

**SRS Document**  
**103 -Restaurant Management**  
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# 1 – Introduction

Restaurant Management System is a Desktop application that aims to digitalize the process of various restaurant management operations including Booking ,ordering , inventory management and POS.(Point of Sale), This document aims to capture the system requirements and features particularly related to Booking , ordering and inventory management to be implemented in this system .

Customer book seat and receive a notification to schedule the appointment. Customer can order in restaurant and receive a receipt.

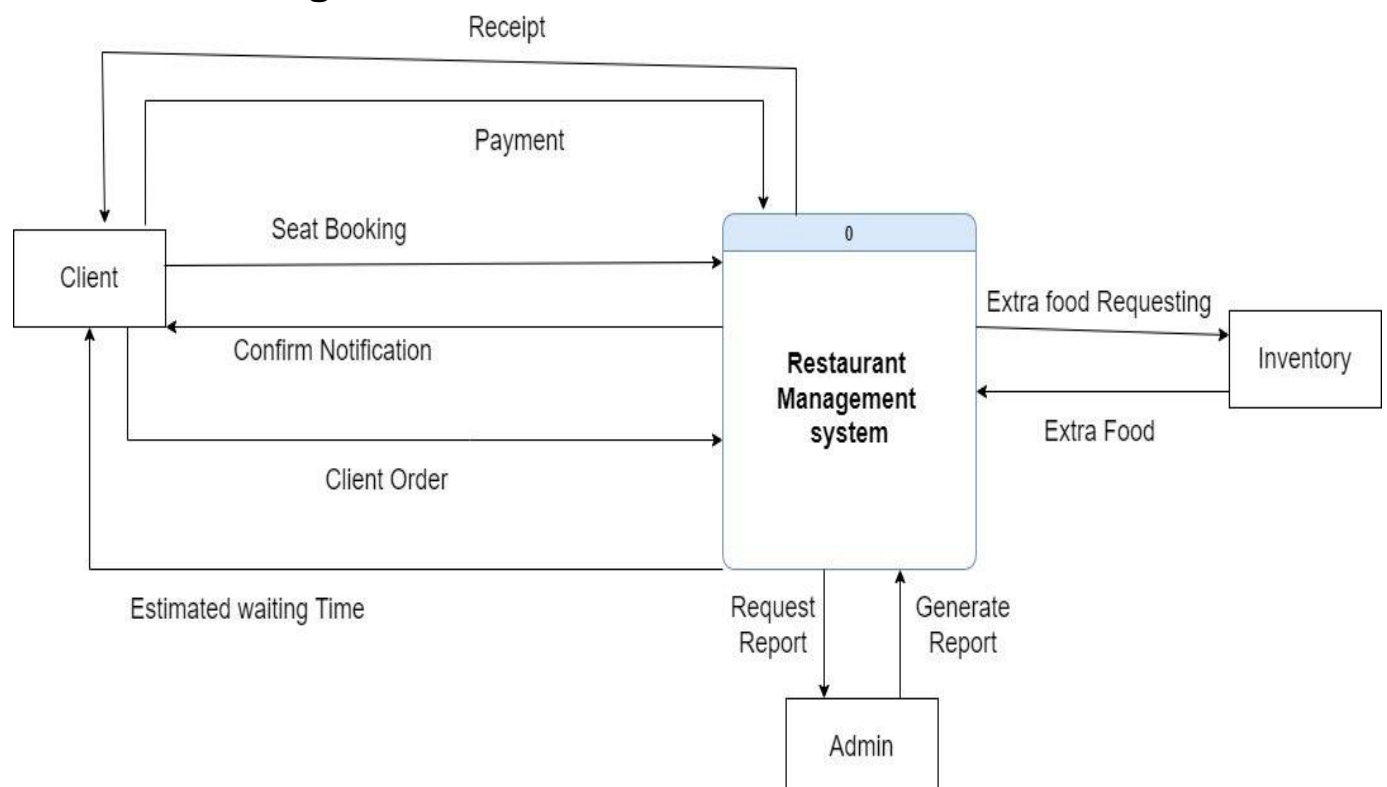
Customer can pay with visa or cash.

The inventory management organize the transactions of availability amount of food and request extra food if there is not enough amount of food.

A restaurant management system is a type of software that has been specifically designed for use within the restaurant industry. Also known as restaurant management software, such solutions are intended to assist leaders and others in carrying out the most critical managerial tasks.

A system of this type may be a comprehensive all-in-one solution, including elements of a point-of-sale system, such as payment processing, with more complex back-end features, such as inventory management, ordering and a booking or reservations system.

## 2. Context Diagram:



### 3. User Requirements:-

To deliver the best service to the users we tried to find out the users necessities, which are below:

#### **Administrator Aspect:**

- Monitoring the whole system from admin panel.
- Taking back up of the database.
- Creating, deleting and modifying the records.
- Keeping the customer's record like their details.
- Organizing their member registration system.
- Monitoring the transaction system.
- Add, View and delete Garcon.
- Generate Reports.
- Add, view and delete cashier.

#### **Customer Aspect:**

- Signing in and signing up to the system.
- Changing their password.
- Resetting forgot password.
- Book a seat.
- Request the order.
- Pay via visa card or cash.

### 4. Functional Requirements:

#### **- Booking**

- **Function: log in or register to system.**

Description: the user shall log in to system or register to the system. Inputs: customer account details like e-mail and password

Source: check the database to authorize the customer to log in Outputs: login has successively

Destination: Home page of the system

Action: the login is denied if it is unauthorized or if the customer account is not saved in database, login is authorized if the customer account is saved in database, Registration process is controlled by the admin.

Requirements: Access the system.

