

SRS DOCUMENT

Introduction

1.1 Purpose

Purpose of this SRS document is to provide requirements of the software system called CafeFlow+ . which allows customers to buy and return plastic bottles and order food online from any cafe in college.

1.2 Scope

- This software will handle plastic management at the cafes and food ordering and servicing and other payments for the cafe
- It will also provide the customer with a user-friendly interface for accessing services at the cafe.
- It will also provide a user-friendly interface for the shopkeepers to manage the services available at their cafe.

1.3 Definitions, acronyms, and abbreviations

- SRS: Software Requirements Specification
- CafeFlow+: The name of the software system
- Customer/User: The primary user who will be able to place orders.
- Cafe staff: The manager of the cafe and other staff who have permission to change the menu and manage plastic items and orders.
- Administrator: The software managers who have super user access for the complete software.

1.4 References

1.5 Overview of document

This document outlines the requirements for the CafeFlow+ system, detailing its purpose , scope and functionality.

General Description

2.1 Product Perspective

The CafeFlow+ system will act as an interface between customers Administrators , and cafe staff . It will manage plastic items ,food Orders , and payments.

2.2 Product Functions

CafeFlow+ provides following functions:

- User Account:
Each user will have an account where the list of purchased plastic items by the user would be displayed. It will also enable users to place orders at different cafes.
- Cafe Account:
The cafe keepers will have an account where they can update the list of submitted plastic items and manage incoming food orders. It will enable them to ensure proper delivery of the orders. The cafe manager will have an option to accept or deny orders placed online. The chef in the kitchen can update the status of the food processing.
- Notification system:
Customers will get a notification when their order is accepted or rejected.
Customers will get a notification after their order gets ready.
- Payment Gateway:
The user will have to pay once the order has been accepted by the manager. The payment should be fast and error-free.

2.3 User Characteristics

CafeFlow+ will be used by three types of users:

- Customers: place orders, buy and return plastic items.
- Administrators: manage overall system functionality
- Cafe staff: update plastic items, manage orders and process food.

2.4 Assumptions and Dependencies:

- The system assumes that users have a stable internet connection and a compatible device to access the system.

- The system is dependent on the availability of shopkeepers and food items in the menu at the cafe.
- The user should have means to pay online to order the food like gpay, paytm, phonepe, etc.

2.5 Apportioning of Requirements

The following features can be added in the future:

- Analytics: Analyzing data to provide purchasing statistics to the cafe managers so they can make business decisions based on the stats.
- Enhanced user experience after analysing software usage statistics.
- Ratings and reviews on food items so the cafe manager can change/improve items in the menu.
- Menu requests: The users can request and support other requests to add items in the menu and the cafe manager can take it as input and decide accordingly.

Specific Requirements

3.1 External Interfaces

- Using API to connect to the server and exchange data.
- Security: Encrypting outgoing data to maintain secure communication between endpoints.
- Efficiency: Communication with minimum API calls to reduce bandwidth usage and improve app loading speed.

3.2 Functions

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3.3 Performance Requirements:

- PERFORMANCE: The system should be able to handle many requests at any given time without any lag or delay.
- SECURITY: The system should be secured with proper authentication and authorization mechanisms to ensure that user data is safe and protected.
- AVAILABILITY: The system should be available whenever the cafe is open.
- USER INTERFACE: The system should have a user-friendly interface that enables users to order food or buy and give plastic items at the cafes.
- SHOPKEEPERS INTERFACE: The system should have a user-friendly interface that enables the shopkeepers to manage the orders and service them and take plastic items from customers.

3.4 Logical Database Requirements:

- Design: Making ER diagram to visualize the database structure.
- Schema: Creating a database schema to help implement the database design. This also includes adding input constraints such that only specified type of data can be stored in the respective table of the database.

- Dependencies: Defining proper constraints and dependencies between tables to efficiently access the information contained in the database.
- Efficiency: Designing the database such that data duplication is minimized to save data storage and bandwidth.
- Authorization: The user trying to access the information should have proper permissions to do so.

3.5 Design Constraints

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3.6 Software System Attributes:

usability: The system must be easy to use for both customers and Cafe staff

Security: The system should ensure secure handling of user data.

3.7 Other Requirements

Appendices

4.1 Appendix A – Glossary

4.2 Appendix B – Analysis Models

4.3 Appendix C – Supplementary Information