

Software Requirements Specification

for

Coffee Shop Management System

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Contents

1	Introduction	2
1.1	Purpose	2
1.2	Intended Audience	2
1.3	Intended Use	2
1.4	Product Scope	3
1.5	Risk Definition	4
2	Overall Description	5
2.1	User Classes and Characteristics	5
2.2	User Needs	5
2.3	Operating Environment	5
2.4	Constraints	6
2.5	Assumptions	6
3	Requirements	7
3.1	Functional Requirements	7
3.2	Non Functional Requirements	9
	Appendices	10
A	Glossary	11

Chapter 1

Introduction

Coffee shops are becoming increasingly popular among the people of Dhaka city. They have become more than just places to enjoy a cup of coffee. They are social hubs, work spaces, and havens for relaxation. With their rising demand, the coffee shops have to exert additional diligence to meet the expectations of the customers. To efficiently manage a myriad of operations and services within a coffee shop, a robust management system is essential. This document outlines the functionalities, features, and constraints of such a system that aims to improve a daily operations of a coffee shop.

1.1 Purpose

The primary purpose of a Coffee Shop Management System is to provide a comprehensive solution that enhances the various operations of a coffee shop. Some of the key purposes of such a system include: Order and Sales Management, Menu Customization, Employee Management, Performance Monitoring, Enhanced Customer Service and Efficient Billing.

A Coffee Shop Management System essentially aims to facilitate the management of coffee shops. It helps the coffee shops to offer exceptional customer service, establish systematic work distribution between staff and stimulate business growth.

1.2 Intended Audience

- Clients
- Project Managers
- Developers
- Testers
- Investors
- Marketing Department

1.3 Intended Use

- Clients:
Clients can use this SRS to make sure all their requirements are met. They can also give their feedback about the features.

- **Project Managers:**
Project Managers need to view the SRS to get an overall update about the project. This will help them plan the project within the given time.
- **Developers:**
With the help of this SRS, developers can quickly comprehend the project's purpose, identify areas for improvement, and determine whether there is room to include new features or functions.
- **Testers:**
Testers can use this SRS to test the software as per requirements. This will make the testing more organized as SRS testers can easily get the idea where to look and what error or bug they should be looking for.
- **Investors:**
The SRS can be used by investors to learn about the product and how it could generate money. Therefore, they may determine whether the initiative is practical and whether it has the potential to grow.
- **Marketing Department:**
This SRS may be used by the marketing department to obtain a better sense of what to advertise, what the project's features are, and how those features will benefit the customers or users.

1.4 Product Scope

Basically this web based application is for a new coffee business to help them manage their system. Moreover, it will provide a new way for the coffee-lovers to order their coffee online and enjoy it at ease.

Benefits:

1. User can browse the menu or search their desired product
2. User can order coffee from anywhere
3. Business owners can manage their staff
4. Business owners can take orders from customer
5. Business owners can keep an account of their orders and payments
6. Workers can keep a track of their orders
7. Workers can view their paycheck.

Objectives:

1. Develop a sustainable business management system
2. Build a web application with user friendly interface
3. Help employees keep a track of their work

Goals:

1. Ensure that business owners can operate on an efficient system
2. Customers could order coffee online without any trouble
3. Help employees of the cafe manage their work properly

1.5 Risk Definition

- Poor internet connection could restrain customers from placing orders and workers from completing tasks.
- Technical problems with the worker interface might prevent workers from receiving and completing their assigned tasks.
- A sudden surge in users accessing the platform simultaneously could lead to server traffic overload, causing slow response times or crashes.
- The server cannot control overwhelming volume of server requests.

Chapter 2

Overall Description

The users of our web-based application will receive helpful customer services to ease the operations and management of our coffee shop. The portal will be used by both customers and staff (baristas and other employees). The whole system will be built as a new site from the ground up.

2.1 User Classes and Characteristics

This is a web-based coffee shop management system aimed to enhance online ordering experience for customers and help maintain the operations of the coffee shop/cafe. It helps automate various tasks related to customer service, management, sales tracking, and more. This application is user friendly so anyone can use this application.

- user can be a customer.
- user can be a staff.
- user can be a manager.