Pre-Condition: Desktop Application Installed.

Post-Condition: In condition of registration, the new customer account is saved in database.

Side effects: add customer information if not registered in database customer table.

- **Function: book a seat.**

Description: the customer shall fill the booking order.

Inputs: Number of seats, appointment, booking name.

Source: check the availability of number of seats in selected appointment Outputs: Number of booking with its appointment.

Destination: Customer booking page.

Action: the customer shall select Number of seats and appointment and receive inform message if the booking is done and valid, customer shall reselect another appointment or another number of seats if the availability is not valid. Requirements: Book a seat and appointment.

Pre-Condition: the user shall to be logged into the system. Post-Condition: determine number of seats and time.

Side effects: add booking record in the database booking table.

## - Order

- **Function: Request Order.**

Description: the Garcon shall take the order from the customer and send its details to the kitchen.

Inputs: customer order

Source: the system check the availability of amounts of food ingredients.

Outputs: message " order will be prepared and estimate time of preparation" Destination: add order page.

Action: the system check the availability of ordered amounts of food ingredients

, if it's enough ;the system accept the order for preparation , if it's not enough

;the system order extra amounts of food ingredients , show message with the suggested amount in the inventory .

Requirements: order food and its details

Pre-Condition: the customer already had booked a seat. Post-Condition: at least one kind ordered .

Side effects: update amount of food ingredients in the database orders table.

## - Inventory

- **Function: Request extra amounts of food ingredients.**

Description: the system shall request extra amounts of food ingredients. Inputs: amounts of needed food ingredients.

Source: the system check the threshold of amounts of food ingredients.

Outputs: message " available amount greater than or less than the threshold". Action: the system shall request the needed amounts of food ingredients

to prepare the order if amounts of food ingredients is less than the threshold . Requirements: Amount of food is up to date  
Pre-Condition: Amounts of food ingredients is less than the threshold.  
Post-Condition: current amounts + requested amounts of food ingredients is greater than the threshold.  
Side effects: update amount of food ingredients in the database food ingredients table.

## - POS

- **Function: generate receipt.**

Description: the system shall generate receipt. Inputs: Each ingredient and its price in order. Source: Calculate total price + service.

Outputs: The Receipt.

Action: system shall Calculate sum price of ingredients +service and generate a receipt.

Requirements: Total price of customer order. Pre-Condition: Price of each food ingredient. Post-Condition: Order details and Total price.

Side effects: Add record in the database receipt table.

- **Function: Payment.**

Description: the customer shall pay via visa card or cash. Inputs: visa card details if payment via visa card.

Source: if payment via visa card ; check visa card number and visa card password to check the balance of amount of money in the customer bank account

Outputs: Message “ payment successfully“ .

Action: if payment via visa card ; the system check visa card number and visa card password to check the balance of amount of money in the customer bank account ,

If balance less than total price ; warning message and cashier check the customer if he complete the total price payment via cash.

Requirements: customer pay money for his order . Pre-Condition: the receipt was generated .

Post-Condition: payment amount from customer greater or equal total price . Side effects: increases the profit.

## ***5. Nonfunctional Requirements:***

### **- Product Requirements:**

- **Book Notifications**

The software can provide automation tools so that guests are automatically sent confirmation emails, or an email or SMS on the day of their booking, reminding them to attend.

- **Cloud-Based**

remote access to software becomes much more manageable, data is continually updated and backed up, and the start-up costs are minimized in exchange for predictable subscription fees.

Using software that relies on cloud infrastructure does require continuous internet access, but the benefits also extend to greater security and compatibility with other similar applications.

- **Reporting & Analytics**

Another major part of restaurant management systems is reporting and analytics features. In most cases, an easily-accessible dashboard will provide a basic overview of the primary information that those involved in restaurant management may need to know on a daily basis. At the same time, more in-depth reports can also be generated.

This allows managers, owners and other leaders to keep a close eye on restaurant performance over time. Meanwhile, analytics tools can help restaurants assess, analyze and understand the vast amounts of data they collect.

- **Additional Integrations**

Modern businesses tend to utilize a variety of different applications, and the data needs to be able to be passed between them as seamlessly as possible. This requires integration options, which is why such functionality is so essential for the very best restaurant management software solutions.

Service providers offer some cloud-based solutions that can customize the restaurant management system for each business based on the integrations they need. However, where this is not possible, a basic level of integration with CRM, revenue management and restaurant POS systems must be on offer.

- **Technical Support**

Finally, your chosen restaurant management system must include technical support functions. After all, when things go wrong with your software or when you encounter system failures, it has the potential to disrupt your entire business, meaning solutions need to be found as quickly as possible.

Technical support features can come in many forms, from access to live chat support or a ticketing system for accessing professional assistance to built-in help, troubleshooting and tutorial sections within the software itself.

- **Testable non-functional requirement**

Restaurant staff shall be able to use all the system functions after four hours of training. After this training, the average number of errors made by experienced users shall not exceed two per hour of system use

- **Performance**

1. Response time should be less than 5 seconds.
2. The system should be responsive.
3. The system should maintain stable response over low powered network.

- **Availability**

1. The system should be available online 24/7.
2. The system should be available on every web-accessing device.

- **Security**

1. The system should use secure protocol to encrypt private data (eg. Passwords).
2. The system should manage transactions securely.

- **Reliability**

1. The system should perform data backups each day.
2. The system should have alternative access server in case of failure.

- **Scalability**

1. The system should support feature extensions easily without altering current system.

## **- Organizational requirement**

- Users of the restaurant management system shall authenticate themselves using their account.

## **- External requirement**

- The system shall implement customer's privacy provisions as set out in HStan-03-2006-priv.

