1">WELCOME TO THE BREWING MANAGEMENT
SCHEME </h1>
</div>
<div id="Layer4">
  <p>Please <span class="style6">login</span> here.</p>
  <p>This page is however <span class="style6">strictly</span> for Administrative
purposes</span></p>
  <form id="form1" name="form1" method="POST" action="<?php echo $loginFormAction;
?>">
    <label></label>
    <p>
      <label>USERNAME
      <input type="text" name="textfield" />
    </label>
  </p>
  <p>
    <label>PASSWORD

```

```

<input type="password" name="textfield2" />
</label>
</p>
<p>
<label>
<input type="submit" name="Submit" value="LOGIN" />
</label>
</p>
</form>
</div>
<div id="Layer2">
<table width="807" height="132">
<tr>
<td width="275"></td>
<td width="276"></td>
<td width="240"><a href="#" onmouseout="MM_swapImgRestore()"
onmouseover="MM_swapImage('Image3','images/coldcan.jpg',1)"></a></td>
</tr>
</table>
</div>
<div id="Layer3">
<div id="Layer6"></div>
<a href="#" onmouseout="MM_swapImgRestore()"
onmouseover="MM_swapImage('Image4','images/ber brewing equipment.jpg',1)"></a></div>
</body>
</html>

```

4.6 Deployment and maintenance

The system is hosted as a site on the host machine. The site is launched on a server so that communication can be done at a wide range. Once the system is launched, monitoring and evaluation can now start. Maintenance of the system is done by subscribing or registering to the internet service provider when internet goes off completely.

4.7 Conversion

Conversion of the system can be both parallel and crossover. In parallel conversion, both the old and new systems are used concurrently until the new system is conceptualized by the users. In direct crossover conversion, the old system is completely done away with and users start using the new system at deployment: but this method of conversion is disadvantageous in that it does not give enough time to the users to fully learn to use the new system; again in case of failure of the new system before full deployment, the users do not have an alternative system to use. To add on that, this method also leads to full loss of data of the organization since the old system is completely done away with at once.

