Software Requirement Specification

Diploma in ICT

College of Technology - Ratnapura

Submitted by:

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Wing Shoe Billing System

Software Requirements Specification

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Revision History

Date	Description	Author	Comments

Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

Signature	Printed Name	Title	Date
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Table of Contents

1. Introduction

Wing Shoe is a small scale shoe manufacturing institute which is located on Millavitiya, Kuruwita. They manufacture various types of ladies footwear for fulfil the market needs. Currently they keeps their customer information and their shoe store details on physical books which are not organized well and they provide a written bill for their customers. If there is a computerized system would be there it would be very useful and efficiency.

1.1 Purpose

This System Requirement Specification (SRS) document is mainly used as agreement between ender users and developers/ as well as it is used as guide for the developing time. Because of that this document is use by below users

- Client: get understand about the system and verify the requirements
- Programmers: use to develop the system
- Testers: verify and validate the build product
- Maintenance team: understand the system in error correction & upgrading

1.2 Scope

Wing shoe billing system provides below services to its end users

1. User must login to the system by using user account name and the password. There are three types of user accounts which are owner, cashier and store keeper.
2. Cashier account has access to the customer database to add new customer to database, update customer information and edit customer details.
3. Cashier account can generate a bill by providing shoe Design ID, shoe size, quantity, and customer telephone number. System automatically generates the invoice number. System searches customer name and address using the user given telephone number from customer database in the system. Finally it generates a bill with invoice number, customer name, address, shoe designs, sizes, quantities, unit prices, total price, discount if it is available and date and time on it.
4. Store keeper account, can modify the shoe inventory table. He/She can add new shoe designs to the inventory, update exist shoe designs, modify the quantities of shoes in each size and store keeper can edit the unit prices of shoes.
5. Owner account has the access to all the services and databases which are provide by the system.

1.3 Definitions, Acronyms, and Abbreviations

WSBS: Wing Shoe Billing System.
Drop down box: a list of items that appear whenever a piece of text is clicked

1.4 Overview

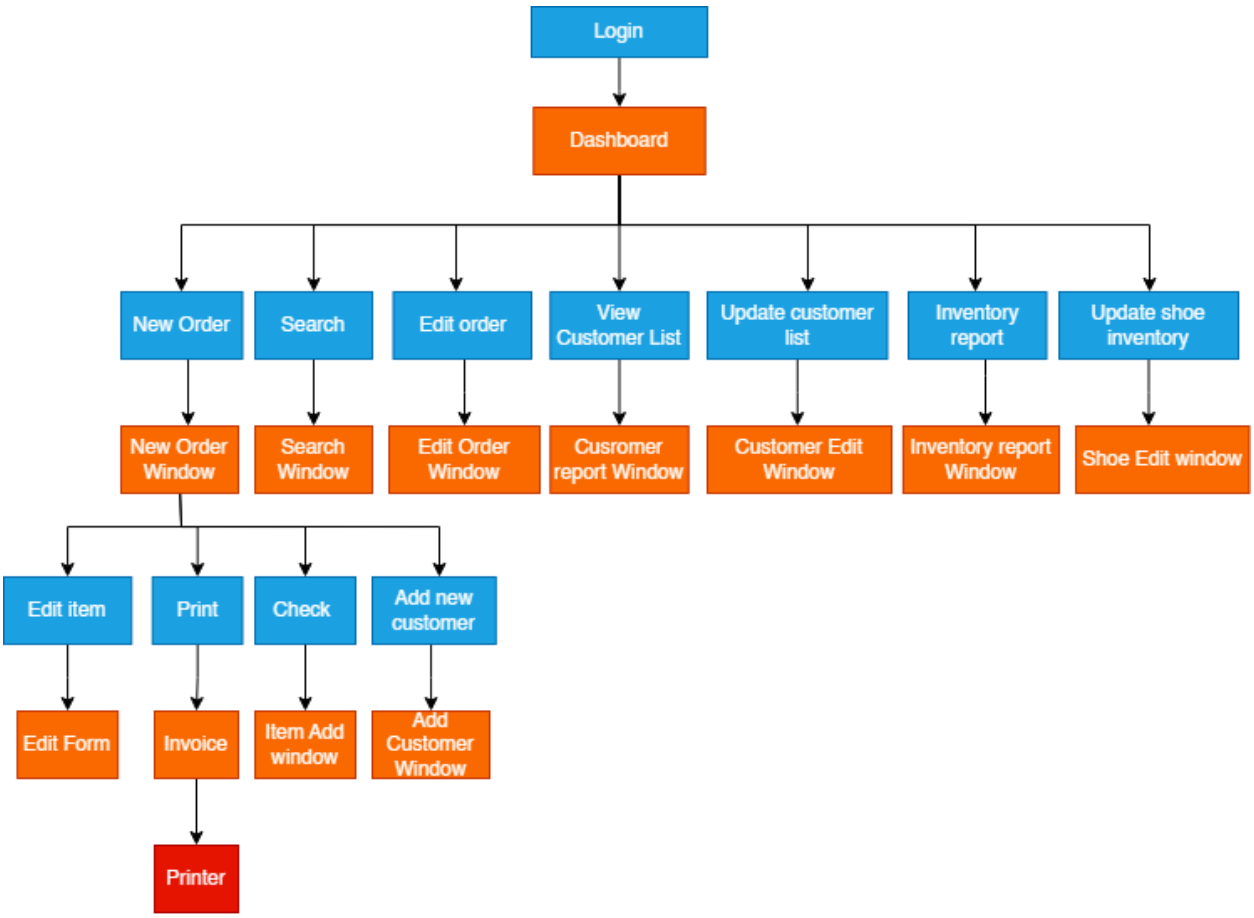
Chapter 1: Introduction – Contains brief explanation about the WSBS
Chapter 2: General Description – Contains factors which effected to the proposed Product
Chapter 3: Design Decision & Requirement
Chapter 4: Change Management Process

