Software Requirements Specification

for

Yogesh Newspaper Agency

Version 1.0 approved

Prepared by Group 5 – FYMCA

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Yogesh Newspaper Agency

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

Mr.Shirude owns a Newspaper Agency. He has to do customer billing manually. The current manual system is very time consuming and error prone. He needs a software/system which will generate bills for him. This software will be used by Mr.Shirude and his trusted employees on an Office Computer.

1. To provide a software that can reduce the tedious task of billing each and every person manually

2. To design and build a software which can be used by the client for billing purposes.

1.2 Document Conventions

None

1.3 Intended Audience and Reading Suggestions

Types of Readers :

1) Developers

2) Testers

1.4   Product Scope

For objectives and scope of the software refer Assignment 2

Benefits of Software –

1.   Billing process is made easier

2.   Easy retrieval of information

3.   Collect customer information

4.   Provides a convenient solution of billing patterns.

5.   Make an easy to use environment for the user.

Corporate Goals

1.   Since the billing process is made easier with the help of this software, our   client can handle more customers.

2.   This software will help in increasing customer loyalty.

3.   This software can be sold to other News Paper Agencies.

4.   We can keep the data of profit and laws

1.5   References

URL:

https://www.javatpoint.com/software-engineering-tutorial
https://www.guru99.com/software-development-life-cycle-tutorial.html#4

2. Overall Description

2.1 Product Perspective

This is a New, Self-contained Product.

Product will be a Desktop Software and will be used by Client and their trusted employees.

2.2 Product Functions

1. Store Customer information
2. Store newspaper information
3. Login in software as admin
4. Calculate the bill
5. Print the bill
6. Store Bill copy for the client

Main Function

> To calculate the bill for customers

2.3 User Classes and Characteristics

Users of the software

> Client and his trusted employees

Frequency of use

1. Depends when customer will come to pay bill

2. Otherwise once a month.

Technical expertise

> Should be able to operate computer

Educational Level

      Must be able to read and write in English

2.4   Operating Environment

Software Requirements:

1**.** Operating System- Windows 7 or above

Hardware Requirements:

Processor	:	Intel Core Duo 2.0 GHz or more
RAM	:	4 GB or More
Hard disk	:	500GB or more
Monitor	:	15" LCD monitor
Keyboard	:	Normal or Multimedia
Mouse	:	Compatible mouse

2.5   Design and Implementation Constraints

1. **Cost of development**

   - We could not include the facility of monthly bill reminders due to cost constraints

2. **Time duration of development**

   - Product was expected to be developed in 1 - 1.5 months

2.6   User Documentation

User Manual

- We will provide a detailed description of how the software can be installed and used by the client.
- We will provide documents in the format of ppt which will contain flow and working of the software.
- Also ppt will contain recorded videos which will guide our client.

2.7   Assumptions and Dependencies

It's a standalone project so we're not confiding on any external dependencies.

Vision- We were planning to add reminder functionality but if it fails to work it would result in affecting our software or its operating environment.

Payment validation will be done by the owner in the billing system.

3. External Interface Requirements

3.1 User Interfaces

1. UI design 1 (example)

Add Customer:

Name: [   ]

Address: [   ]

Phone No. [   ]

[Submit]   [Reset]

1) Add Admin:

- Less expert knowledge is required to use it.
- Easier to Navigate and can look through folders quickly in a guess and check manner.

- The user may switch quickly from one task to another and can interact with several different applications.

2) Newspaper list

- Admin can view the newspaper list added in the database
- Admin can add, delete or update newspaper information

3) Customer list

- Admin can view customer list.
- Admin can add, delete or update customer information.

4) Subscription List

- Admin can view subscription list
- Admin can add ,delete or update customer subscriptions

5) Bill generation

- Bill can be generated for each customer with the help of his/her unique identity a.ka. contact number.

3.2   Hardware Interfaces

Monitor, CPU, Printer is required

No internet connection is required.

3.3   Software Interfaces

It will be a Desktop Software

User will be our client.

Minimum software – Windows 7 OS

3.4 Communications Interfaces

No communication interface as such needed. System is a standalone system.

4.   System Features

The application will help the task maintaining the purchases in a much
more organized way.
Currently it involves lot of paperwork thus requires time and
is also prone to error thus the benefit with a new system would be that work
could
be done much faster and in a much more accurate manner.
Also the Data for the
Newspaper and will be available very easily

4.1   Maintaining Customer Records:

4.1.1   Description

*The Software Allows the Owner of the agency to maintain and store records
of all customers in specific format. This will reduce the manual paperwork of
the owner while searching for the data of individual customer .*

4.1.2   Stimulus/Response Sequences

Buttons will be present on the home screen where the admin can navigate for
the details of individual customer and newspaper and other functions like
delete and update.

After clicking on the search bar owner has to enter unique key to search a
from database after that list of the customer can be seen on screen.

To generate the bill a separate button will be present in which admin shall
enter the required details to get the bill.

4.1.3   Functional Requirements

"Error message" will be displayed in response to every invalid input, also it
will state what is valid input.

4.2   Add, Update and Delete Customers:

4.2.1   Description

Owner can easily add new customers to the database by filling required fields.