The researcher therefore considered the former method of implementation as the better method since here, the users learn the new system slowly by slowly and adaptability is taken step by step; there is also no loss of information/ data since the two systems are concurrently used.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This is the final chapter that deals with the discussion, conclusion, recommendation, list of references and the appendices.

5.1 Discussion

The structure of this system is very simplified in a way that it only requires the user to input a username and password for system access and the rest is left for monitoring company databases and sending pluses and deltas to these production companies.

This system is cheap yet a little expensive: the major thing that makes this system expensive is the launching and hosting of the website on the internet. All in all, the system has more advantages than disadvantages.

5.2 Limitation of the study

The following were the limitations of the study:

This research was done concurrently with the university program which inconvenienced the researcher's daily class routine.

Lack of funds was another limitation to the researcher: printing and binding of the research documents costed a lot more than the researcher could afford.

The study only considered three breweries industries in Uganda and yet there are over six breweries industries in the country; so once the system is launched, only three companies will be monitored.

5.3 Recommendation

The researcher recommends that this system should be hosted on the MTTI site so that it can run effectively. I also recommend that this system be hosted on windows server 2007, Mozilla Fire fox 4.0, disk space 200 GB, 2GB RAM and a system processor speed of 1.66GHZ and above.

5.4 Conclusion

In this system, the researcher has developed a system that is more efficient than the termly visits by the ministry of tourism trade and industries to the breweries companies' premises. The system

is again more effective because it can be done any time. It does not require any arrangements by the ministry to visit the breweries industries to carry out any form of monitoring.

The system has however considered a few breweries industries due to time limits: all beverage industries can be monitored using this system.

5.5 Future work and research areas

Improving the system from just a mere breweries monitoring system to a beverage monitoring system throughout the country is the biggest prospect. Therefore the system in future will incorporate all brewing industries and beverage industries. Again in future, the same scheme will be used by the Uganda revenue authority for collecting taxes over the internet instead of literally moving to the company premises to collect taxes.

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<http://www.wikipedia.com>

APPENDICES

APPENDIX A: PROJECT TIME TABLE

DATE	ACTIVITY
1 st March-29 th March	Proposal writing
31 st March	Proposal Submission
1 st April-7 th April	Data collection and Analysis
8 th April-23 rd July	Report Writing
10 th August	Report submission

APPENDIX B:

BUDGET.

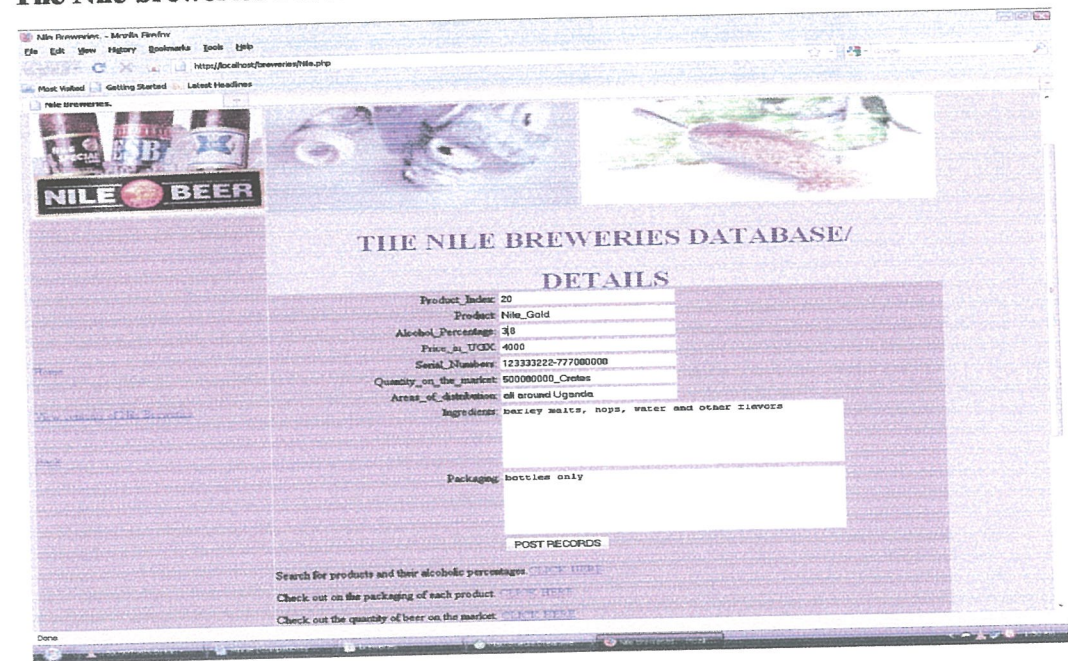
ITEM	AMOUNT (UGX)
Computer	600.000
Mysql platform	200.000
Dream weaver software	250.000
Transport	100.000
Printing and binding	75.000
Grand Total	1.225.000

ome of the interfaces are shown here below:

The home page



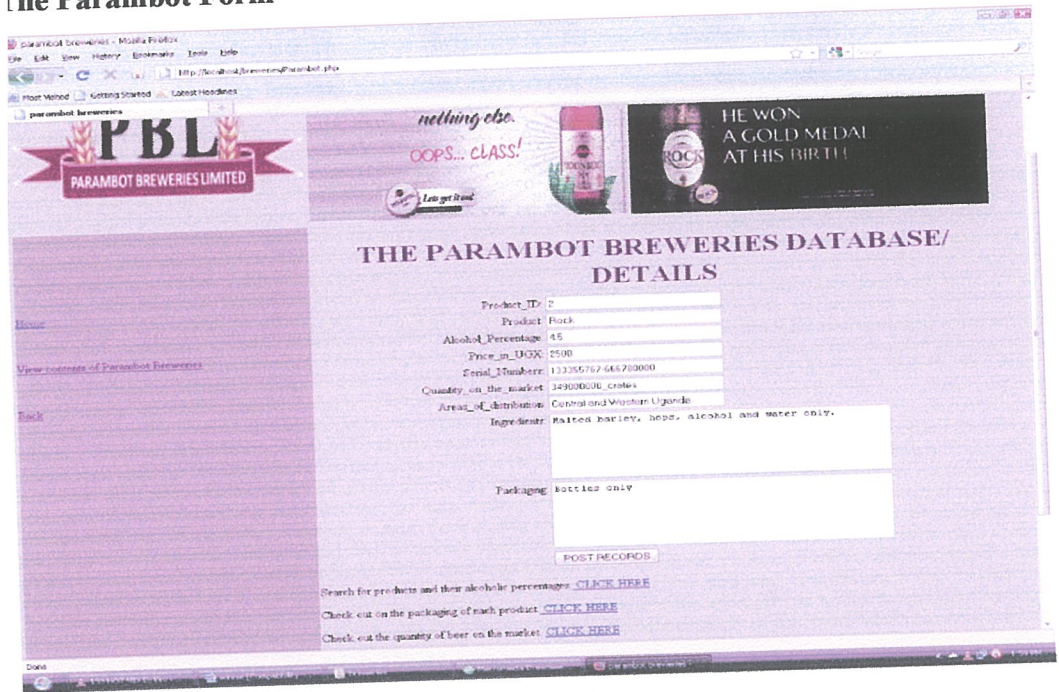
The Nile breweries Form



Outlook of the Nile breweries Form.

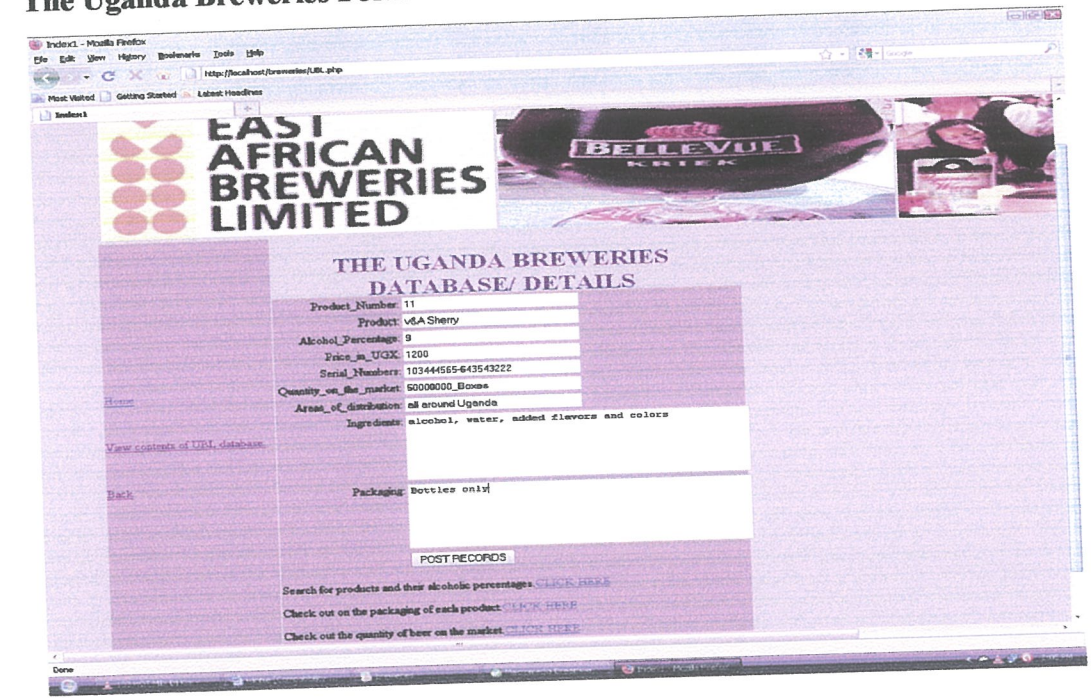
Below the form, are links that help the user to view the alcoholic percentages, packaging and quantities of products in the company. We shall later view these queries in the Parambot breweries form.

The Parambot Form



The links below the form show the following queries.

The Uganda Breweries Form



The Uganda Breweries Form

APPENDIX C

SOURCE CODES

Login Form