2. General Description

The proposed system used by the Wing shoe staff. This system can be access through the desktop computer. Hence the system need to maintain external constrains and limitations.

2.1 Product Perspective

WSBS contain 14 interfaces. Dashboard interface stand to hold 8 interfaces and other interfaces hold remain 4 interfaces via the buttons. Each interface work as below to provide the system services.



2.2 Product Functions

- Ask for username and password in login
- Search and View shoe sizes and available quantities.
- Add shoe design, size, and quantity to the invoice.
- Edit added items to the invoice.
- Remove added items from invoice.
- Add, view and edit customer details.
- Add, view and edit shoe inventory details.
- Add, view and edit customer details.

2.3 User Characteristics

- When entering the design id user may make mistake. Hence select designID through the dropdown box.

2.4 General Constraints

- Company name must be in the receipt.

2.5 Assumptions and Dependencies

- Every shoe designs which are in shop is in added to the shoe inventory.

3. Specific Requirements

Wing shoe billing system is created according to the requirements which are provided by the owner of wing shoe. This requirements are convert in to design decisions and noted down according to the below sub topics.

3.1 External Interface Requirements

3.1.1 User Interfaces

- Keyboard: Login into system, Entering data, Search specific designs and add designs to the order. Select from drop down menu.
- Mouse: Selection

3.1.2 Hardware Interfaces

- Printer: This device use to get the receipt printed. A cashier add design the order and get printed receipt via the printer.

3.1.3 Software Interfaces

- Microsoft Access 2013: This software uses to manage databases. Add data to the database through the forms. Customer details, shoe details, order details store in separate databases. That database stored on the hard disk for future used.

