ECOMMERCE FOOD APPLICATION

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A Software Requirements Specification (SRS) document for an e-commerce food application outlines the functional and non-functional requirements of the system. Below is a sample template for an SRS document for an e-commerce food application:

Software Requirements Specification

1. Introduction

1.1 Purpose

The purpose of this document is to provide a detailed description of the requirements for the development of an e-commerce food application.

1.2 Scope

The application will be a platform for users to browse, select, and purchase food items online. It will include features for user registration, order management, payment processing, and vendor management.

1.3 Definitions, Acronyms, and Abbreviations

- **User: ** Refers to any individual using the e-commerce food application.
- **Vendor:** Refers to the restaurant or food establishment selling products on the platform.
- **Admin:** Refers to the system administrator responsible for managing users and vendors.

2. Overall Description

2.1 Product Perspective

The e-commerce food application will operate as a standalone system interacting with users and vendors. It will integrate with payment gateways for secure transactions.

2.2 Product Features

- 1. **User Registration and Authentication:**
- Users can create accounts and log in securely.
- Password recovery and account management features.
- 2. **Browse and Search:**
- Users can browse food items by category, cuisine, or vendor.
- Search functionality for specific items.
- 3. **Product Details:**
- Detailed information about each food item.

- Images, prices, and user reviews.
- 4. **Shopping Cart:**
- Users can add items to the shopping cart.
- Edit, remove, or update quantities in the cart.
- 5. **Checkout and Payment:**
 - Secure checkout process with multiple payment options.
- Integration with third-party payment gateways.
- 6. **Order Management:**
- Users can view order history.
- Real-time order tracking.
- 7. **Vendor Management:**
- Vendors can register and manage their menu.
- Receive and process orders.
- 8. **Admin Panel:**
- System administrator can manage users, vendors, and overall system settings.
- Reporting and analytics features.

2.3 User Classes and Characteristics

- **Guests:** Users who visit the platform without creating an account.
- **Registered Users:** Users who have created an account on the platform.
- **Vendors: ** Restaurants or food establishments selling products on the platform.
- **Admin:** System administrator responsible for managing the application.

3. Specific Requirements

3.1 Functional Requirements

- 1. **User Registration and Authentication:**
- Users must provide a valid email address and password during registration.
- Two-factor authentication for enhanced security.
- 2. **Browse and Search:**
- The application must provide filters for easy browsing.
- Search functionality should be fast and accurate.
- 3. **Product Details:**
- Each product page should display relevant details, including images and user reviews.

4. **Shopping Cart:**

- Users must be able to view and modify the contents of their shopping cart.
- Cart should show the total cost.

5. **Checkout and Payment:**

- Secure SSL connection for all transactions.
- Support for various payment methods, including credit cards and digital wallets.

6. **Order Management:**

- Users should receive order confirmation emails.
- Real-time order tracking using GPS or status updates.

7. **Vendor Management:**

- Vendors must provide necessary details for registration.
- Vendor dashboard to manage inventory and view orders.

8. **Admin Panel:**

- Admins should be able to manage user accounts.
- Reporting features for sales, user activity, and inventory.

3.2 Non-functional Requirements

1. **Performance:**

- The system should handle a minimum of 1000 simultaneous users.
- Response time for all operations should be less than 2 seconds.

2. **Scalability:**

- The application should be easily scalable to accommodate increased user and vendor loads.

3. **Security:**

- All user data must be encrypted during transmission.
- Regular security audits to identify and mitigate potential vulnerabilities.

4. **Reliability:**

- The system should have a 99.99% uptime.
- Regular backup and recovery procedures.

5. **Usability:**

- The user interface should be intuitive and user-friendly.
- Support for multiple languages and accessibility standards.

4. System Models ### 4.1 Use Case Diagram [Insert Use Case Diagram Here]

4.2 Class Diagram
[Insert Class Diagram Here]

5. External Interface Requirements

5.1 User Interfaces

The application will have a responsive web interface for desktop and mobile users.

5.2 Hardware Interfaces

The application will run on standard web servers and utilize cloud-based storage.

5.3 Software Interfaces

Integration with third-party payment gateways and mapping services for order tracking.

5.4 Communication Interfaces

Secure communication via HTTPS for user interactions and API calls.

6. Other Non-functional Requirements

- The application should comply with data protection and privacy regulations.
- Regular system backups and disaster recovery procedures should be in place.

7. Appendix

[Include any additional information or supporting documentation here.]

8. Revision History

[Document any changes made to the SRS over time.]

9. Approvals

[Document signatures or approvals from relevant stakeholders.]

This is a generic template, and you may need to customize it based on your specific project requirements. Additionally, it's crucial to involve stakeholders, including users, vendors, and administrators, in the requirements gathering process to ensure the document accurately reflects their needs.