Beverage Sales System

Software Requirements Specification (SRS)

Version: 1.0

Name	Student ID	E-mail

Department of Computer Science & Information Engineering
National Taipei University of Technology

10/6/2021

Table of Contents

Section 1 Introduction

1.1 Purpose

Nowadays, every website basically has a database system. As long as you go online, you will definitely use the database system. However, we usually use it as a "user", and rarely as a "developer". Through this course, we can have the opportunity to construct the database system from the perspective of a "developer". With this project, we can not only learn in class, but also let us know more about the construction, operation and application of database system

1.2 Identification

Our project will implement a beverage sales system in which users will be divided into three different identities, system administrators, sellers and buyers. These three identities will use different functions in the store, so each identity will also have a different table to store the corresponding information. If you want to obtain information between different identities, it will be executed through a relational database.

1.3 Overview

This system consists of a main system and several subsystems that are described as follows:

Main system:

Beverage Sales System, BSS

Subsystems:

User Management Subsystem, UMS

Financial Subsystem, FS

Purchase Subsystem, PS

Sales Manage Subsystem, SMS

1.4 Notation Description

Notation	Description
BSS1.0.0	Beverage Sales System will be labeled with the number 1.0.0
UMS 1.1.n	User Manage Subsystem components will be labeling with the number 1.1.n.
FS 1.2.n	Financial Subsystem components will be labeling with the number 1.2.n.
PS 1.3.n	Purchase Subsystem components will be labeling with the number 1.3.n.
SMS 1.4.n	Sales Manage Subsystem components will be labeling with the number 1.4.n.

| Notation	Description
BSS-I-n	BSS Interface Requirements
BSS-F-n	BSS Functional Requirements
BSS-D-n	BSS Data Requirements
BSS-N-n	BSS Non-Functional Requirements

BSS-O-n	BSS Other Requirements
BSS-R-n	BSS Business Rules or Constraints

Section 2 System

2.1 System Description

This project will be divided into a main system and multiple subsystems. The main system is the Beverage Sales System (BSS). There are many subsystems in the main system, which are divided into User Manage Subsystem (UMS), Financial Subsystem (FS), Purchase Subsystem (PS), Sales Manage Subsystem (SMS).