3.2 Functional Requirements

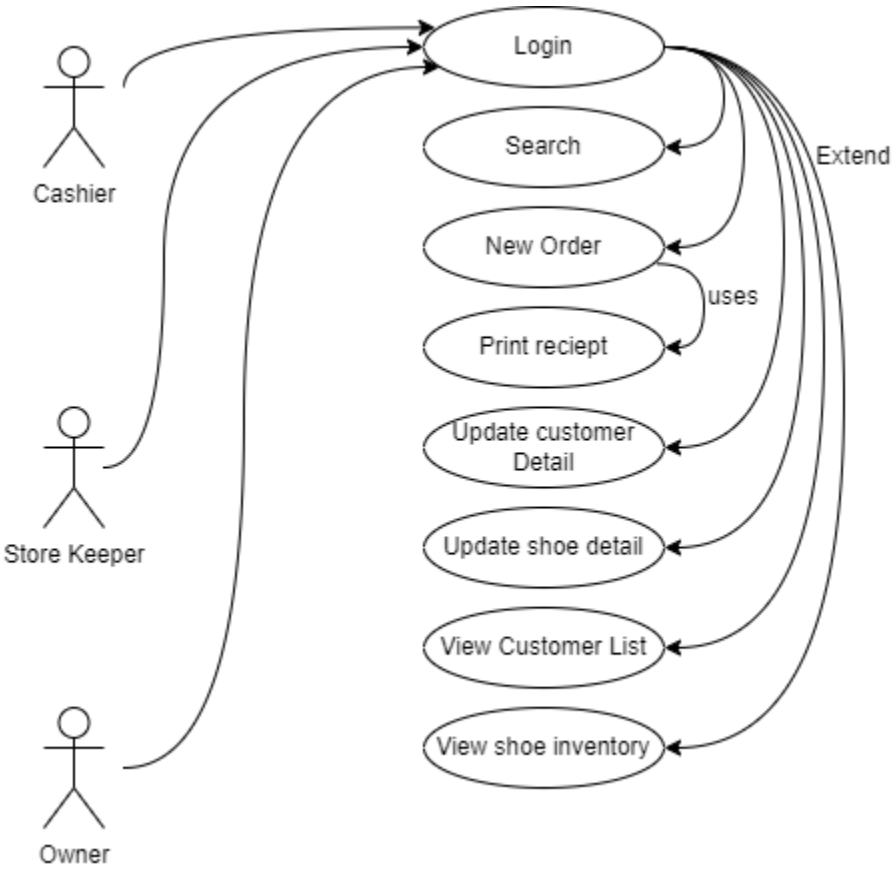
Functional Requirement	Introduction	Input	Process	Output	Error handling
01.Login	The user must login to the system	User name & Password	Check the username and password are correct.	Correct: Dashboard windows opens Incorrect: show a message box to notify it	
02.i). Add new order	Cashier can add new order using the new order form.	Shoe design id, Shoe quantity,	Check shoes available and ask for quantity then add it to the order	Correct: add shoe design, size and quantity to order Incorrect: show a message to enter quantity value	

02.ii). Edit, Remove items on order.	Cashier can edit added items on order and remove item or remove all items from order.	Select added item from order	1. Edit: show a window and edit quantity 2. Remove: remove selected item from order. 3. Remove all: remove all items from order.	Correct: 1. Add Edited value to the order 2. Remove item selected item from order 3. Remove all items from order Incorrect: Show message to notify.	
02.iii). Search Customer details	Cashier can search the customer detail and add it to the printed bill	Customer TP number	Check given TP is in the customer database	Correct: Add it to the printed bill Incorrect: Ask for save as a new customer and if yes add it to the Database. If no show a message to please enter a customer TP	
02.iv). Select which type of order	Cashier can select type of order there are two types Normal order and whole sale order.	Select order type	Check the cashier has selected one of them	Correct: Add it to the printed bill Incorrect: show a message to select order type.	
02.v). Print receipt	Cashier can print the receipt using print button	Shoe DesignID, Quantity, Customer TP, Order Type.	Check cashier has selected the order type.	Correct: Show receipt preview.	

			Check order is empty Check casher has entered a customer tp Save order details in the database.	Incorrect: Shoe warning message that showing what is missing from the receipt.	
03. Add new customer	Cashier can add new customer	Customer tp, Customer name, Customer Address, Customer Gender	Validate entered telephone number, Save it to customer database.	Correct: Add new customer to database Incorrect: Show a message to notify.	
04. Add, Edit, Delete Shoes	Store keeper can add, edit, delete shoes on shoe database	Design id, Design name, available quantity.		Correct: Add to the Shoe Database Incorrect: Show message to notify	

