

Department of Computer Science and Engineering

# SOFTWARE REQUIREMENTS SPECIFICATION for

# RESTAURANT MANAGEMENT SYSTEM

Version 1.0 approved

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# **Revision History**

Name Date Reason For Changes Version
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#### Introduction

#### Purpose

This document presents a detailed explanation of the objectives, features, user interface and application of Restaurant Management System in real life. It will also describe how the system will perform and under which it must operate. Both the stakeholders and the developers of the system can benefit from this document.

#### Intended Audience

This document is intended for different types of people such as:

- Developer
- System designer
- Tester
- Restaurant owner

This document has a sequential overview of the whole project so if a reader reads the document from top to bottom, he will get a clear idea about the project.

## **Product Scope**

- This system will help to manage and run the restaurant business systematically. In this management system we will provide an app that can be used by the customers to order food.
- Customers can see the list of food items in the restaurant for that day. This helps them to choose whether to come or not.
- They can order their dishes and also make payment through this website.

#### References

- HTML5 https://www.w3schools.com
- CSS3 https://www.w3schools.com



• JAVA Script - <a href="https://www.w3schools.com">https://www.w3schools.com</a>

# **Overall Description**

# **Product Perspective**

The Restaurant Management System helps the restaurant manager to manage the restaurant more effectively and efficiently by computerizing meal ordering, billing.

The system processes transaction and stores the resulting data.

The whole management system is designed for a general Computerized Digital

Restaurant. So that any restaurant owner can get it and can start automated process to his restaurant.

#### LOGIN PAGE:

Allows user to login to the website so that they can access the features

#### **DESCIPTION:**

Allows user to see what features and how different is the website by explaining the features.

#### FRONT END USER INTERFACE

HTML-Format the text document on the web

CSS: Styling sheet

**BACKEND:** 

**MONGODB** 

**EXPRESS JS** 

#### **Product Functions**

- Ordering food through the app
- List of food items to search
- Sign up page to register, if already registered then directly login.
- Adding items to the cart.
- Payment gateway.



#### **User Classes and Characteristics**

- One main type of users are people who work in mnc's or own business. They don't have much time to wait for their order in the restaurant .So they like to order in advance before coming so that they have no problem.
- Another type of users are those who want to see the menu before coming to the restaurant so as to decide whether to come or not.
- There might also be users who have language problems and find it difficult to speak to the waiter. So they order in advance

These are the main type of users who use the website.

## **Operating Environment**

The product will be operating in a windows environment. The website shall operate in all famous browsers, for a model we are talking Microsoft Internet Explorer, Google Chrome and Mozilla Firefox. Also, it will be compatible with IE 6.0. Most of the features will be compatible with Mozilla Firefox and Opera 7.0 or higher versions. The only requirement to use this online product would be an internet connection.

The hardware configuration includes Hard Disk: of 40GB, Monitor: 15-inch Color monitor, Keyboard: 122 keys input devices required are keyboard, mouse and output devices are monitor etc

## LANGUAGE: Javascript

It is need to use Smart phone to place food order in this system. Which will running on Android Operating System. Whole system should be covered by WiFi connection.

#### **Design and Implementation Constraints**

#### 2.6 Assumptions and Dependencies

'The assumptions are:-

- The coding should be error-free.
- The system should be user-friendly so that it is easy to use for the users.
- The system should have more capacity and provide fast access to the database.
- The website is running 24/7.
- Users may access from any computer that has internet browsing capabilities and an internet connection.



• The user must have their correct usernames and passwords to enter into their online accounts and do actions.

## The dependencies are:-

- The specific hardware and software due to which the product will be run.
- Based on listing requirements and specifications the project will be developed and run.
- The end users (admin ) should have a proper understanding of the product.
- The information of all users must be stored in a database that is accessible by the website.

# **External Interface Requirements**

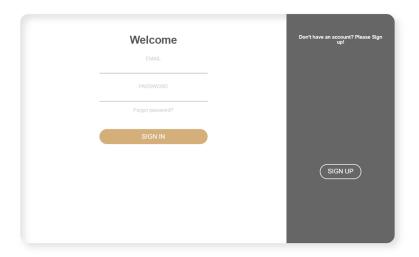
#### **User Interfaces**

The interface will be user-friendly. So that every kind of customer can place the food order easily. Customers can also give feedback through it easily with some demo comment or if they are keen to write their review by own they can do it.

