



Software Requirements Specification

for

10. Restaurant Management System

Version 0.1

Prepared by

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1 Introduction

This SRS gives an insight into the software requirements and functionalities for the release 0.1 version of the Restaurant Management System (RMS). Also, the purpose for this document is described and a list of abbreviations and definitions is provided. This SRS will act as a base foundation for the management and development of the restaurant as well as focuses on what the resultant software will do and the relevant benefits associated with it.

1.1 Document Purpose

This document is intended to act as a foundation for efficient and well-managed project completion and will serve as an accurate reference in the future. This project focuses on implementing real-time management of a restaurant. It will also serve as the base for project planning and can help in assessing the progress made.

The software will comprise of managing the menu, orders at each table, employees working in the restaurant and keep track of the daily financial activity (Billing) and is intended to provide service from both customers as well as the manager's point of view.

1.2 Product Scope

This S/W is an online system that is intended to replace the conventional paper-based menus with the electronic format and is supposed to make the delivery easier as well as the generation of the payment instantly. S/W will help both customers and the staff in the restaurant mainly the manager and the chief chef. Even though the suggested strategy needs the use of various H/W components to incorporate the idea, our primary objective is to present an SRS related to the software.

The RMS is a software package to facilitate ordering within a traditional restaurant but in a modern way. The customer will be able to view the menu, pick his options instantly and order them after making instant payment. The option to order more items are also provided. From the manager/ owner point of view, billing will take place automatically and can view the transaction details, as well as the employee's details along with the scope of modification and above all the delivery of food, can be made faster by the chief chef since all the orders can be viewed and delivered faster than by using conventional paper pen technique.

1.3 Definitions, Acronyms and Abbreviations

APP - Application

SRS - Software Requirement Specification

DB - Database

RMS - Restaurant Management System

H/W - Hardware

S/W - Software

Item - Single serving of food

Order - Comprises one or more items

Server - Backend computer that hosts the restaurant menu and ordering system

Menu - Surface computer representation of the available items and other options

1.4 Document Conventions

This document follows the IEEE formatting requirements. Arial font size 11,14 has been used throughout the document for text. Use italics for comments. Use of bold for headings. The document text is single-spaced and 1" margins are maintained in this document.