```
<?php require_once('Connections/win.php'); ?>
<?php
// *** Validate request to login to this site.
if (!isset($_SESSION)) {
    session_start();
}

$loginFormAction = $_SERVER['PHP_SELF'];
if (isset($_GET['accesscheck'])) {
    $_SESSION['PrevUrl'] = $_GET['accesscheck'];
}

if (isset($_POST['textfield'])) {
    $loginUsername=$_POST['textfield'];
    $password=$_POST['textfield2'];
    $MM_fldUserAuthorization = "USERNAME";
    $MM_redirectLoginSuccess = "monitoring.php";
    $MM_redirectLoginFailed = "relogin.php";
    $MM_redirecttoReferrer = false;
    mysql_select_db($database_win, $win);

    $LoginRS__query=sprintf("SELECT USERNAME, PASSWORD, USERNAME FROM
login WHERE USERNAME='%s' AND PASSWORD='%s'",
    get_magic_quotes_gpc() ? $loginUsername : addslashes($loginUsername),
    get_magic_quotes_gpc() ? $password : addslashes($password));

    $LoginRS = mysql_query($LoginRS__query, $win) or die(mysql_error());
    $loginFoundUser = mysql_num_rows($LoginRS);
    if ($loginFoundUser) {
```

```

$loginStrGroup = mysql_result($LoginRS,0,'USERNAME');

//declare two session variables and assign them
$_SESSION['MM_Username'] = $loginUsername;
$_SESSION['MM_UserGroup'] = $loginStrGroup;

if (isset($_SESSION['PrevUrl']) && false) {
    $MM_redirectLoginSuccess = $_SESSION['PrevUrl'];
}
header("Location: " . $MM_redirectLoginSuccess );
}
else {
    header("Location: " . $MM_redirectLoginFailed );
}
}
?>
<!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">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Index1</title>
<style type="text/css">
<!--
#Layer1 {
    position:absolute;
    width:570px;
    height:91px;
    z-index:1;
    left: 361px;
    top: 204px;
    background-color: #999999;

```

```
}  
#Layer2 {  
    position:absolute;  
    width:807px;  
    height:188px;  
    z-index:2;  
    left: 123px;  
    top: 11px;  
}  
#Layer3 {  
    position:absolute;  
    width:238px;  
    height:701px;  
    z-index:3;  
    left: 123px;  
    top: 201px;  
}  
#Layer4 {  
    position:absolute;  
    width:232px;  
    height:603px;  
    z-index:4;  
    left: 699px;  
    top: 297px;  
}  
.style1 {color: #330099}  
#Layer5 {  
    position:absolute;  
    width:335px;  
    height:611px;  
    z-index:5;  
    left: 363px;  
    top: 296px;
```

```

}
.style5 {font-size: 18px}
.style6 {color: #FF0000}
body {
    background-color: #CCCCCC;
}
#Layer6 {
    position:absolute;
    width:236px;
    height:286px;
    z-index:6;
    left: 2px;
    top: 417px;
}
-->
</style>
<script type="text/JavaScript">
<!--
function MM_swapImgRestore() { //v3.0
    var i,x,a=document.MM_sr;    for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++)
x.src=x.oSrc;
}

function MM_preloadImages() { //v3.0
    var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
    var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
    if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

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_swapImage() { //v3.0
var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array;
for(i=0;i<(a.length-2);i+=3)
if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc) x.oSrc=x.src;
x.src=a[i+2];}
}
//-->
</script>
</head>

<body onload="MM_preloadImages('images/coldcan.jpg','images/ber brewing
equipment.jpg')">
<div id="Layer1">
<h1 align="center" class="style1">WELCOME TO THE BREWING MANAGEMENT
SCHEME </h1>
</div>
<div id="Layer4">
<p>Please <span class="style6">login</span> here.</p>
<p>This page is however <span class="style6">strictly for Administrative
purposes</span></p>
<form id="form1" name="form1" method="POST" action="<?php echo
$loginFormAction; ?>">
<label></label>
<p>
<label>USERNAME
<input type="text" name="textfield" />
</label>
</p>
<p>

```