Here Customers have to login inorder to browse the food menu in the website, and then they can order the food by their own desire.

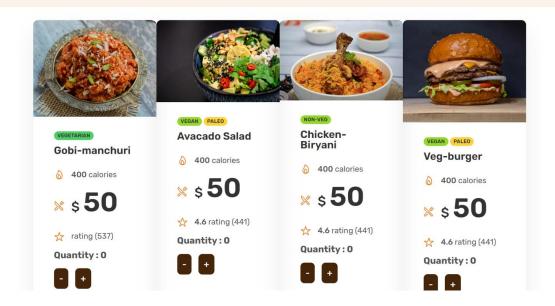
SAMPLE SCREENSHOT:





In the screen below, system shows a list of cards (UI Elements) of dishes. Each dish will have an image, its price per serving.

#### OMNIF COD



## Software Interfaces:

Admin Interface:



As Admin is authorized to perform CRUD operations on menu items and prices of those items and then

receiving the payment of customers.

Software Interfaces:

The software required for the development of the project is:

Operating System: Windows 10/11

Environment: Visual Studio .NET 2002

Framework: Version 1.0

Language: HTML, CSS and Javascript

Backend: NodeJS, ExpressJS.

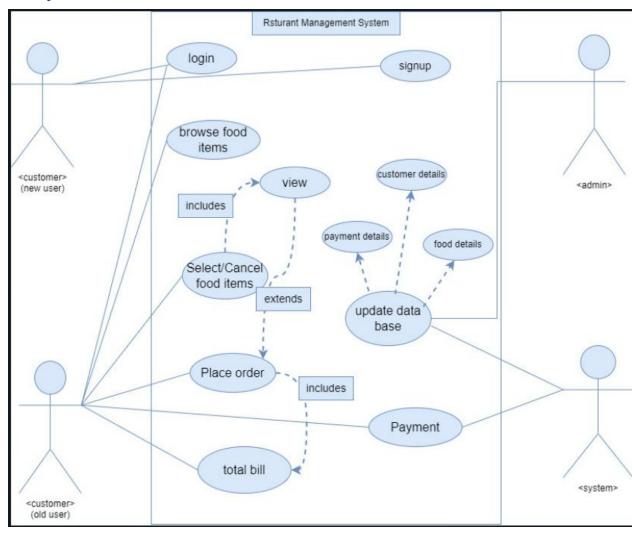
Database: MongoDB.

#### **Communications Interfaces**

Communications Interfaces: uses HTTP protocol for communication, so our device will follow HTTP protocol



# **Analysis Models**



# System Features:

The Restaurant management system has the following users:

- 1.Customer
- 2.Admin

Customers are able to:

View the menu and add items to the cart

Then go to the payment page



Can check for the availability of food items

Admin can:

Check the order details and users registration details stored in the database

Other Nonfunctional Requirements

Performance Requirements

Performance based on local server.

Takes some initial load time.

Performance will depend on hardware components.

Payment system will be fully secure with POS system

Different database for each customer.

#### Safety Requirements

The database may get crushed at any certain time due to virus or operating system failure. Therefore it is

required to take the database backup so that the database is not lost. Proper UPS/ Inverter facility should

be there in case of power supply failure.

#### Security Requirements

Whole system is secured and only admin access the data. The system will use HTTPS, because of this protocol more secure.

#### Software Quality Attributes

- Only the admin can edit the database and not the users
- The quality of the database is maintained in such a way so that it can be very user friendly to all the users of the database.

#### **Business Rules**

A business rule is anything that captures and implements business policies and practices. A rule can enforce business policy, make a decision, or infer new data from existing data.



This includes the rules and regulations that the system users should abide by. This includes the cost of the project . The users should avoid illegal rules and protocols. Neither the admin nor members should cross the rules and regulations.



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# Other Requirements

The website shall handle expected and unexpected errors in ways that prevent loss of information and long downtime period .

# **Appendix A: Glossary**

- User: Normally users can comment or view details of the website availability.
- Client: Intended users for the software.
- SRS: Is a document that describes what software will do how it will be expected to perform
- MongoDb: is an opensource Nosql database management program