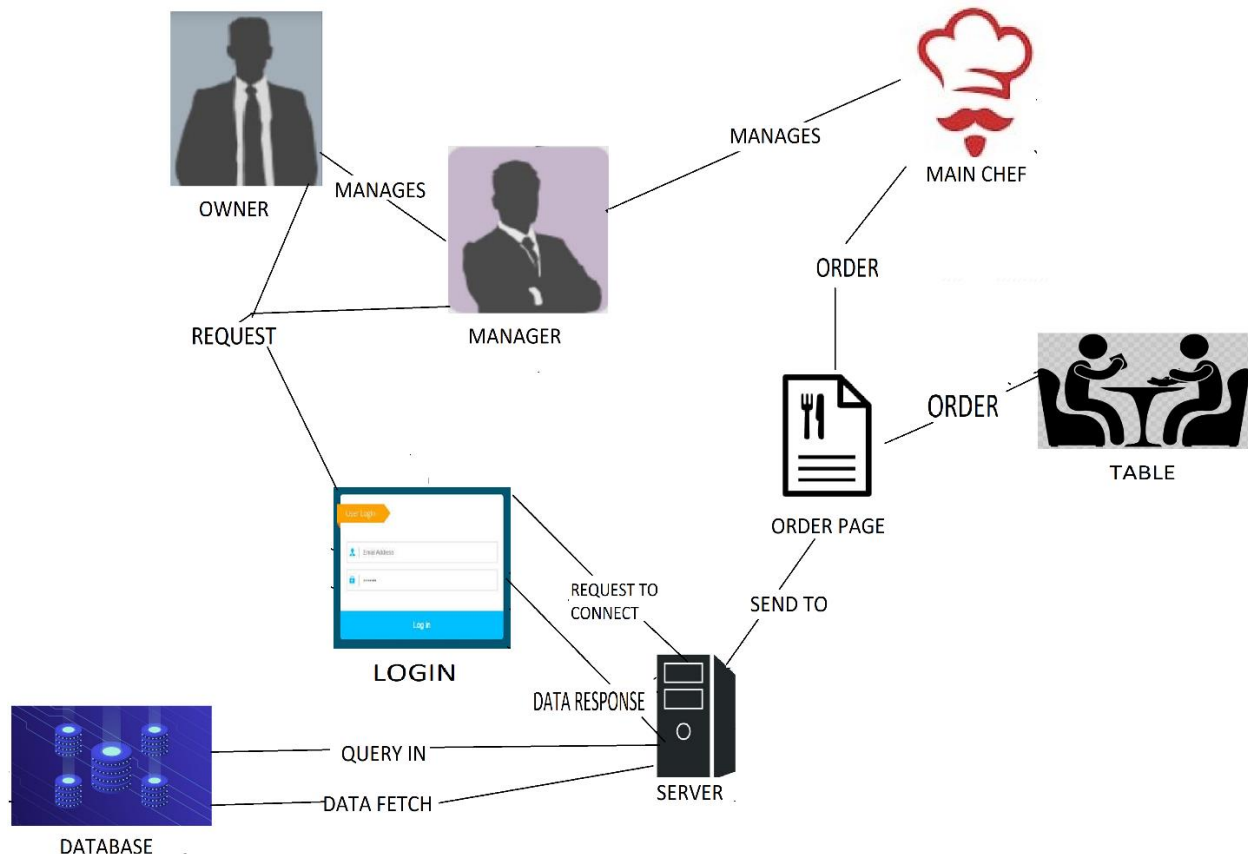
1.5 References and Acknowledgments

1. <https://online.visual-paradigm.com> for the designing part.
2. IEEE formatting template.
3. You Tube – UML videos for reference
4. Google images

2 Overall Description

2.1 Product Overview

This Restaurant Management System (RMS) is a self-contained product that will be developed from scrap in the current 0.1 version. A restaurant owner wants to computerize his order processing, billing and accounting activities. The financial reports generated from the system is expected to play a crucial role in further financial decisions undertaken by the manager/owner. The system is expected to evolve over several releases. This application will be convenient to manage the employee details and financial calculations which will otherwise have to be managed manually.



2.2 Product Functionality

For Manager/Owner:

- **Login:** Provides the option to log in to the system to check all the details of orders and bills.
- **Check Transaction:** Display the bills paid
- **Table status:** Display table free or not

- Orders: Fetch details of all the items ordered that day
- Employee details: Provide the data of all the employees in the restaurant.

For Customers:

- Place Order: Select items from the menu
- Time taken: Approximate time taken to finish preparing the orders
- Expand Order: Add new items to an existing order
- Pay: Make the payment soon after placing order and acknowledgement receipt regarding payment will be delivered

For Master Chef:

- Read Order: The master chef can see details regarding the currently placed orders.
- Allocate waiter: Chef shall check the status of available waiters and allot the available one to deliver the order

3 Specific Requirements

3.1 Functional Requirements

F1: The system shall provide a login page for the owner/manager and if required should provide registering option.

F2: The system shall allow the manager/ owner to see the revenue generated that day.

F3: The system shall provide details regarding the table to the manager/owner, whether the table is available or not, the order placed in the table and the transaction of the amount if made by the customer.

F4: The system shall display the list of items placed in the orders by all the customers that day.

F5: The system shall display the employee details i.e., chefs, waiters, master chefs, managers if the current user is owner/ manager.

F6: The system shall provide the option to place a new order for the customers.

F7: The system shall display the approximate time for the arrival of the order to the customer.

F8: The system shall allow the existing customer to add new items to his/her order.