4.1.2   Stimulus/Response Sequences

Owner has to click the Add Customer Button. After clicking the button page will be directed to Add customer page. After filling Mandatory fields user will click submit button. Hence customer details will get saved in database.

To update customer details, admin shall search for a customer by his/her unique identity and then change the details as he/her wants.

To delete the customer details, admin shall search for a customer then delete his/her details.

4.3   Add, Update and Delete Newspaper

4.2.1   Description

Admin can easily add new newspaper to the database by filling required fields.

4.1.2   Stimulus/Response Sequences

Newspaper has to click the add newspaper Button. After clicking the button page will be directed to Add newspaper page. After filling Mandatory fields user will click submit button. Hence customer details will get saved in database.

To update newspaper details, admin shall search for a newspaper by its unique identity and then change the details as he/her wants.

To delete the newspaper details, admin shall search for a newspaper then delete his/her details.

4.3.   Generate Bills

4.3.1 Description :

The main feature of the system is billing. Billing will be done by calculating number of days between two dates and number of newspaper and their prices.

4.3.2 Stimulus/Response Sequences

The Make bill button will direct the user to the new page where selected customer details will be already displayed there ,after that start date and end date will be entered by the user.

5.   Other Non functional Requirements

5.1   Performance Requirements

The system must have following performance requirements-

- Response Time: The system provides acknowledgement once the customer's information is checked.
- Capacity: The system needs to support at least 3000 people at once.
- User-Interface: The user interface should be

5.2   Safety Requirements

- The system shall protect the data and services from unauthorized access.
- System should provide the highest possible security mechanism in order to protect critical information.
- Information transmission should be securely transmitted to the server without any changes in information.

5.3   Security Requirements

Security requirements must cover following areas such as :

- Login Id: Owners who make use of the system need to hold a Logon ID and password.
- Modifications: Any modifications like insert, delete, update, etc. for the database can be synchronized quickly and executed only by admin.
- Administrator rights: The administrator can view as well as alter any information in the Newspaper agency System.
- Network and data security.
- Data validation and sanitization.

5.4   Software Quality Attributes

Software Quality Attributes facilitate the measurement of performance of a software and have following attributes -

Availability : The system is available all the time.

Reliability: The system shall be reliable, shall not produce any errors or bugs.

Usability: The system should be easy to use and learn in every aspect.

Scalability: System should provide options to extend hardware and other services in future.
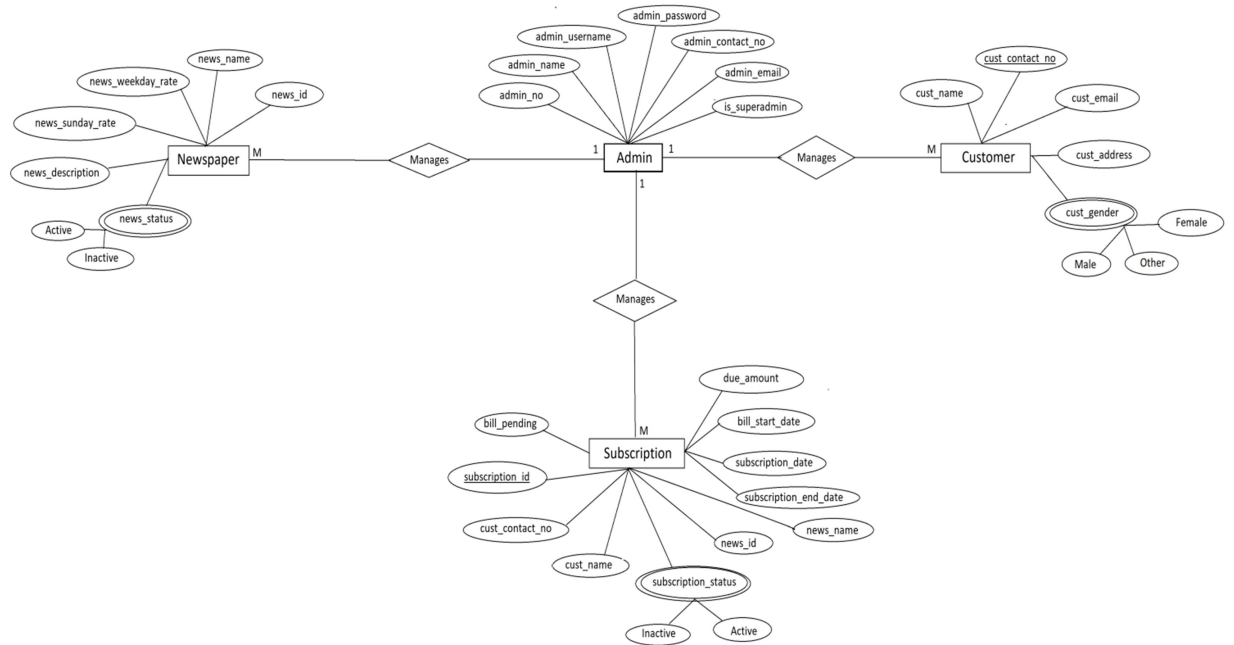
5.5   Business Rules

Business rules are intended to assert business structure or to control or influence the behaviour of the business. A business rule is a rule that defines a specific constraint within the context of a business.

Business Rules could be

1) The cost of service is predefined.

6.   Other Requirements

ERD:

DFD :