**SAVANNAH DAIRY FARM MANAGEMENT SYSTEM.**

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**SOFTWARE PROJECT 1**

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## DECLARATION.

I Kimanthi Martin Gikundi hereby declare that this project proposal is original and has not been published or submitted for any other diploma award to any other university before.

Signature…………………….. Date…………………………

NAME OF SUPERVISOR: Mr. Kevin Tuei

Signed…………………………. Date………………………

## Abstract

The dairy sector has been faced by the challenge of management of resources. The introduction of a computerized diary management system will help to overcome this problem. A research was conducted to determine the challenges faced by the diary sector about their way of handling their activities manually. Interviews were conducted to on some workers from different dairy farms about their experience and how they handled their activities. The dairy workers were also issued questionnaires to fill which contained questions regarding the dairy farms activities. After the research was over the results obtained were as follows: 1.) the workers stated that there was sometimes misplacement of records. 2.) It wasn’t easy to keep track of the records made since they had to record everything from start in case of an update hence tiresome. 3.) Their old manual system of record keeping was prone to errors and 4.) Poor security of the records since it can be accessed by anyone. It was concluded that introduction of a computerized system would be beneficial in managing the dairy record keeping.

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### CHAPTER ONE

# INTRODUCTION

A dairy farm is an agricultural field that deals with receiving milk products, processing milk calculating each farmer’s quantity of sales and paying back with a rating that is determined by the prevailing milk demands.

In a dairy farm there are various departments like Production department, health department, consumption department and many others. All these departments’ perform different tasks which need to be well coordinated to ensure smooth running of the firm. Dairy farms have a wide range of information that needs proper record keeping and so it needs a well-developed system for keeping all these records.

## BACKGROUND OF THE STUDY.

In Ojede’s dairy farm the dairy management system will keep a record of the animals, feeds, workers, products, clients, their health and orders made by clients. For the animals it will keep records about breed, age, weight among others. Concerning the age for the animal to be sold it should at least have a minimum age of 13 years and the price at which it’s sold is determined by the animal weight. The price while purchasing the animal a deposit is allowed followed by a minimum of six months installment. The individual can also pay the price at once if capable. For the feeds the person in-charge records the amount and what type of feed has been issued out. In-case of shortage of the feeds he or she has to collect others from the store where the store keeper records what has been taken, when and the amount. The clients’ information is recorded for references and also to keep track of payments made by the clients. Every detail about workers is also recorded to know specifically who is in-charge where, when and at what time. The health is also recorded to check if they are in perfect health. Their products and orders made are recorded and where to be delivered, at what time and where.

PROBLEM STATEMENT.

The existing system has various challenges as explained.

1. There is misplacement of records. Since the recording is done manually it’s easy to misplace the files containing the records.
2. There isn’t security of the records. Since the filing of the records is stored in cabinets anyone can access the files.
3. It is tiresome and takes a lot space. The information regarding the details of all the dairy activities in the farm has over years been kept in books. Especially on retrieving important details and on case where such books get lost, such details are forgotten.
4. Also the system has not been capturing details of the sold animals in dairy farm. The existing system cannot produce a production report, consumption report and health reports of the registered animals in case a needed.
5. Also records concerning the animal health, consumption and production has over years been recorded manually where updating them is a problem and getting them when needed is time consuming.
6. The existing system also does not allow the user to view the animals registered in a farm, the sold animals and some registered animal details.

## Objectives of the study

### Major objective

The major objective of this project is to come up with a system that can ensure safe record keeping of important details in the dairy farm. The system is expected to have a database where all the farm records can be posted by the respective persons.

**Specific objectives**

* To develop a system that can allow animal registration capturing their Id, breed, date registered and calving times.
* To develop a system that can enable user update on records of animal production, consumption and health details.
* To develop a system that can print out a report of animal health details, overall production details and consumption details.
* To develop a system that admin can login, add user, update animal details and add animal’s

## SCOPE AND LIMITATIONS OF THE STUDY.

In the development of the proposed system, I would like to focus on record keeping by creating a platform for capturing the relevant details. I will also go beyond and provide a platform where the users to the system can update these details and view the existing animal details. I will ensure the user can view sold animals. The system will be able to print out various reports when prompted to. The admin to the system will be able to add unlimited number of users to the system.