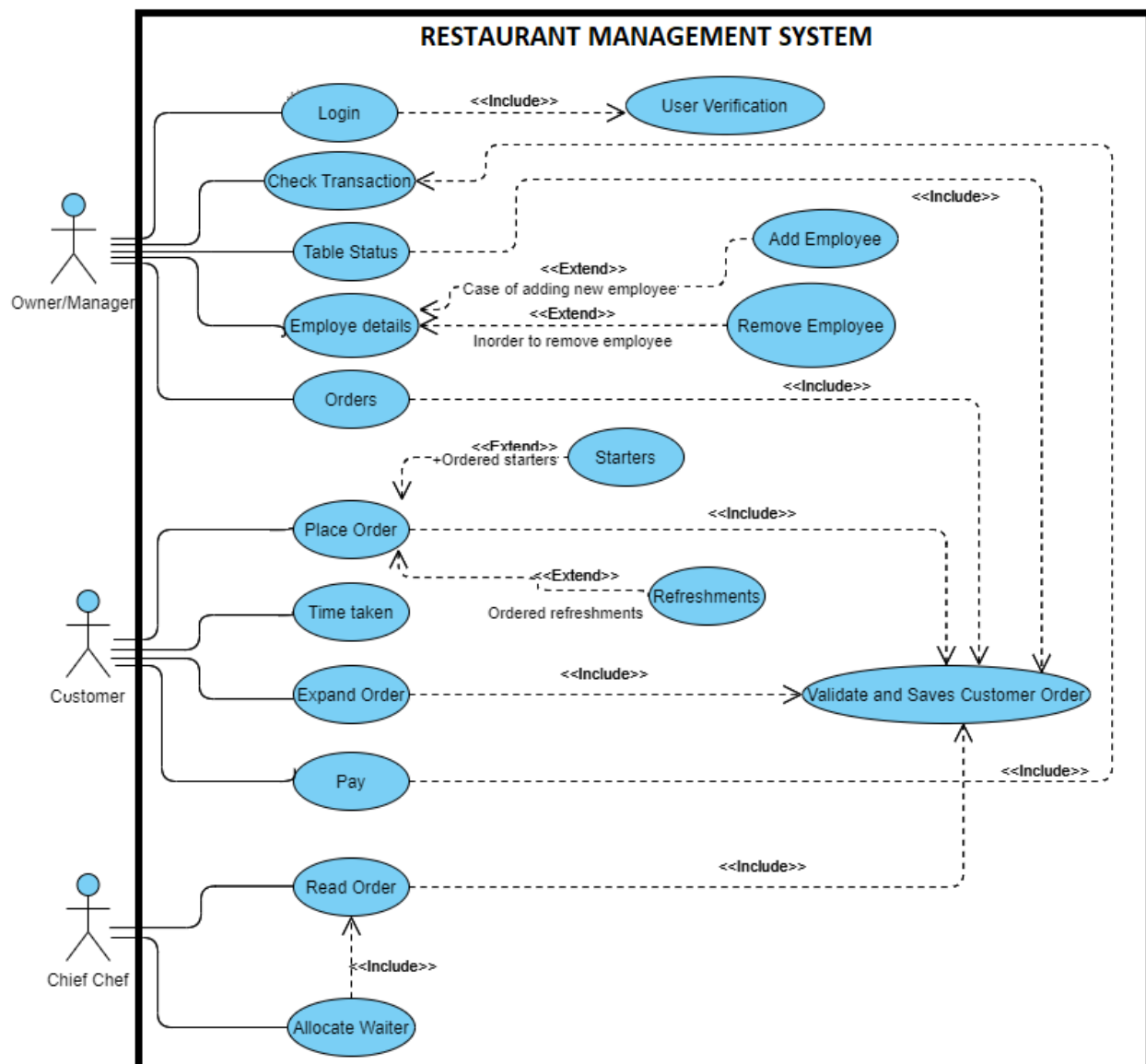
F9: The system shall provide an interface for the transaction and deliver notification regarding the transaction to the customer.

F10: The system shall display the order page to the Master chef to prepare the items.

F11: The system shall allow the master chef to allot waiters to tables where orders are currently placed.

F12: The system shall provide the owner/ manager with the scope to add new employees and remove them and update their details.
 F13: The system shall provide the facility to the owner/ manager to update every employee details.
 F14: The system shall make sure the waiter is delivering the proper order to the corresponding table.

3.2 Use Case Model



3.2.1 Use Case #1 (Login)

Purpose – To allow the owner/manager of the restaurant to login into the system.

Requirements Traceability – F1

Actors – Owner/Manager

3.2.2 Use Case #2(Check Transaction)

Purpose – The Owner/ Manager can see the amount earned by the restaurant

Requirements Traceability – F2, F9

Actors – Owner/Manager

3.2.3 Use Case #3(Table Status)

Purpose – Reports which all tables are currently available

Requirements Traceability – F3, F6

Actors – Owner/Manager

3.2.4 Use Case #4(Employee details)

Purpose – To feed the details of the employee along with updating and removal options.

Requirements Traceability – F5, F12, F13

Actors – Owner/Manager

3.2.5 Use Case #5(Orders)

Purpose – List out every order placed on that particular day.

Requirements Traceability – F4, F6, F8

Actors – Owner/Manager

3.2.6 Use Case #6(Place Order)

Purpose – Arrived customers can place the order through order page.

Requirements Traceability – F6

Actors – Customer

3.2.7 Use Case #7(Time taken)

Purpose – Provide approximate time of arrival of the order.

Requirements Traceability – F7

Actors – Customer

3.2.8 Use Case #8(Expand Order)

Purpose – Provide customer option to add order to the existing one.

Requirements Traceability – F8

Actors – Customer

3.2.9 Use Case #9(Pay)

Purpose – Customers can make instant payments after placing an order.

Requirements Traceability – F9

Actors – Customer

3.2.10 Use Case #10(Read Order)

Purpose – The Chief chef can see and command the dishes to be prepared.

Requirements Traceability – F6, F8, F10

Actors – Chief chef

3.2.11 Use Case #11(Allocate Waiter)

Purpose – The chief chef can allot a waiter to serve the order placed at the corresponding table.

Requirements Traceability – F11, F14

Actors – Chief chef