**FARMERS INTERACTIVE**

**WEB-BASED SYSTEM**

**ELLENA AUDREY BARASA**

**BIT/0043/16**

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1. **DECLARATION AND APPROVAL**

I, Ellena Audrey hereby declare that all the information in this research is my own work and has not been presented anywhere else before and should not be copied by any other person without my permission.

**Name: Reg. Number Signature Date**

Ellena Audrey BIT/0043/16 **………………. ……………….....**

The undersigned certify that they have read and hereby approve for acceptance of Kibabii university information system proposal entitled (Campus Online Job system)

**Supervisor(s)**

**Name:** Roselinda Maroko

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**Signature: ………………………………… Date: …………………………………**

**ABSTRACT**

Farming is an economic activity carried out by most people. It includes planting of crops and foodstuffs, poultry, dairy, beef among many other practices.

Animal farming is an economic activity that is taken on by many farmers. It is a type of farming that is concerned with the rearing of domestic animals. Quite often it is connected to many other kinds of farming for example horticultural, foodstuff farming and many others. This kind of farming involves many others for example beef farming, dairy farming, layers, broilers and many others.

Rearing of these animals specifically means feeding them, ensuring their safety and taking care of their health. Domestic animals usually don’t give a hard time to the farmers for their safekeeping; they eat grass, leaves, fodder, hay and other readily available foodstuffs. Well taken care of animals give back to the farmer quality profits. There are also manufactured foodstuffs for some of these animals which can be accessed in agro vets. These foodstuffs range from different animals and in different sizes. There are foodstuffs for young animals, 3 days old etc. according to specific animals and their age. These animals have their different kinds of medications at different levels. There are those at toddlers’ stages and after different intervals according to a specific animal.

Crop farming is the planting of crops for various reasons. Cash crop farming is the planting of crops for the soul reason of selling and getting money. Cash crops include coffee, tea, pyrethrum just to mention but a few. Another kind of crop farming includes subsistence farming. This is where crops are grown for the purpose of domestic uses at home though sometimes they could be sold in few cases. These crops include beans, maize, cassavas, yams, arrowroots and many others.

# ABBREVIATIONS

# PHP hypertext pre-processor

DBMS database management system

MYSQL my structured query language

CSS cascaded style sheets

ROM read only memory

GUI graphical user interface

SDLC system development life cycle

# Operation Definition of Term

# **Farme**r a person who takes on farming activities.

**Animal farming**  a farming activity that includes the rearing of domestic animals.

**Crop farming**  a farming activity that includes planting of crops

**System** it is a collection of elements or components that are organized for a common purpose.

**Information** it is a processed data.

**Confidentiality**: ensuring disclosure of information only to the people with authority to see it.

**Prototype**: an early approximation of a final system or product.

# **CHAPTER ONE**

# **INTRODUCTION**

## **Background Information**

The internet has changed the face of the world and make receiving and sending of information spread widely and easily, this can be done at the comfort of people’s hands regardless of their location and without wasting any time. Compared to when internet had not evolved, before information could be received another end, it took time depending on the distance of the journey. The proposed Farmers interactive system is a web based system which makes use of the internet. Farming is an economic activity carried out in the most parts of this country. Farming is an activity that has been taking place over the years and it’s profitable to many who pursue it. Farming has been divided into two major types; animal farming and crop farming.

In this country, animal farming has been taken up by many it involves a farmer acquiring a domestic animal to which they start rearing. These domestic animals are a variety and they include chicken, cows, pigs, ducks, and goats among others. Quite often these animals are kept for various reasons majorly being for meat or for sale or for domestic purposes. Most farmers have got a variety of these domestic animals and quite often they keep them in one place.

Animal farming is in Kenya is done by use of a little bit of manual methods that do not have assurance of tomorrow. There is no proper way where a farmer gets to have appropriate ways of knowing how things should be do done. The only way get to have a say about confidence is through long periods of trial and error methods. There’s no clear prescription of what should be done to take care of lives at what stage. This leads to poor feeding and medical protection to livestock which in return is a loss to the farmer. The presence of veterans doesn’t prove to be helpful to all farmers as not all of them do get access to veterans or agro vets. At the same time it is sometimes expensive for the farmers to pay the veterans as they offer their services to them.