```

<label>PASSWORD
<input type="password" name="textfield2" />
</label>
</p>
<p>
<label>
<input type="submit" name="Submit" value="LOGIN" />
</label>
</p>
</form>
</div>
<div id="Layer2">
<table width="807" height="132">
<tr>
<td width="275"></td>
<td width="276"></td>
<td width="240"><a href="#" onmouseout="MM_swapImgRestore()"
onmouseover="MM_swapImage('Image3','images/coldcan.jpg',1)"></a></td>
</tr>
</table>
</div>
<div id="Layer3">
<div id="Layer6"></div>
<a href="#" onmouseout="MM_swapImgRestore()"
onmouseover="MM_swapImage('Image4','images/ber brewing equipment.jpg',1)"></a></div>
<div class="style1" id="Layer5">

```

ABOUT THE BREWING MANAGEMENT SYSTEM

The above proposed system has been formulated to provide a centralised monitoring system for all brewing industries in Uganda.

Alcohol is a very sensitive issue in the country and therefore the ministry should take required precautions to protect its consumers.

: There has been no body in the ministry however, that does the monitoring of industrial processes in the country. The ministry has therefore set the scheme to monitor activities in the brewing industry since many alcohol consumers lost their lives in 2010 due to the careless alcoholic producers.

</div>

</body>

</html>

MDDI form codes

top: 234px;

}

body {

background-color: #CCCCCC;

}

.style3 {color: #330099; font-weight: bold; }

#Layer6 {

position: absolute;

width: 92px;

height: 115px;

z-index: 5;

left: 510px;

top: 86px;

}

#Layer7 {

position: absolute;

width: 93px;

height: 115px;

```
    z-index:5;
    left: 507px;
    top: 122px;
}
#Layer8 {
    position:absolute;
    width:601px;
    height:106px;
    z-index:5;
    top: 1px;
}
.style4 {
    font-size: 36px;
    color: #FF9900;
}
.style5 {font-size: 36px}
.style7 {color: #F0F0F0}
.style8 {color: #FF0000}
#Layer9 {
    position:absolute;
    width:842px;
    height:24px;
    z-index:6;
    left: -237px;
    top: -27px;
}
-->
</style>
<script type="text/JavaScript">
<!--
```

```

function MM_preloadImages() { //v3.0
var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}
//-->
</script>
</head>

<body>
<div id="Layer1">
<table width="841" height="85" border="10" cellpadding="10">
<tr>
<td><a href="Nile.php" target="_parent">NILE BREWERIES</a></td>
<td><a href="parambot.php" target="_parent">PARAMBOT BREWERIES </a></td>
<td><a href="UBL.php" target="_parent">UGANDA BREWERIES</a></td>
</tr>
</table>
</div>
<div id="Layer4">
<h2 class="style1">&nbsp;</h2>
<div id="Layer8">
<h1 align="center" class="style4">&nbsp;</h1>
<h1 align="center" class="style4">WHERE NEXT? </h1>
</div>
<div id="Layer9"><a href="Nilequeries.php">Nile Contents </a> /<a
href="parambotqueries.php"> Parambot Contents</a> /<a href="UBLqueries.php"> UBL
Contents</a><a href="#"> </a> / <a href="Nilesubqueries.php">Nile Alcoholic
Content</a> / <a href="parambotsubqueries.php">Parambot Alcoholic Content</a> /<a
href="ublsbqueries.php"> UBL Alcoholic Content </a> / </div>
<p class="style1">&nbsp;</p>
<p>&nbsp;</p>

```

```

<p>&nbsp;</p>
<h2 align="center" class="style5">
  <marquee direction="up">
    <span class="style8">You are most welcome.    </span>
  </marquee>
  <span class="style8">
    <marquee direction="down">
      Karibuuni.
    </marquee>
  </span><span class="style7">    </span></h2>
<p>&nbsp;</p>
<p>&nbsp;</p>
</div>
<div id="Layer2">
  <table width="840" height="211">
    <tr>
      <td width="262"></td>
      <td width="244"></td>
      <td width="281"></td>
    </tr>
  </table>
</div>
<div id="Layer3">
  <p>&nbsp;</p>
  <p>&nbsp;</p>
  <table width="239" height="209">
    <tr>
      <td><p><span class="style3">What you may want to know </span><span
class="style3">about</span>:</p>
      <p><a href="Nile.php">Nile Breweries </a></p></td>
    </tr>
  </table>

```

