**Water Bill Management System**

**Software Requirements Specification**

**Document**

Prepared by

Abhijit Pratap Singh Tomar

Roll no. 07EEBCS002

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# 1 Introduction

The following subsections of the Software Requirements Specifications (SRS) document provide an overview of the entire SRS.

## Purpose

The Software Requirements Specification (SRS) will provide a detailed description

of the requirements for the Water Bill Management System (WBMS). This SRS will allow for a complete understanding of what is to be expected of the WBMS to be constructed. The clear understanding of the WBMS and its’ functionality will allow for the correct software to be developed for the end user and will be used for the development of the future stages of the project. This SRS will provide the foundation for the project. From this SRS, the WBMS can be designed, constructed, and finally tested.

This SRS will be used by the software engineers constructing the WBMS and the hotel end users. The software engineers will use the SRS to fully understand the expectations of this WBMS to construct the appropriate software. The end users will be able to use this SRS as a “test” to see if the software engineers will be constructing the system to their expectations. If it is not to their expectations the end users can specify how it is not to their liking and the software engineers will change the SRS to fit the end users’ needs.

## Scope

The software product to be produced is a Water Bill Management System which will

automate the major water works operations. The first subsystem is a Add Customer option to keep track of customers. The second subsystem is the Update option that changes the data stored about a customer. The third subsystem is a Submit Query option which is used for storing any query that the customer might have and allows modification of subsystem information. These three subsystems’ functionality will be described in detail in section 2-Overall Description.

There are two end users for the HMS. The end users are the water works staff (customer service representative) and customers. Both user types can access all the subsystems.

The Water Bill Management System’s objective is to provide a system to manage a water works office without automation. The system will be able to handle many services to take care of all customers in a quick manner. The system should be user appropriate, easy to use, provide easy recovery of errors and have an overall end user high subjective satisfaction.

## Definitions, Acronyms, and Abbreviations.

SRS – Software Requirements Specification

WBMS – Water Bill Management System

Subjective satisfaction – The overall satisfaction of the system

End users – The people who will be actually using the system

## Overview

The SRS is organized into two main sections. The first is The Overall Description

and the second is the Specific Requirements. The Overall Description will describe the requirements of the WBMS from a general high level perspective. The Specific Requirements section will describe in detail the requirements of the system.

# The Overall Description

Describes the general factors that affect the product and its requirements. This section does not state specific requirements. Instead it provides a background for those requirements, which are defined in section 3, and makes them easier to understand.

## Product Perspective

The WBMS is an independent stand–alone system. It is totally self contained.

**2.1.1 Hardware Interfaces**

The WBMS will be placed on various water works offices.

### Software Interfaces

All databases for the WBMS will be configured using MS ACCESS. These databases include meter numbers and customers information. These can be modified by the end users. The customers information database will contain all the information of the customer such as name, address, phone number, city, meter number and whether or not the customer has any query.

## Product Functions

This project aims at storing information related to the Water Bill Management of a house.

Here, we use the datadase to store the following information about a person, in whose name the water connection is registered-

1.Meter No.

2.Name

3.City

4.Address

5.Phone Number

6.Query

There are four buttons-

1.Submit

2.Update

3.Submit Query

4.Show

The submit button will store the information enterd. In the database and the update button is used if someone wants to update any information like address or phone number.

Submit Query button is used for entering a query in database, and Show button is used for viewing information about an existing customer.

At the top there are three drop down menus-

1.Customer

a)Add

b)Remove

c)Update

d)Show Details

e)Exit

2.Bill

a)Generate

b)Cost

3.Help

a)Instructions

b)Query

The Add of first menu is used for adding a new customer, Remove I used for deleting a customer’s record and Update is used for updating already present information about a customer.The Show Details can be used for viewing information about an existing customer.

The Bill menu is used for estimating the to tal bill amount for a customer.

The Help menu can be used for obtaining instructions about how to operate this application, and it can also be used for submitting any queries.

## User Characteristics

Educational level of WBMS computer software – Low

Experience of WBMS software – None

Technical Expertise – Little

## Apportioning of Requirements

The audio and visual alerts will be deferred because of low importance at this time.

## Assumptions and Dependencies

- The system is not required to save generated reports.

- Credit card payments are not included

# Supporting Information

A system context diagram as well as use cases and use case descriptions have been developed in separate documents.