## Justification of the study

The system has its significance to the users (admin and registered users) whereby it will be able to wipe out the existing challenges in record keeping. There is no farm that has been able to come up with a scheme whereby clients can view registered animals and their details. The system therefore, will open an avenue where such dairy farm can be able to fetch the existing market in the dairy farming industry. If a company offers services of viewing all types of animals, clients will not be bothered to contact any other farm but them. Getting various reports as pertains animal details has been a challenge. The system aims to ensure reports regarding animal health, production and consumption can be printed out to the client on enquiry. There major advantages that will be brought upon by the proposed system. There will be safe record keeping of important information to a dairy farm. Easy retrieval of data by printing out reports when needed.Fast update to the data in the system. Eliminating paper work in the office. Time saving. Save on cost of buying files and books

CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

A dairy firm is an organization that deals with all what pertains dairy animals. These include managing milk production, consumption and health matters of the animals to ensure their high productivity. It is often organized with numerous local branches and primarily located near towns or in towns or busy city areas.

Dairy farms primarily serve farmers who are registered to a dairy firm with services like providing fodder ad concentrates for their animals on an affordable price, allocating a veterinary officer to attend to their animals on health matters like vaccination and disease treatment as well as calving services and collecting animal milk from various system provide a rating and paying back to the customer’s monthly each according to his or her production quantity. Animal registration in the dairy farms and from the farmers is among the other tasks in the dairy farm. In the area of study, many dairy farms that have been operating have been doing so but have been leaving out vital functionalities like printing vital reports on demand. The systems that have been in operation and that many farms are using has not been providing a platform where users can view the animal details and allow the admin to update anytime need arises. It has not been enabling the firm to keep a record of registered animals and sold animals. Mostly, the firms provide services without proper record keeping. For example in case a veterinary is sent to attend an animal in a farmers home or even within the firm, the veterinary will go and live a written report to the farmer which in case of disposing it the farmer cannot be able to retrieve the date and type of service provided during the accounting period.

The current system works in interactive mode with departmental staff and to coordinate their activities and facilitate running the organization. The interaction online through a web browsers and is manually through a many office books and files.

Some information about the farm progress, location and milk rating is available on the internet. Either important records like consumption production and animal health details are recorded manually in the files and office books. It’s tiring for a staff to record all these details in books and retrieving them becomes another tiring task.

### CHAPTER THREE:

# METHODOLOGY

## 3.1 Introduction

The proposed system is supposed to help solve corporate record keeping situation whereby the users can update various animal details under one platform. The system will be providing vital functionalities and periodic reports on demand, viewing of all registered animals, their health details, consumption & productivity and offer animal selling service.

To accomplish this project, data is supposed to be collected using various techniques such as observations, questionnaires, sampling and interviews. The data collected will help in designing and developing a system with correct user requirements that will be geared towards solving the record keeping problem.

The final product of the project will be a web based system which will provide an online record keeping system of all the animal under one platform. Once the system has been developed, it will be made available in mainstream browsers, and then advertised via the social media sites such as Twitter, Facebook and instagram for dairy farms to adopt it.

3.2 Methodology

When developing the system, one of the system development methodologies that will be best suited for the project will be used.

For this project, agile development methodology will be used. It is based on incremental, iterative approach. This methodology is open to changing requirements over time and encourages feedback from the end users and does not require an in-depth planning at the beginning of the project.

The goal of each iteration is to produce a working product that satisfies the customer

**Sources of data**

*Primary sources*

This is the first hand information that we will acquire from the parties involved in the car rental industry. In analyzing the requirements of the proposed system, a number of data collections tools will be employed. The primary data collection tools to be used are to administer questionnaires to the parties involved. Other method to be employed is observation.

*Secondary sources*

This is the information obtained from already documented sources. Those sources to be used include;

## Internet

The internet will be a useful tool since it will help in doing a research on how the current system can be improved and how the new system will be favourable to the users.

## Journals

Published books and journal by scholars in the field will be read and valuable concepts derived on how to carry out the process. We will be able to review what others have done on such web related systems. The journals are quite comprehensive and we are glad they will provide a lot of insight into how the system can be implemented and which disciplines have benefited from this system.

## Data collection methods

*Questionnaires*

Questionnaires are a set of structured questions.

The questionnaires will be prepared and distributed to the users regarding the use of the system, problems facing the users and the shortcoming of the manual system. Both closed and open ended questions will be used in the questionnaire so as to get adequate information concerning the basic operations in the enterprises to gather requirements.

Questionnaires are quickly and efficiently, relatively cheap way of gathering information and also helped respondents to maintain their anonymity.

**Preparation**

The questionnaire will be prepared using Microsoft word office and be well sectioned to provide an easy environment to gather data. The questionnaire will be divided into THREE main sections

1. Section A: Basic Details – Personal Details
2. Section B: ADMIN– To be filled by the administrator/hire firm owners.
3. Section C: CLIENTS – To be filled in by the departmental staffs.

