The Munchies

Munch
Software Requirements Specification
For Web Application

Version 1.0

Revision History

Date	Version	Description	Author
26/03/24	1.0	Initial draft of the Phase I report	Arbab Husain Daniel Rappaport

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Software Requirements Specification

1. Introduction

1.1 Purpose

The purpose of this software requirement specification document is to present a detailed description of Munch. It will explain the purpose and features, interfaces, function, and the constraints of the system. Additionally, it will explore how the system handles external influences.

1.2 Scope

Munch is a web application inspired by the architecture of UberEats application. It will serve as a platform for customers to order food from stores that are specifically open late into the night. Business owners can use the platform to showcase their restaurants and menu and provide delivery and pickup services. Delivery drivers can use the application as a way to deliver the food from the restaurant to the customer and be paid for doing so. The application will use the customer location to display restaurants within a certain range. The interactions between business owners, customers, and delivery workers will exclusively be managed via the backend of the application.

1.3 Definitions, Acronyms, and Abbreviations

Terms	Definitions
Eat in order	Food orders placed by a customer to be eaten at the restaurant. Includes information about the food items, price, time, and seating.
Pick up order	Food orders placed by a customer to be eaten at the restaurant. Includes information about the food items, price, and time.
Delivery order	Food orders placed by a customer to be delivered. Includes information about the food items, price, time, delivery location
User	Logged in users, can include: - Store users (chef, delivery, importer, manager) - Customer (normal, VIP)
Surfer	User who visits the website and can see the menus and ratings but is not registered.
Chef	Chef user account which has permissions to edit the menu
Deliverer	Deliverer account which can view pick up orders.

Importer	Importer account.
Manager	Manager account which has admin permissions and has access to all other accounts in order to promote, demote, fire, register, deregister etc. The manager account will also be able to settle disputes in the app.
Registered customer	Registered customer account
VIP Customer	VIP customer account
Ratings	Ratings for dishes.
Compliment	Compliment of customer/chef/deliverer/importer for their performance which will affect their status positively.
Complaint	Complaint against customer/chef/deliverer/importer for their performance which will affect their status negatively.

1.4   References

spec_sample.docx located on the course website by Jie Wei.

1.5   Overview

This Software Requirements Specification (SRS) is organized into several key sections to provide a detailed layout of the project's design, functionalities, and requirements. The SRS starts with introductory sections that detail the purpose and scope, and provide definitions of terms and acronyms used in the document. The remaining sections include Overall Description, Specific Requirements, and Supporting Information. The Overall Description section provides an in-depth outline of the software's intended market and target user base, while also providing a general outline of the design/development approach without discussing specific requirements. The Specific requirements is a critical section that consists of detailed requirements for development, application features, and user and system interactions. The final section, Supporting Information, contains an Index and Appendices and allows for accessibility of supplementary information that pertains to the project and this SRS document.

2.   Overall Description

2.1 Use-Case Model Survey

Customer: Any person who uses the app to order food.
Guest: A non-registered user browsing the app.
Registered Customer: A user with an account.
Delivery Partner: Individuals who deliver the food.
Restaurant Partner: Restaurants that offer food through the app.
Admin: Personnel responsible for overseeing the platform operations.
Use Cases:
Browse Restaurants: Customers can view various restaurants available.
Place Order: Customers can select items from a restaurant to place an order.
Payment: Customers proceed to pay for their order.
Track Delivery: Customers can track the status of their delivery in real-time.
Manage Account: Users can create, modify, and delete their account information.
Rating and Feedback: After delivery, customers can rate the service and provide feedback.
Delivery Routing: Delivery Partners get the best route to deliver the order.
Receive Payment: Delivery Partners receive payment for completed deliveries.
Manage Menu: Restaurant Partners can manage their menu offerings.
Receive Orders: Restaurant Partners receive orders from customers.
Support and Resolve Issues: Admin can handle complaints and resolve issues.
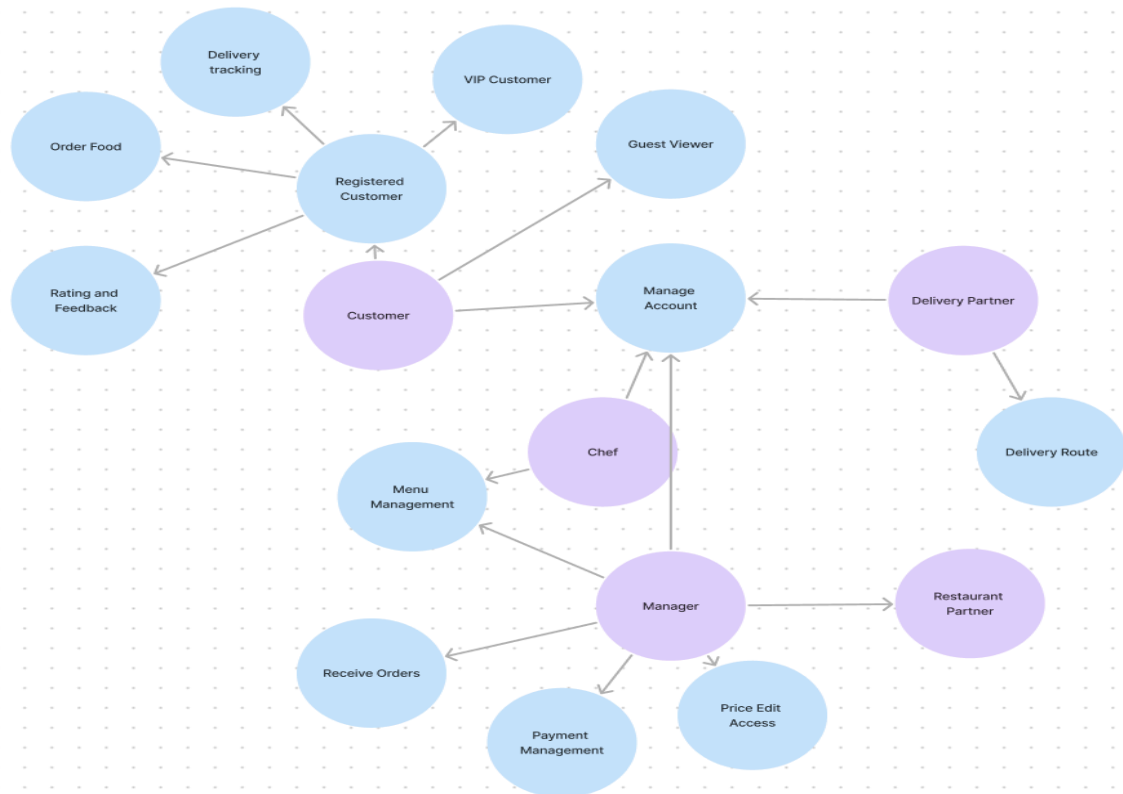
2.2   Assumptions and Dependencies

