

Software Requirements Specification

for

Online Food Ordering System

Version 1.0 approved

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1. Introduction

1.1. Purpose

In today's age of fast food and busy lives, several people have been shifting to takeouts rather than occasional fine dining experiences. An online food ordering system brings this convenience to the fingertips and helps restaurants reach a wider range of customers. This in turn helps replace the traditional method of calling restaurants and placing orders, which had several disadvantages like - needing to have a physical copy of the menu, lack of visual confirmation that the order was placed correctly, and a presence of a restaurant employee to answer the phone and take orders.

The online ordering system will greatly simplify the ordering process for both the customer and the restaurant. The customers will always be presented with up-to-date menus on the website along with options, and the ability to review the specifics before check out. Since the entire process gets automated, restaurants get presented with the delivery specifics of their orders in a concise manner to fulfill them with minimal delay and confusion.

1.2. Document Conventions

This section presents the terms and acronyms used in the SRS.

- a. SRS- Software Requirements Specifications
- b. DBMS - Database Management System
- c. UPI - Unified Payment Interface
- d. SQL - Structured Query Language
- e. IP - Internet Protocol
- f. TCP - Transmission Control Protocol
- g. NIC - Network Interface Control
- h. LAN - Local Access Network

1.3. Scope

An online food ordering system provides greater flexibility and simplifies the complete process. Since the menu is made available across all devices through the web application, updates and changes can be made easily. Digitization eliminates the need of designing and printing new menus. Moreover, since the orders get stored and logged in on the system, a record is maintained on the DBMS which helps the restaurant look at the orders

to be fulfilled in a compact way. Thus, accuracy is ensured and the staff can be held accountable. At the same time, the process helps the administration recognize flaws (if any) in their system which can be later worked upon. Hence, maintaining, managing, and auditing the company, staff, materials, and restaurant efficiency are made easier.

1.4. References

- a. [Project Report of Online Food Ordering System](#)
- b. [Online Food Ordering System - Advantages and Disadvantages](#)
- c. [Online Food Ordering - History and Types](#)

2. History/Background Study

2.1. Technical Literature

According to a study conducted by the Research Department of Commerce CA Hindusthan College of Arts and Science, Coimbatore, online food ordering offers the mobility of food delivery/takeout from a local restaurant. The rapid growth of technology makes an electronic payment system and other opportunities feasible. The improvement of the management aspect by the use of a computer system connected to each order and transaction, instead of their data record adds the efficiency which helps reduce the time consumed, human errors, and helps provide smooth service to customers. Thus, it can be concluded that the system is a suitable solution.

2.2. Existing Applications

- a. [Swiggy](#)
- b. [Zomato](#)
- c. [FoodPanda](#)
- d. [GrubHub](#)
- e. [UberEats](#)

2.3. Customer Surveys

Surveys Sent - 4000

2.4. Expert Advice

The online food ordering system is an efficient way to reach customers and smooth the process of ordering. It helps restaurants manage their administration and provide users such as office-goers, busy moms, and students a way to save time. Thus, the application benefits all stakeholders and users involved.

2.5. Current/Future Requirements

- a. Faster Processing and Results
- b. Error-Free Food Ordering Process
- c. Ability to Change Menu as and when required

3. Overall Description

3.1.1. Hardware Requirements

- a. A device (computer/laptop/android/iOS) with at least 2GB RAM
- b. Hard Disk Space Required - 250 MB
- c. Minimum Snapdragon 600 series/i3 8th gen/apple a11 bionic

3.1.2. Software Requirements

- a. A database like DBMS to store necessary data and records
- b. A working web browser like Google Chrome, Mozilla Firefox, etc.
- c. Operating System - At least Windows 7 64 bit, Android Oreo(8), iOS 11

3.2. Functional Requirements

R: Online Food Ordering System

R1: Sign Up/Sign In

Description - New users who wish to create a new account have to sign up. Existing users have to just log in.

R1.1. - Create New Account

Input: Enter name, mobile number, email address, and password.

Output: Account created with message confirmation.

R1.2. - Log In

Input: Email/phone number and password.

Output: Open the Homepage of the user.

R1.3. - Forgot Password

Input: Click forgot password and enter an email.

Output: The reset mail is sent to the user's email ID.