Crop farming is another major farming activity that is widely taken up by the citizens of this country. A considerable amount of Kenyans are involved with cash crop farming and most of them in subsistence farming. Subsistence farming is majorly for consumption, but most farmer do not record the best results. The food that is harvested after their soiling is hardly enough to see them through the next season: leading to often records of hunger and famine in the country. This is due to a few factors including improper farming techniques by the farmers due to not having exposed to better farming techniques. Most of these farmers are not sure which crops to grow in which season and hence monocrop quite a lot draining the fertility of the soil with one kind of crop.

Cash crop farmers on the other hand have not been recording the best results as the quality of their products is not good. The returns in their labor is very poor not owning up to the costs they incur.

## 1.**2 Problem statement**

### The current process by which farmers acquire knowledge and skills to enhance their farming is tedious and unsure. Quite often most of them acquire from very long-term trial and error methods in preferred uses for example the use of fertilizes.

**1.3 Justification**

The proposed system allows farmers to acquire and engage new skills at any point of time from any place. It also allows them to interact with other farmers from outside and exchange ideas with them.

# **1. 4 Purpose of the project**

The purpose of the project is to develop a web based farming aid system that helps all kinds of farmers from all corners to easily gain access to most of their unanswered questions concerning farming and learn and exchange new ideas from their fellow farmers.

**1.5 Specific Objectives of the study**

Listed below are the objectives of this project work;

1. To capture farmers details.
2. To create an account for a farmer.

b) To allow farmers to login and logout.

c) To allow farmers to interact.

d) To allow farmers to ask questions.

e) To allow farmers to view replies.

## **1.6 Scope of the Study**

This project’s work is to develop a web based farming aid platform for farmers across Bungoma to aid their farming.

This computer based software basically serves two major functions that is;

1. To help farmers learn new tips and skill in their farming techniques.
2. To help farmers to interact and share and exchange ideas with other farmers from all over.

The overall time for this projects completion is 4months and the cost for it is 300,000sh.

## **1.7 Significance**

The project work will help in a good number of ways that is;

1. It will help farmers learn new farming techniques this because the system allows sharing of information and ideas with the other users of the same system who are farmers.
2. Allows farmers to share and exchange ideas hence allowing them to have a variety of options in their farming skill.
3. It will indirectly help in the increase of products due to a wide exchange of information which is aimed at making better animal and crop farming.
4. It is convenient as it can be used anywhere even in remote places and can be accessed by all farmers.
5. It will lead in the reduction costs of labor as with this newly acquired skills the farmer knows what to do when for quality returns.
6. It will save a lot of time for the farmer on doing excess unnecessary things and rather he/she aims at a specific goal at a certain time.

## **1.8 Deliverables**

### **1.8.1 System design document**

This system will contain the following design documents;

1. Interface design document that is flow chart for the flow of activities.
2. Database design document that is the Entity Relationship Diagram for database design.

### **1.8.2 Test results**

The system will have the results after testing which shows the working of the system.

### **1.8.3 Data capture**

The system will capture farmers’ details from the farmers.

## **1.9 System Requirements**

### **1.9.1 Functional Requirements**

1. The system shall be able to create an account for the farmer
2. The system shall be able to allow farmers to log in and out of their account and send request questions.
3. The system shall allow a farmer to send a reply to any question.
4. The system shall allow a farmer to view forwarded questions and answers.

### **1.9.2 Non-functional Requirements**

1. The system should be able to provide security of the farmers accounts for example by use of strong passwords.
2. The system should be able to work on different platforms i.e. work on different Operating Systems.
3. The system is expected to provide the definition of error and buttons like BACK, CANCEL and OK to allow the user to choose the appropriate action.

# **CHAPTER TWO**

# **LITERATURE REVIEW**

## **2.1 Introduction**

Farming is an economic activity carried out in the most parts of this country. Farming is an activity that has been taking place over the years and it’s profitable to many who pursue it. Farming has been divided into two major types; animal farming and crop farming

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In this system, a farmer logs in the system if they are new members or first time users with the help of a username and a password. A farmer requests to place a question or ask a question in the ask section. There they place their question and wait for replies; whereby they requests to view the suggested answers from other farmers. A farmer can pose as many questions and is able to view the replies in the answers section. A farmer can also view posed questions by other farmers and react to them in the reply section. A question asked by another farmer from anywhere can be replied by another farmer if they have experience in the asked area. It is not necessary for two farmers to know each other before they react to requests because the system is online hence anybody can react to the question.