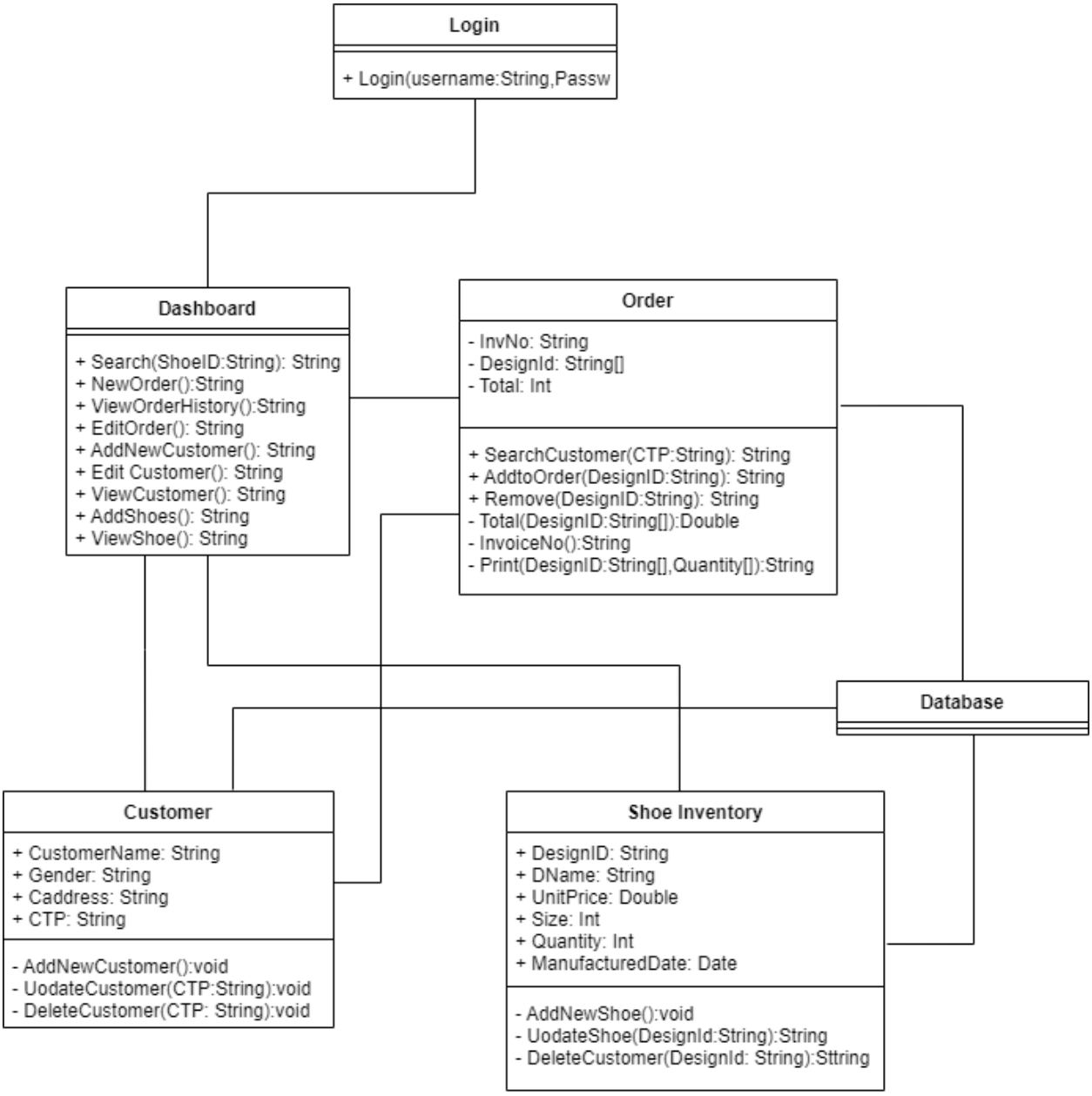
3.3 Use Cases

3.3.1 Use Case #1



3.4 Classes / Objects

3.4.1 <Class / Object #1>



3.5 Non-Functional Requirements

Wing shoe billing system is established as a desktop application. Because of that system need to maintain it standards according to the company standards. As well as some data need to be protected by accessing unauthorized parties.

3.5.1 Performance

- System needs to handle many shoe items in one order. Get the total amount of the items in a order within a second having without any delay.

3.5.2 Reliability

- System needs to prevent unauthorized access.

3.5.3 Availability

- System must be connected to the database whenever it uses.
- Order details should be accessible to owners at any time

3.5.4 Security

- System stores their customer details in database hence system has to protect customer details from unauthorized access. Customer details should be accessible to the cashier and owner account only.

3.5.5 Maintainability

- User can add new shoe designs to system
- When user enters same TP to customer database system has to show a warning message.

3.6 Inverse Requirements

- Orders are limited to duplicate by using invoice number

3.7 Design Constraints

- User must be enter all the data to the database.
- Company is using windows operating system in the computers

3.8 Logical Database Requirements

- Database must be created using MS AACCESS
- It must contains four tables.

4. Change Management Process

If there is more than 100 errors which spread through the 10 pages. SRS is edited and get full print out as new version
If there is less than 20 errors which spread through the 6 pages. Only the corrected pages are added to the SRS as appendices
If there is less than 5 errors which spread through the 1 page. Correction is done it self with red pen and authorized person’s signature’.