**Software Requirements Specification**

for

**PROFIT PEN SYSTEMS**

Version 1.0 Draft

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## **CHAPTER ONE**

## **BACKGROUND**

According to Engineer Kamanyire , his business STS POULTRY AND ANIMAL FEEDS which deals with both animal and poultry feeds. He a faces a challenge of time consuming information retrieval .

The business is expected to grow and its only prudent to take advantage of the available technology to establish a computer system that will store information and ensure faster information retrieval about the business .

The computer system will be installed on his laptop which will also be offline as this ensures safety of his business information.

## **CHAPTER TWO**

## **PROBLEM STATEMENT**

### **2.1 Statement of the Problem**

According to Engineer Kamanyire , he always checks on his records time and again he finds it time consuming to navigate the large records using Microsoft Excel .The computer system will reduce the amount time used when retrieving the information.

### **2.2 Objectives of the Project**

#### **2.2.1 General Objective of the Project**

To provide new and alternative way for STS Poultry and Animal feeds to retrieve business information in reduced period of time.

#### **2.2.2 Specific Objectives of the Project**

The specific objectives of the project are:

1. To study the current system being used by STS Poultry and Animal feeds to keeps its business records in order.
2. To identify the requirements for developing the Profit Pen computer system that can counter challenges of the current system.
3. To develop the Profit Pen system
4. To test and validate the developed Profit Pen system to establish whether it addresses the general objective.

## **CHAPTER THREE**

## **REQUIREMENTS SPECIFICATION**

Specific requirements are split into two that is user and system requirements.

1. User Requirements

The Profit pen system will be accessible to only the staff of STS Poultry and animal feeds . The systems users will only include the executive staff.

Executive users will be required to provide mandatory information in order for them to use the system.

1. System Requirements

These are requirements for the system to be able to perform its functionality efficiently and effectively.

1. Functional Requirements

* The app should be able to input purchase details.
* It should be able to display the purchase details.
* It should be able to input the sales details.
* It should be able to display the sales details.
* It should be able to display profit of each sale.
* It should be able to show the stock balance of each item.

1. Non-Functional Requirements

* The app should be a Web based system.
* The first version of the app should be able to run on all web browsers.
* Versions of the system that run on other platforms like iOS for Apple phones, Windows and Linux will later have to be developed.
* The app should have a local server that is started on reboot.
* The app should automatically update the database whenever a user submits input.

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## **CHAPTER FOUR**

## **SYSTEM DESIGN**

### **4.1 Process Flows**

#### **4.1.1 Display Customer Details**

**Display Customer Details Process Flow Chart**



**Display Customer Details Process Description**

* Existing customer opens app.
* The user fills in their meter number; if the meter number exists in the UEDCL database, the app should then display the customer’s details. If the meter number does not exist in the database, the system should prompt the user to fill in an existing meter number.

#### **4.1.2 Display Customer Purchase History**

**Display Customer Purchase History Process Flow Chart**



**Display Customer Purchase History Process Description**

* Existing customer opens app.
* The user fills in their meter number; if the meter number exists in the UEDCL database, the app should then display the customer’s purchase history. If the meter number does not exist in the database, the system should prompt the user to fill in an existing meter number.

#### **4.1.3 Display Outstanding Balance**

**Display Outstanding Balance Process Flow Chart**



**Display Outstanding Balance Process Description**

* Existing customer opens app.
* The user fills in their meter number; if the meter number exists in the UEDCL database and it points to a post-paid meter, the app should then display the customer’s outstanding balance. If the meter number does not point to a post-paid meter, the system should prompt the user to fill in another meter number.

#### **4.1.3 Display Current Notifications**

**Display Current Notifications Process Flow Chart**



**Display Current Notifications Process Description**

* User opens the app.
* If the user does not have a UEDCL meter number, then they are able to view up to 10 consolidated current notifications.
* However, if the user has a UEDCL meter number, they input it in the system and the system returns all current notifications in the user’s area.

## **CHAPTER FIVE**

## **SYSTEM IMPLEMENTATION**

### **5.1 Project Development Stages**

The project will be implemented in two phases that is Phase One and Phase Two.

In Phase One, the following will be implemented:

1. Display existing customer details.
2. Display customer purchase history.
3. Display outstanding balance of post-paid customer.
4. Capture customer queries, complaints or feedback.
5. Display to notifications and alerts as issued by the UEDCL including planned and unplanned shutdowns for the concerned areas.
6. Provide links to the UEDCL Official website.

In Phase Two, the following will be implemented:

1. Customers applying for power supply
2. Customers purchasing power and getting energy tokens.

### **5.2 Project Schedule**

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| --- | --- | --- |
| **##** | **Task** | **Schedule** |
| 1 | Research and familiarize with development tools to use | Week 1 - 2 |
| 2 | Agree on development tools and DBMS to use | Week 2 |
| 3 | Design database schema | Week 3 |
| 4 | Develop app | Week 4 - 8 |
| 5 | Test and validate app | Week 9 - 12 |
| 6 | Project Report and Documentation | Week 13 - 14 |
| 7 | Launch the app | Week 15 |

### **5.3 System Developers**

1. Ms Kyomuhendo Babra
2. Mr. Karuhaga Delta
3. Mr. Wandobire Brian

## **CHAPTER SIX**

## **REFERENCES**

Edward Kayiwa, (2016). Smart phones driving digital penetration, August 2016, <https://www.newvision.co.ug/new_vision/news/1427964/smart-phones-driving-digital-penetration> accessed on 17/08/2018.