## 2.2 **Farmers’ interactive web-based system.**

The proposed farmers interactive System will be developed to solve the problem affecting the manual system in use. It is designed to be used online thereby relieving farmers from much stress as experience in the manual system as this system will do analysis and storing of information either automatically or interactively.

The proposed system will also have some important features such as accuracy in handling data, fast rate of operation and excellent response time. It will also be flexible as it can be accessed at any time and can easily store data and fast retrieval of the data. Since the system will be accessed online it can also be accessed at any geographical area provided there is presence of internet.

The security of the proposed system is enhanced through authentication whereby the user is required to login using his or her details such as the username and password which when valid allows the user only to view the information relevant for his duty.

## **2.3 Conclusion**

In conclusion, this system will help farmers to carry out their farming activities in an easier manner. The security of information is guaranteed hence there is a need to integrate this system.

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# **CHAPTER THREE**

# **METHODOLOGY**

## **3.1 Introduction**

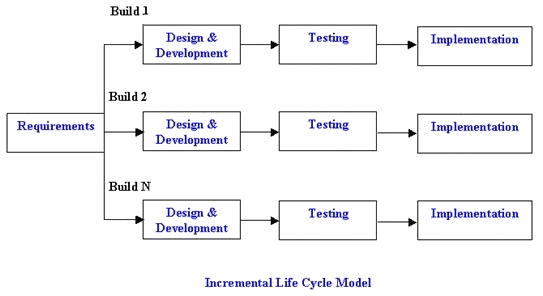
Following a careful study and evaluation of several design methodologies, I decided to use Incremental methodology for my project keeping into consideration several factors;

Incremental model generates working software quickly and early during the software life cycle.

* It is more flexible – less costly to change scope and requirements.
* It is easier to test and debug during a smaller iteration.
* Makes it easier to manage risk because risky pieces are identified and handled during its iteration.
* Each iteration is an easily managed milestone.

## **Incremental Methodology procedure**

**Fig. 1: Incremental Model procedure**



## **3.3 Incremental Model Phases**

1. **Requirement phase**

In this phase of incremental model the basic requirements are identified by the product analysis expertise. This phase involves understanding the system functional requirement by the requirement analysist. After completely understanding the user demand the analyst readies a product requirement tools documents and categorized the functionality of the system. On the bases of functional categorization, the analyst decides how to accomplish the task completely in step by step modulation of the actual product. This requirement phase plays an important role in the development of product under incremental model of software life cycle.

1. **Design and Development phase**

In this phase of incremental model of SDLC the design of the system functionality and the development process is done successfully. Incremental model use design and development phase each time when the new functionality and/or new version of the product have to be developed.

1. **Testing phase**

The testing phase of the incremental model checks the behavior of each existing function in the system under development as well as the additional functionality. Several testing methods are used under this phase to check the behavior of the each categorized function and system respond.

1. **Implementation phase**

Implementation phase of incremental model enable the coding phase of the under developed system. This phase includes the final coding of the system that design in the design and development phase and tested the functionality under testing phase. After completion of this phase the product working is enhanced and upgraded up to final system product.

**Appendices**

# **Tab. 1: Schedule (Project plan)**

My project plan will be as follows;

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **TASK** | **WEEK 1** | **WEEK 2** | **WEEK 3** | **WEEK 4** | **WEEK 5** | | **WEEK 6** | **WEEK 7** | **WEEK 8** |
| *Requirement*  *Analysis gathering* |  |  |  |  | |  |  |  |  |
|  |  |  |  |  | |  |  |  |  |
| *Proposal Defense* |  |  |  |  | |  |  |  |  |
| ***Module 1***  *Requirement phase*  *Design and development*  *testing*  *Implementation* |  |  |  |  | |  |  |  |  |
| ***Module II***  *Requirement phase*  *Design and development*  *testing*  *Implementation* |  |  |  |  | |  |  |  |  |
| *System testing* |  |  |  |  | |  |  |  |  |
| *Project presentation* |  |  |  |  | |  |  |  |  |
| *Project Documentation* |  |  |  |  | |  |  |  |  |
| *Submission* |  |  |  |  | |  |  |  |  |

# 

# **Tab.2: Budget**

I will incur the following costs as we implement our project.

|  |  |
| --- | --- |
| **Item type** | **Cost (Kshs.)** |
| Laptop | 60,000 |
| communication | 1,500 |
| Internet | 2,000 |
| Transport | 2,500 |
| Miscellaneous | 7,000 |
| Printing documents | 500 |

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