Customer Rating Impact: It is assumed that users of the application will comprehend the significance of their ratings and feedback. These ratings not only influence the service quality but also may affect the users' privileges and status within the app, such as eligibility for special offers or membership tiers. Similarly, service providers, including delivery partners and restaurants, will understand that their continued partnership and performance ratings can directly affect their ability to use the platform.

Currency Constraints: Transactions within the application will be conducted exclusively in USD. This assumption is vital for simplifying the payment processing system, tax calculations, and financial reporting. Users must be aware that alternative currencies will not be accommodated at this stage of the project.

Data Security: It is assumed that the application will implement robust cybersecurity measures to ensure that customers' personal and payment information is securely encrypted and protected against unauthorized access. The system's security protocols will be continuously updated and monitored to safeguard sensitive data.

Internet Dependency: The application is reliant on a stable and strong internet connection. All functionalities, including account access, order placement, real-time tracking, and payment processing, are dependent on users' ability to connect to the internet. Therefore, it is presumed that users will have sufficient internet access when interacting with the app.

3.   Specific Requirements

3.1   Use-Case Reports

- User Registration:
  - Users create an account and register as either a business user or a customer.
  - Users will be prompted to enter a unique username, password with requirements, and unique email
- Business User Registration:
  - Users registering as a business user will be prompted to enter their restaurant information such as address, store name, and business type.
  - Business users will also be prompted to enter a unique username, password with requirements, and unique email.
- Customer Interaction
  - Customers choose to share location or manually enter a location. The location will be used to display restaurants open late into the night within a deliverable range.
    - Access to choose from multiple stores
    - Access to choose specific dish, and quantity from a store
    - Access to leave reviews on dishes and stores
    - Can leave complaints on stores

- Access to manage account information such as username, password, and email
- Business Interaction
  - Manager
    - Access to edit restaurant information
    - Access to edit menu
    - Access to edit menu prices
    - Access to edit customer access
    - Access to chef payroll, and employment status
    - Access to select delivery worker
    - Can view customer complaints and reviews
    - Access to manage account information such as username, password, and email
  - Chef
    - Access to edit menu
    - Can view customer complaints and reviews
    - Access to manage account information such as username, password, and email
- Delivery Interaction
  - Delivery Driver
    - Can view ratings about quality of service
    - Access to choose customer delivery request
    - Access to manage account information such as username, password, and email

3.2   Supplementary Requirements

System functionality

> **User experience and usability:** The system should be fully functional and provide a good user experience. This includes a user-friendly and intuitive interface, fast loading times, and visually appealing landing pages. The system should also build user trust by taking proper security measures.

Website performance and reliability

> **Fast response times and efficient resource usage:** Efficient resource usage will improve loading speeds and server response times. These things are crucial in enhancing the website's performance and improving user experience.

> **High user traffic:** The website should be able to handle concurrent access by many users.

> Optimization of infrastructures, code, and resources can help improve the website's capabilities and scalability to meet the needs of many users.

User information security

> **Secure information storage:** The system must protect user privacy by securely storing user information such as names, emails, addresses, passwords, and financial information. Sensitive user information such as passwords and financial information should be encrypted following trusted encryption standards.

Website maintenance

scalability: The system must be scalable in order to account for any future changes made to the business. It is crucial for the system to be able to scale to meet new needs as the business expands. It also needs to be scalable to deal with increased user traffic.

Technology changes: The system should be capable of adapting to new technologies in order to integrate new features and perform effectively.

Transaction accuracy and consistency

Transaction authentication: The system must implement transaction authentications in order to protect customer data and prevent fraud. These measures will ensure that the system's transactions are accurate and immediate in order to minimize disputes and financial risks.

Transaction logs: The system must maintain detailed records of all transactions. This will allow the business to verify and ensure the accuracy of all transactions and maintain accountability when necessary.

4. Supporting Information

Specifications include:

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