**Administration**

The questionnaires will be administered manually where the various customers (clients) identified will make tremendous contribution. The questionnaire will also be administered to a number of administrators and the car hire owners who will give a great contribution and support.

## 

## 3.6 Budget

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | ITEM | PURPORS | QUANTITY | PRICE | TOTAL |
| 1 | Laptop | Used to keep information | 1 | @40000 | 40000 |
| 2 | Internet | Used for searching some information | 5GB | @500 | 25000 |
| 3 | Printing paper A4size | Printing proposal | 2 | @500 | 1000 |
| 4 | Hub | For connecting pc and sharing information | 1 | @2000 | 2000 |
|  |  |  |  |  | Total 45500 |

## 

### CHAPTER FOUR

# INTRODUCTION

This chapter is about getting information and determining requirements. Here the responsibility includes only requirement determination, not the design of the system.

## Functionality of the current system.

The system works in interactive mode with departmental staff and to coordinate their activities and facilitate running the organization. The interaction online through a web browsers and is manually through a many office books and files.

Some information about the farm progress, location and milk rating is available on the internet. Either important records like consumption production and animal health details are recorded manually in the files and office books. It’s tiring for a staff to record all these details in books and retrieving them becomes another tiring task.

## Users to the system to the proposed system

Department staff

Administrator

## Functional requirements of the proposed system

On consulting the managers in the farm, facts are that the system shall make a note of a database of the user accounts. This system will have two kinds of users.

The first user will be a staff who must have been added by the administrator. The staff will be able to update and submit some details in the system.

The second user will be the administrator who adds the staffs to be users of the system, he can also edit and delete various details in the system. He also prints out consumption, production and health reports as available in the system.

## Non-functional requirements.

The system must be error free in the common web browsers available to users for example Mozilla Firefox, Opera, Internet Explorer, Safari and Chrome. The system should be fast enough to inform the user about its current state.

The system must not contain errors making other system functionality unavailable or even user being disturbed by errors while busy working with the system.

## Design requirements.

The system must work in a form of online web application.

**Implementation requirements.**

The presentation layer of this system has to be implemented in HTML Framework.

**System user interaction**

**Departmental Staff**

Staffs interact with system online through a computer to be able access the site, update records and view various details.

**Admin**

They use the system to manage animal details, add users and print various reports. He also makes major updates to the system by editing and deleting some details.

Unified

Modeling language

(uml)

(diagram);

Use case diagram

ADIMIN.

unified modeling language

Diagram

STAFF

### CHAPTER FIVE

## Introduction

This chapter will cover the details of the proposed system in great depth showing all its functionalities to yield outputs**.**

## Functionality of the proposed system

The system will work in interactive mode with departmental staff and to coordinate their activities and facilitate proper record keeping. The interaction is online through a computer web browser.

A staff logs into the system given he/she is registered as a user to the system and the information is stored in a staff’ table in the database. This information aid in facilitating operations in the system. The staff can update various records in the system submitting them to be stored for future reference. He can also be able to view the animals registered in the system and the ones sold together with other animal details available. After all this He logs out.

The admin to the system too logs in to the system with the right credentials as an admin. On logging in he can manage animal registration, sell an animal, add breed and add a user either as another admin or a normal user. He can also update production, consumption or health details of the animals. He will also be able to view registered animals and sold animals.

The admin can also print a report of overall production, animal consumption and health.

**Users**

Department staff

Administrator

Functional requirements**.**

The system shall make a note of a database of the user accounts. This system will have two kinds of users.

The first user will be a staff who must have been added by the administrator. The staff will be able to update and submit some details in the system.

The second user will be the administrator who adds the staffs to be users of the system .He can also edit and delete various details in the system. He also prints out consumption, production and health reports as available in the system.

**Activity diagram for the admin.**

Start

Invalid

Valid

Consume

**Activity diagram for the staff:**

Invalid

## Conclusion

The proposed system shall entirely improve the current system on the major issues that pertains record keeping. It will be cost effective and easy to use. It will also reduce paper work in the offices which takes a lot of office space. The issue of report printing will help save time taken by the staff in writing the report. The proposed system is open for any relevant improvement as they arise in the dairy firm

## References

BOOK REFERRED:

•Book Name: PHP6 and My SQL

•Author Name: Steve Suehring, Tim Converse, and Joyce Park

SITE REFERRED:

•http://www.w3schools.com

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•http://www.banasdairy.com

VBN