R2: Customer

Description - The functionalities for the users of the web ordering system, i.e. customers, to allow them to order.

R2.1. - View Menu

Input: Click on the Menu Category

Output: Displays the Complete Menu

R2.2. - Place Orders

Input: Click on the Food Item in the Menu

Output: Confirmation Message - "Item Added to Cart"

R2.2.1 - Payment

Input: Click on "Proceed to Checkout" and choose the appropriate method from the options - UPI or Credit Card/Debit Card or Cash on Delivery.

Output: Redirects to payment site (for UPI and Credit Card/Debit Card) or prints receipt (Cash on Delivery).

R3: Admin

Description - Allows admin to make changes to the menu.

R3.1. - Add New Food Item

Input: Click on the "Add Item" button and enter details like - name, price, and brief description.

Output: Confirmation Message - “Item Added”

R3.2. - Update Food Item

Input: Click on the Food Item to Edit and change name or price or brief description.

Output: Confirmation Message - “Item Updated”

R3.3. - Delete Food Item

Input: Click on the Food Item and Delete button.

Output: Confirmation Message - “Item Deleted Successfully”

R4: Restaurant Employees

Description - Allows the employees to retrieve and read orders from the database.

R4.1. - Retrieve New Orders

Input: Click on “Pending Orders”

Output: Displays a list of all pending orders (if any), else prints “No Pending Orders”

R4.2. - Mark an Order as Complete

Input: Click on an Order from the List and change status to “Complete”

Output: Displays Confirmation Message - “Order Marked as Complete”

3.3. Non-Functional Requirements

3.3.1. Correctional Requirements

Minimum bugs with suitable outputs for inputs.

3.3.2. Portability Requirements

The software can run properly in maximum OS’ in different devices meeting the system requirements

3.3.3. Efficiency Requirements

Response Time – The system provides acknowledgment in less than a

second, once the user inputs anything

Capacity – The system needs to support at least 1000 people at once

3.3.4. Usability Requirements

The system allows users to access the system from a wide range of devices. Moreover, it is user-friendly which makes the system easy to use.

3.3.5. Reusability Requirements

The system has to be 100% reliable due to the importance of the data it holds.

3.3.6. Maintainability Requirements

Back-Up: The system provides the functionality of back-up

Errors: The system will track every error as long as the log is active

3.4. User Characteristics

We have three types of users:

a. Admin

- i. Add Food Item
- ii. Update Food Item
- iii. Delete Food Item

b. Customers

- i. View Menu
- ii. Place Orders and Pay

c. Restaurant Employees

- i. Retrieve New Orders
- ii. Mark Orders as Complete

3.5. Design and Implementation Constraints

3.5.1. Hardware and Software Constraints

Since the project is developed using JAVA (an object-oriented programming language), it is largely independent. The project can be run on any platform with the JAVA framework.

3.5.2. End User Constraints

As mentioned, the above constraint is having a JAVA framework on the device. Moreover, being familiar with the user interface or operations help to some extent.

3.6. Assumptions and Dependencies

The assumptions are:-

- a. Our code is error-free
- b. The system should have storage capacity and access to a DBMS.

The dependencies are:-

- a. The hardware/software of the device on which the system will run.
- b. A database to store the required information.
- c. Data entered by the admin is correct.

4. Interface Requirements

4.1. User Interfaces

- a. User Interface should respond within 5 seconds.
- b. The system must conform to Microsoft Accessibility Guidelines.

4.2. Hardware Interfaces

- a. The recommended configuration is mentioned above.

4.3. Software Interfaces

- a. An OS is installed
- b. Browser for accessing the system

4.4. Communication Interfaces

- a. NIC – Hardware Component allowing the computer to connect to a network.
- b. TCP/IP protocol – Internet Service Provider to access and share information over the Internet
- c. Ethernet Communications Interface – Ethernet is a frame-based computer network technology for LANs

- d. Ubiquitous, easy to set up, and easy to use. Low cost and high transmission rates.

5. Conclusion

The main objective of the Online Food Ordering System is to enhance and automate the food order process at a restaurant, along with other administration tasks (if necessary). It is a well-defined, efficient, controlled, and managed information system or software based on web technology that stores, processes, and provides information through the internet.