**PROPOSAL**

**For**

**ARREARS PAYMENT ARREARS (APA) MANAGEMET SYSTEM**

**Version 1.2 approved**

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# **Introduction**

## **Background**

National Water and Sewerage Corporation (NWSC) is a public utility company 100% owned by the Government of Uganda that is committed to supplying clean water to people in all parts of Uganda. Its main goal as a Corporation is to be the leading customer service oriented utility in the world. However, in its quest to attain this goal, it is faced with customer problems, the biggest being arrears i.e. large outstanding unpaid bills. Many customers fail to pay their bills on time for various reasons including abnormal shooting up of the customer bill usually caused by pipe leakages, illegal water usage, estimates made on defective meters, suppressed accounts and many others. In some cases, customers never pay their debts at all causing big losses to the corporation.

The Corporation has however made a provision for customers with outstanding bills to still enjoy the privilege of continuous supply of water despite their accounts being in arrears. The Corporation has an Arrears Payment Agreement (APA) which indicates the amount of money the customer owes the corporation, how it should be paid, usually in monthly instalments, how much should be paid (this is usually according to the customer) and the date by which the customer should have cleared the outstanding bill.

Normally a customer with unpaid bills gets suppressed, that is he/she gets cut off from water supply, or his/her account gets closed (includes removing the meter on ground), according to the terms of NWSC. However, any customer who still wants to get the services of NWSC may negotiate with the Corporation by signing an APA that allows one to get water as one clears one’s arrears, as well as the current bills. Failure to comply with this agreement leads to immediate disconnection.

## **Problem Statement**

Over the years the number of the customers with arrears has gone up. Even with the APA system in place, it has increasingly become hard to follow up these customers under this arrangement. Many of these customers don’t really pay as stated in the agreement and their failure to pay only registers more debts in the corporation because they are still accessing water.

## **Aims and Objectives**

The main purpose of this project is to design a software system that effectively monitors and follows up the customers with arrears and ensures that all arrears are paid according to the agreement. This is to simplify the work of the Commercial officers in as regards to tracking the customers who have failed to comply to the agreement.

Other objectives of this project include;

* To design a software system that automatically notifies the customers when they are due for payment.
* To design a software system that automatically notifies the NWSC Commercial Officers when some customers are due for payment.
* To design a software system that automatically notifies the NWSC Commercial Officers when a customer makes a payment.
* To design a software system that captures the payment details of the customer in regards to payments made on the arrears.
* To design a system that automatically generates monthly reports that show how many arrears have been registered vs the arrears that have been cleared in a particular month.
* To design a system that filters out the defaulting customers and automatically put them on a priority list. This list will contain the details of customers who have failed to comply to the agreement.

## **1.3 Project Significance**

The project will help the Corporation to collect all the revenue due with an ease of follow up and also simplify the work of the Commercial officers in as regards to tracking the customers who have failed to comply to the agreement.

## **1.4 Project Scope**

This project will only consider the four steps of the Software Development Lifecycle which are Requirements Gathering and Analysis, system Design, Implementation and Coding, and Testing. Any steps other than these will not be considered and are out of scope.

The system to be developed will consider password authentication.

# **Project plan**

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| --- | --- | --- | --- |
| **No.** | **Name of activity** | **Number of days** | **Timeline** |
| 1 | Interviewing NWSC staff to get an understanding of the working of the APA | 2 Weeks | 17th June- 28th June |
| 2. | Develop a Software Specifications Document | 2 Weeks | 20th June -28th June |
| 3 | Design a Software Design Document | 5 days | 24th June -29th June |
| 4 | Coding | 4 Weeks | 26th June- 24th July |
| 5 | System Testing | 3 days | 24th July- 30th July |

# **References**

1. <https://www.nwsc.co.ug>
2. Payment of Arrears Agreement, NWSC Bwaise Branch