Software Requirements Specification (SRS) for Cloud Cuisine

# 1. Functional Requirements

## 1.1 Administrative Functions

- Ability to add, modify, or remove menu items and categories.  
- Monitor and manage order-to-delivery processes.  
- Manage user accounts (customers, kitchen staff, delivery personnel).

## 1.2 Customer Functions

- User registration and login.  
- Browsing menus and placing orders.  
- Managing delivery addresses and payment options.

## 1.3 Kitchen Functions

- Kitchen registration and menu management.  
- Order receipt and status update functionalities.

## 1.4 Delivery Personnel Functions

- Access to delivery assignments and status updates.  
- Navigation assistance to customer addresses.

# 2. Interface Requirements

- Web Interface: Responsive design compatible with various devices (desktop, tablet, mobile). Built with React.js for dynamic user interactions.  
- Database: MySQL for data storage, including user data, orders, and menu items.  
- Backend Services: Developed using Spring Boot (Java J2EE), providing RESTful services to connect the frontend and database.

# 3. Performance Requirements

- Scalability: The system should efficiently handle an increase in user load.  
- Responsiveness: Web pages should load within 2 seconds under normal conditions.  
- Reliability: The system should be available 99.9% of the time.

# 4. Design Constraints

- Technology: The application is constrained to use MySQL, React.js, and Spring Boot due to project requirements.  
- Platforms: The web application must be compatible with major browsers including Chrome, Firefox, Safari, and Edge.

# 5. Non-Functional Attributes

## 5.1 Security

- Secure user authentication and authorization.  
- Data encryption for sensitive information (e.g., payment details).

## 5.2 Usability

- Intuitive user interface design for ease of navigation.  
- Accessibility features for users with disabilities.

## 5.3 Maintainability

- Modular design for easy updates and maintenance.  
- Comprehensive documentation for future development phases.

# 6. Goals of Cloud Cuisine

The primary goals of the Cloud Cuisine project are to:  
**1. Facilitate Easy Access:**

Provide a user-friendly platform that connects customers with local home kitchens, offering a wide variety of homemade meals.  
**2. Enhance User Experience:**

Create an intuitive and seamless ordering process from meal selection to delivery, improving customer satisfaction.  
**3. Support Local Kitchens:**

Enable small and medium-scale home kitchens to reach a broader customer base, manage orders efficiently, and grow their businesses.  
**4. Streamline Delivery Process:**

Implement a robust system for delivery personnel, ensuring timely and reliable delivery services.

**5. Promote Culinary Diversity:**

Offer a platform that showcases a diverse range of homemade culinary delights, catering to different tastes and dietary requirements.

# 7. Scope of Cloud Cuisine

## In Scope

- Development of a web application for food ordering and delivery services, specifically focusing on homemade meals.  
- Implementation of user authentication and profile management for customers, kitchen operators, and delivery personnel.  
- Menu management capabilities for registered home kitchens to list, update, and manage their meal offerings.  
- Order management system to track and update the status of customer orders from placement through delivery.  
- Integration of a payment gateway to process transactions securely.

## Out of Scope

- Development of a mobile application version of Cloud Cuisine is not included in the initial phase of the project.  
- Internationalization and localization services for languages other than English will not be covered.  
- Supply chain management for ingredients and kitchen operations will remain the responsibility of the home kitchens and is not part of the Cloud Cuisine platform.