2.1.1 System Architecture Diagram
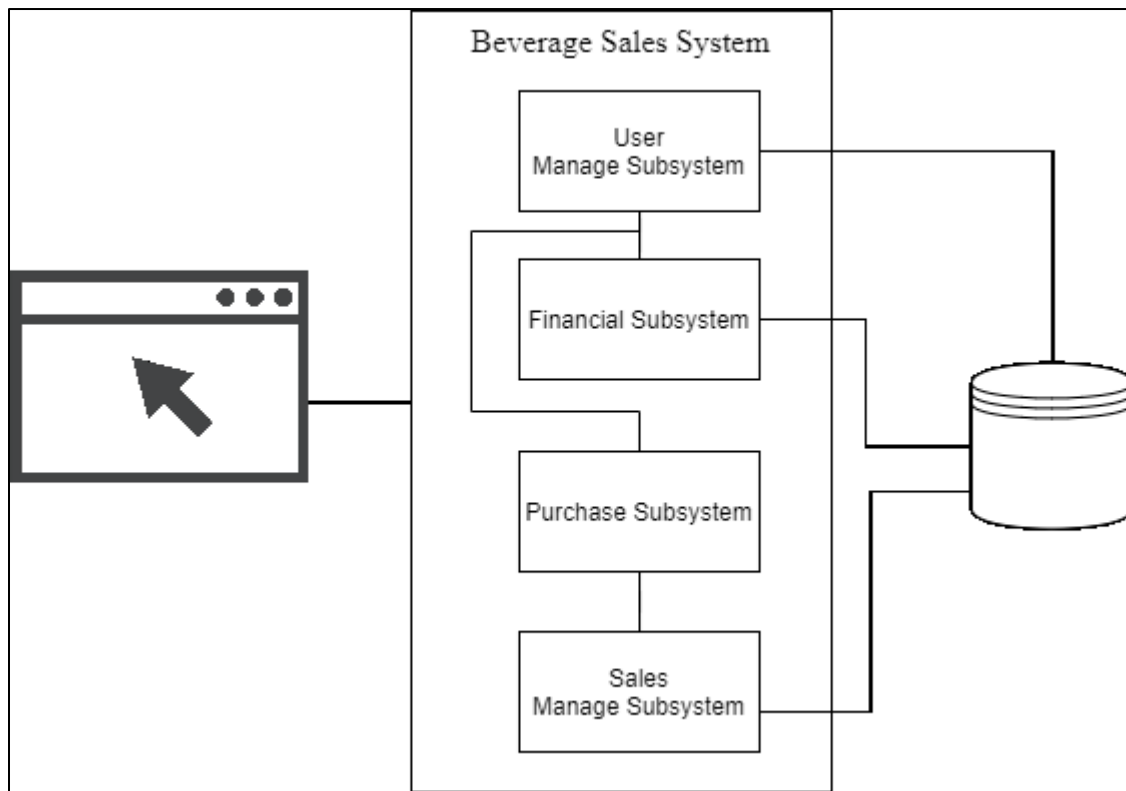
2.2 Operational Concepts (User Stories)

When user enters the website, the User Management Subsystem (UMS) will be used to identify the user's identity. Different identities will display different pages for the user to operate.

2.3 Functional Requirements

No.	Description
BSS-F-01	Shall allow the system to authenticate and authorize the users.
BSS-F-02	Shall allow customers to search products, order products, and view the history of his/her orders.
BSS-F-03	Shall allow staffs to manage products and process customer's order requests.
BSS-F-04	Shall allow staffs to define various discount policies for the products and/or the orders.

BSS-F-05	Shall allow staffs to generate the corresponding reports or statistics.

2.4 Data Requirements

No.	Description
BSS-D-01	The system shall contain information about each valid users of the system: loginid, name, password, email, address.
BSS-D-02	The system shall contain information about each product: productid, name, description, and other attributes, such as product picture, price, the quantity of the product in stock.
BSS-D-03	The system shall contain information about each store: storeid, name, address, contact email and phone.
BSS-D-04	The system shall contain information about each order: orderid, time, customer, name and price of each purchased item, quantity of each purchased item, total amount of the purchase, current status of the order (received, processing, shipping, closed).
BSS-D-05	The loginid, productid, storeid, orderid, and discount code are all unique.

2.5 Non-Functional Requirements
2.5.1 Performance Requirements

No.	Description
BSS-N-01	Page response should be less than 5 seconds
BSS-N-02	When an error occurs in the system, an error message should be displayed and the user should return to the previous page.

2.5.2 Security Requirements (if any)

No.	Description
BSS-N-03	All the users must be authenticated and data accesses must be enforced only to authorized users.
BSS-N-04	All the user passwords must meet the complexity requirements.
BSS-N-05	Verify there are no default passwords in use for the application framework or any components used by the application.

2.6 Interface Requirements
2.6.1 User Interfaces Requirements

No.	Description
BSS-I-01	Can't use any real money to buy or sell.
BSS-I-02	After the user logs in, the website will provide different pages for users of different identities.

2.6.2 External Interface Requirements (if any)

No.	Description
BSS-I-03	The user browses the web through the browser using HTTP communication.
BSS-I-04	The webpage uses the Vue framework to link with the host.

2.6.3 Internal Interface Requirements (if any)

No.	Description
BSS-I-05	UMS can obtain all kinds of information about products through PS.
BSS-I-06	UMS can perform financial review and wallet management through FS.
BSS-I-07	UMS manage all accounts.
BSS-I-08	UMS can purchase goods through PS.
BSS-I-09	UMS can use SMS to unload and edit products

2.7 Other Requirements
2.7.1 Environmental Requirement

No.	Description
BSS-O-01	The processor 64-bit dual-core clock exceeds 2.0GHz.
BSS-O-02	Storage space requires at least 200GB of hard disk space.
BSS-O-03	2 GB or more memory.

2.7.2 Installation Requirement

No.	Description
BSS-O-04	Visual Studio Code
BSS-O-05	Node.js (use it to install Vue.js)
BSS-O-06	XAMPP (already included MySQL)

2.7.3 Test Requirements (if any)

No.	Description
BSS-O-07	The system needs to be thoroughly tested using real data, and all modules need to pass unit tests.
BSS-O-08	The system shall pass the vulnerability testing.
BSS-N-09	The system shall pass the penetration testing.

2.8 Business Rules and Integrity Constrains

No.	Description
BSS-R-01	The periods of special event discount for a given product cannot overlap
BSS-R-02	The quantity of each purchased product must be an integer that is greater than zero.

BSS-R-03	The quantity of purchasing for a product must be less than or equal to the current quantity of stock for that product.

Glossary

References

Appendix