```

</tr>
<tr>
    <td><a href="parambot.php">Parambot Breweries </a></td>
</tr>
<tr>
    <td height="79"><a href="UBL.php">Uganda Breweries </a></td>
</tr>
</table>
<p> <a href="Home.php">Home </a></p>
<p>&nbsp; </p>
</div>
</body>
</html>

```

All Companies Report/ Form

```

<?php require_once('Connections/win.php'); ?>
<?php
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"] == "form1")) {

    $insertSQL = sprintf("INSERT INTO ubl (Product_Number, Product, Alcohol_Percentage,
Price_in_UGX, Serial_Numbers, Quantity_on_the_market, Areas_of_distribution, Ingredients,
Packaging) VALUES (%s, %s, %s, %s, %s, %s, %s, %s, %s)",

        GetSQLValueString($_POST['Product_Number'], "int"),
        GetSQLValueString($_POST['Product'], "text"),
        GetSQLValueString($_POST['Alcohol_Percentage'], "double"),
        GetSQLValueString($_POST['Price_in_UGX'], "int"),
        GetSQLValueString($_POST['Serial_Numbers'], "text"),
        GetSQLValueString($_POST['Quantity_on_the_market'], "text"),
        GetSQLValueString($_POST['Areas_of_distribution'], "text"),
        GetSQLValueString($_POST['Ingredients'], "text"),
        GetSQLValueString($_POST['Packaging'], "text"));

    mysql_select_db($database_win, $win);
    $Result1 = mysql_query($insertSQL, $win) or die(mysql_error());

    $insertGoTo = "UBL.php";

```

```

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

$maxRows_Recordset3 = 10;
$pageNum_Recordset3 = 0;
if (isset($_GET['pageNum_Recordset3'])) {
    $pageNum_Recordset3 = $_GET['pageNum_Recordset3'];
}
$startRow_Recordset3 = $pageNum_Recordset3 * $maxRows_Recordset3;

mysql_select_db($database_win, $win);
$query_Recordset3 = "SELECT * FROM ubl";
$query_limit_Recordset3 = sprintf("%s LIMIT %d, %d", $query_Recordset3,
$startRow_Recordset3, $maxRows_Recordset3);
$Recordset3 = mysql_query($query_limit_Recordset3, $win) or die(mysql_error());
$row_Recordset3 = mysql_fetch_assoc($Recordset3);

if (isset($_GET['totalRows_Recordset3'])) {
    $totalRows_Recordset3 = $_GET['totalRows_Recordset3'];
} else {
    $all_Recordset3 = mysql_query($query_Recordset3);
    $totalRows_Recordset3 = mysql_num_rows($all_Recordset3);
}
$totalPages_Recordset3 = ceil($totalRows_Recordset3/$maxRows_Recordset3)-1;
?><!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">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />

```



```
<title>Index1</title>
<style type="text/css">
<!--
#Layer1 {
    position:absolute;
    width:592px;
    height:91px;
    z-index:1;
    left: 278px;
    top: 266px;
    background-color: #CCCCCC;
}
#Layer2 {
    position:absolute;
    width:1391px;
    height:236px;
    z-index:2;
    left: 81px;
    top: 9px;
}
#Layer3 {
    position:absolute;
    width:209px;
    height:702px;
    z-index:3;
    left: 80px;
    top: 263px;
    background-color: #999999;
}
#Layer4 {
    position:absolute;
    width:228px;
    height:601px;
```

