

Software Requirements Specification

for

Online Food Delivery Management System

Version 1.0 approved

Prepared by –

Krishna Agrawal PES1UG22CSS293

Jathin Shetty N PES1UG22CS249

PES University

28th August,2024

Table of Contents

1. [Introduction](#) 1.1 [Purpose](#) 1.2 [Intended Audience and Reading Suggestions](#) 1.3 [Product Scope](#)
2. [Overall Description](#) 2.1 [Product Perspective](#) 2.2 [Product Functions](#) 2.3 [User Classes and Characteristics](#) 2.4 [Operating Environment](#) 2.5 [Design and Implementation Constraints](#) 2.6 [Assumptions and Dependencies](#)
3. [External Interface Requirements](#) 3.1 [User Interfaces](#) 3.2 [Software Interfaces](#) 3.3 [Communications Interfaces](#)
4. [System Features](#) 4.1 [Restaurant Management](#) 4.2 [Menu Management](#) 4.3 [Customer Management](#) 4.4 [Order Management](#) 4.5 [Payment Processing](#)
5. [Other Nonfunctional Requirements](#) 5.1 [Performance Requirements](#) 5.2 [Safety Requirements](#) 5.3 [Security Requirements](#)
6. [Other Requirements](#)

Appendix A: Glossary Appendix B: Analysis Models Appendix C: To Be Determined List

1. Introduction

1.1 Purpose

This Software Requirements Specification (SRS) document provides a detailed description of the requirements for the Online Food Delivery Management System. It outlines the functional and non-functional requirements, system features, and constraints of the software application designed to manage restaurants, menu items, customer orders, delivery personnel, and payment processing for an online food delivery service.

1.2 Intended Audience and Reading Suggestions

This document is intended for:

- Project managers
- Software developers
- Quality assurance testers
- System administrators
- Stakeholders involved in the food delivery business

Readers are encouraged to first review the Overall Description for a general understanding of the system, followed by the System Features for detailed functional requirements.

1.3 Product Scope

The Online Food Delivery Management System aims to provide a comprehensive platform for managing all aspects of an online food delivery service. Key features include:

- Restaurant and menu management
- Customer order processing
- Delivery personnel assignment and tracking

- Payment processing and transaction management
- Reporting and analytics for business insights

The system will streamline operations, improve customer satisfaction, and provide valuable data for business decision-making.

2. Overall Description

2.1 Product Perspective

The Online Food Delivery Management System is a new, self-contained product designed to serve as a comprehensive solution for food delivery businesses. It will interact with external payment gateways for processing transactions and may integrate with mapping services for delivery tracking and optimization.

2.2 Product Functions

Major functions of the system include:

- Restaurant profile and menu management
- Customer registration and order placement
- Order processing and tracking
- Delivery personnel assignment and route optimization
- Payment processing and financial reporting
- Analytics and performance dashboards

2.3 User Classes and Characteristics

- Customers: End-users who place food orders
- Restaurant Managers: Manage restaurant profiles and menus
- Delivery Personnel: Fulfill orders and update delivery status
- System Administrators: Manage overall system operations and user accounts
- Business Analysts: Access reports and analytics

2.4 Operating Environment

- Web-based application accessible via modern web browsers
- Database management system: MySQL
- Client: Any device with a web browser and internet connection

2.5 Design and Implementation Constraints

- Must comply with local food safety and delivery regulations
- Secure handling of personal and financial data (PCI DSS compliance)
- Scalable architecture to handle peak order times

2.6 Assumptions and Dependencies

- Restaurants have reliable internet connectivity
- Users have access to smartphones or computers for accessing the system

3. External Interface Requirements

3.1 User Interfaces

- Responsive web interface for customers, restaurants, and administrators
- Mobile app interfaces for customers and delivery personnel
- Admin dashboard for system management and analytics

3.2 Software Interfaces

- DBMS software for tracking and storing transactions

3.3 Communications Interfaces

- HTTP/HTTPS for web and mobile app communication

4. System Features

4.1 Restaurant Management

4.1.1 Description and Priority

Allows registration and management of restaurant profiles, including location, operating hours, and cuisine types. High priority.

4.1.2 Stimulus/Response Sequences

- Restaurant managers can register, update, and manage their restaurant profiles
- Administrators can approve or suspend restaurant accounts

4.1.3 Functional Requirements

REQ-1: System shall allow restaurants to create and manage their profiles

REQ-2: System shall provide an approval process for new restaurant registrations

REQ-3: System shall allow restaurants to set and update their operating hours

REQ-4: Systems will have smooth payment processing

4.2 Menu Management

REQ-5: The system shall provide options to categorize menu items and add details such as ingredients, prices, and special offers.

REQ-6: The system shall allow restaurants to upload images of menu items.

4.3 Customer Management

REQ-7: The system shall allow customers to create and manage their profiles

REQ-8: The system shall include features for customer feedback and ratings for restaurants

4.4 Order Management

REQ-9: The system shall allow customers to place orders from available restaurant menus

4.5 Payment Processing

REQ-10: The system shall securely handle payment transactions and ensure the protection of sensitive payment information

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- System will respond to user inputs instantaneously
- Order placement should be completed within 30 seconds

5.2 Safety Requirements

- Ensure food safety information is accurately displayed

5.3 Security Requirements

- Implement secure user authentication and authorization

6. Other Requirements

- All financial calculations must comply with international accounting standards
- The system must adhere to data protection regulations such as GDPR for handling personal information

Appendix A: Glossary [Define key terms and acronyms used in the document]

Appendix B: Analysis Models [Include ER diagrams, use case diagrams, and other relevant models]

Appendix C: To Be Determined List [List any requirements or features that are still under consideration or need further clarification]