2.2 User Needs

Customers will use this application when they want to place an order from the coffee shop. They can avail all the services on site such as viewing the coffee shop menu, placing multiple orders and viewing or editing their order cart. The staff can manage customer orders (by viewing, accepting/rejecting, updating orders) and view paycheck details or even their paycheck history. This web-based application will ensure proper and swift service delivery to customers and easy the management tasks for the shop staff.

2.3 Operating Environment

Below is a list of the Coffee Shop's Management System's operating environment:

- Operating System: Any OS that supports web browsing.
- Database: MySQL
- Platform: Python, Django Framework

2.4 Constraints

- The system must be compatible and consistent with the client's operating environment, specifically targeting the Windows platform.
- The project have to be completed within a two-month time frame.

2.5 Assumptions

- Users can understand English.
- Users have compatible devices that support internet service.
- Users are familiar with web browsing and can interact with similar websites.

Chapter 3

Requirements

3.1 Functional Requirements

1. **As a customer**

I want to add items to my cart
so that, I can easily keep track of the products I intend to purchase.

Confirmation

- Customers will receive a confirmation message after selecting an item, indicating successful addition to the cart.
- Customers can view the cart icon to see the quantity of items selected in the cart.
- Customers can increase or decrease the quantity of item selected.

2. **As a customer**

I want to proceed to checkout after selecting all the items
so that, I can review my order and provide the necessary information for delivery and payment.

Confirmation

- Customers will be presented with a summary of selected items and their total cost upon clicking the "Checkout" button.
- Customers have to provide shipping and payment information.
- Customers can cancel the checkout and go back to view the cart.
- Customers will see an order confirmation screen displaying all the relevant details upon successful checkout.

3. **As a customer**

I want to print a payment slip after completing the checkout process
so that, I have a physical record of the transaction for my reference.

Confirmation

- Customers will be provided an option to print the payment slip after completing check out.
- Customers have to click the "Print" button to generate a printable payment slip containing the order details, itemized costs, and payment information.

4. **As a customer**

I want to view the menu
so that, I can decide what to order.

Confirmation

- Customer will click on the “Menu” page and view the menu

5. **As a customer**

I want to search for a particular product
so that, I can find my desired product.

Confirmation

- Customer will click on the “Menu” page
- Customer will click on the search bar on the top of the page
- Customer types the name of the product
- If product is found user will be able to view the product on that page
- If product is not found user will see an error message

6. **As a staff**

I want to view received orders
so that, I can prepare the received orders of the customers.

Confirmation

- Staff will receive a notification whenever an order is placed.
- Staff can view the orders that the customers have placed.
- Staff can accept or reject the order.
- Staff can update the order status.

7. **As a staff**

I want to view paycheck
so that, I can easily check my earnings and payment details.

Confirmation

- Staff will receive a notification when their paycheck is uploaded.
- Staff can view paycheck information details such as gross pay, bonus and net pay.
- Staff can view previous paychecks.

8. **As a manager**

I want to add items in the menu
so that, it attracts more customers.

Confirmation

- Manager will receive confirmation that the item has been added to the menu.

9. **As a manager**

I want to delete items from the menu
so that, I can remove worst reviewed items from the menu.

Confirmation

- Manager will receive confirmation that items have been deleted upon deletion.

10. **As a manager**

I want to edit the menu
so that, I can update the items on the menu.

Confirmation

- Manager will click on the "Edit Menu"
- Manager will be able to update the item price, name and picture.

11. **As a manager**

I want to remove/add staff members

so that, I can maintain the staff member list.

Confirmation

- Manager can add or approve staff members
- Manager can remove staff members
- Manager will receive confirmation that items have been deleted upon deletion.

3.2 Non Functional Requirements

Performance Requirements:

- The system will be able to handle large traffic without crashing.
- Response time per feature will be less than 3 seconds.

Security Requirements:

- Database must be secure to use.
- Data of the customers/employees must not be vulnerable to data theft.

Safety Requirements:

- System must not do any miscalculation while confirming orders.
- System will not cause harm to human users.

Error Handling:

- OS must handle all the expected and unexpected errors in ways that prevents data loss and long maintenance break.

Appendices

Appendix A

Glossary

SRS: A software requirements specification (SRS) is a description of a software system to be developed. The software requirements specification lays out functional and non-functional requirements, and it may include a set of use cases that describe user interactions that the software must provide to the user for perfect interaction.