```

        z-index:4;
        left: 701px;
        top: 233px;
    }
    .style1 {color: #330099}
    .style2 {color: #CC0000}
    .style3 {color: #FF0000}
    #Layer5 {
        position:absolute;
        width:335px;
        height:598px;
        z-index:5;
        left: 365px;
        top: 234px;
    }
    .style5 {font-size: 18px}
    #Layer6 {
        position:absolute;
        width:578px;
        height:608px;
        z-index:4;
        left: 291px;
        top: 356px;
        background-color: #999999;
    }
    body {
        background-color: #CCCCCC;
    }
    #Layer7 {
        position:absolute;
        width:512px;
        height:47px;
        z-index:5;

```

```

    left: 872px;
    top: 274px;
}
-->
</style>
<script type="text/JavaScript">
<!--
function MM_swapImgRestore() { //v3.0
    var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++) x.src=x.oSrc;
}

function MM_preloadImages() { //v3.0
    var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
    var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
    if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

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_swapImage() { //v3.0
    var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array; for(i=0;i<(a.length-2);i+=3)
        if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x;    if(!x.oSrc)    x.oSrc=x.src;
x.src=a[i+2];}
}
//-->
</script>

```

</head>

<body onload="MM_preloadImages('images/UGImages.jpeg')">

<div id="Layer1">

<h1 align="center" class="style1"> THE UGANDA BREWERIES DATABASE/
DETAILS</h1>

</div>

<div id="Layer2">

<table width="1434" height="235">

<tr>

<td width="489"></td>

<td width="488"></td>

<td width="524"></td>

</tr>

</table>

</div>

<div id="Layer3">

<p> </p>

<p> </p>

<p> </p>

<p> </p>

<p> </p>

<p> </p>

<p>Home</p>

<p> </p>

<p>View contents of UBL database.</p>

<p> </p>

```

<p> <a href="monitoring.php">Back </a></p>
</div>
<div id="Layer6">
  <form method="post" name="form1" action="<?php echo $editFormAction; ?>">
    <table align="center">
      <tr valign="baseline">
        <td nowrap align="right">Product_Number:</td>
        <td><input type="text" name="Product_Number" value="" size="32"></td>
      </tr>
      <tr valign="baseline">
        <td nowrap align="right">Product:</td>
        <td><input type="text" name="Product" value="" size="32"></td>
      </tr>
      <tr valign="baseline">
        <td nowrap align="right">Alcohol_Percentage:</td>
        <td><input type="text" name="Alcohol_Percentage" value="" size="32"></td>
      </tr>
      <tr valign="baseline">
        <td nowrap align="right">Price_in_UGX:</td>
        <td><input type="text" name="Price_in_UGX" value="" size="32"></td>
      </tr>
      <tr valign="baseline">
        <td nowrap align="right">Serial_Numbers:</td>
        <td><input type="text" name="Serial_Numbers" value="" size="32"></td>
      </tr>
      <tr valign="baseline">
        <td nowrap align="right">Quantity_on_the_market:</td>
        <td><input type="text" name="Quantity_on_the_market" value="" size="32"></td>
      </tr>
      <tr valign="baseline">
        <td nowrap align="right">Areas_of_distribution:</td>
        <td><input type="text" name="Areas_of_distribution" value="" size="32"></td>
      </tr>
    </table>
  </form>

```

```

<tr valign="baseline">
  <td nowrap align="right" valign="top">Ingredients:</td>
  <td><textarea name="Ingredients" cols="50" rows="5"></textarea>
</td>
</tr>
<tr valign="baseline">
  <td nowrap align="right" valign="top">Packaging:</td>
  <td><textarea name="Packaging" cols="50" rows="5"></textarea>
</td>
</tr>
<tr valign="baseline">
  <td nowrap align="right">&nbsp;</td>
  <td><input type="submit" value="POST RECORDS"></td>
</tr>
</table>
<input type="hidden" name="MM_insert" value="form1">
</form>
<p>Search for products and their alcoholic percentages.<a href="ublsbqueries.php">CLICK
HERE </a></p>
<p>Check out on the packaging of each product.<a href="ublsbqueries1.php">CLICK HERE
</a></p>
<p>Check out the quantity of beer on the market.<a href="ublsbqueries2.php">CLICK HERE
</a> </p>
</div>
</body>
</html>
<?php
mysql_free_result($Recordset3);
?>

```