**SOFTWARE ENGINEERING PROJECT**

**SOFTWARE REQUIREMENTS SPECIFICATION**

**RMS**

RESTAURANT MANAGEMENT SYSTEM

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1 **Introduction:-**

Restaurant management system(RMS) isn't just for keeping customers coming and almost about serving food.we need to form that we offer nice service too.

It helps the restaurant manager to manage the restaurant a lot of effectively and effectively by computerizing meal ordering and internal control.

It is primarily supposed to restaurant business,but it also can use in bakeries,bars,cafes or delivery business.

* 1. **Purpose:-**

The purpose of this SRS is for each functional and non-functional needs of the restaurant management system. This document aims to capture the system requirements and features associated with ordering and inventory management.

* 1. **Scope:-**

This system can facilitate to manage and run the restaurant business consistently. the main purpose is to boost the performance of the restaurant by eliminating the daily paper work. with this technique the tasks are performed in less quantity of time and effectively.

* 1. **Definitions, Acronyms, and Abbreviations:-**
* Account - Comprises all the meals from a table
* Business - it  is an occupation or trade and the

purchase and sale of products or services to make a profit.

* Customers - a person who buys goods or services from a shop or business.
* Order  - Comprises one or more items
* RM - Restaurant Manager
* RMS - Restaurant Management System
* SRS - Software Requirements Specification

1.4 **References:-**

* IEEE. Software Requirements Specification Std. 830-1993.
* [www.google.co.in](http://www.google.co.in)

1.5 **Overview:-**

Section 1 - discusses the purpose and scope of the software.

Section 2 - describes the overall functionalities and constraints of the software and user characteristics.

Section 3 - details all the requirements needed to design the software.

2 **The Overall Description:-**

2.1 **Product Perspective:-**

1. The RMS is a single functional unit consisting of various sub-components.
2. This software allows the user to login their accounts through a login page without any cards etc.
3. This software also allows the perform various other functions apart from just ordering food from his account such as selecting different categories of food etc.
4. Some of its hardware components are memory, drives i.e. for ordering, management system and disks.

2.2 **Product Functions:-**

The major functions that RMS performs are described as follows:

1. Account Maintenance:- The various functions that a user can perform with his account are as follows:-
2. Account Type:- The user has the freedom to select any order with his account.
3. Ordering food:- he can select any category of food and order them with his account.
4. Before Login

 Login

 Register

 About Us

 Contact Us

1. After Administrator Login

 Edit Website Details

 Add Food Items

 Remove food Items

 Add Restaurants

 Delete Restaurant

 Logout

1. After User Login

 My Profile

 Menu

 Search Food Items

 My Cart

Order

 Logout

2.3 **USER characteristics:-**

there are different types of users that will be using the software the users of the software are as follows:-

user A- this user has little or no experience with electronics or the usage of any kind of software and for this type of users the software will be provided basic

instructions which he need to read and follow the given instructions carefully.

user B- this user has more experience with electronics or any software he uses the software regularly to order the food so he need no instructions for ordering his food but there will be a little help at the beginning of the session so

that he can read the instructions or skip it.

2.4 **Constraints:-**

The major constraints that the project has are as follows:

1. The RMS must service at most one person at a time.
2. A user can select any category of food that is supported by the account.
3. Windows system is more convenient.

2.5 **Assumptions and Dependencies:-**

The SRS assumes that none of the constituent system components are becoming to be implemented as embedded applications.

The order report, food category and food are

stored in register and at the top of the session the reports are generated. The existing system isn't user friendly because the retrieval of knowledge is extremely

slow and data is not maintained efficiently. We require more calculations to generate the report.

It is furthermore assumed that the scope of the package will increase considerably in the future.

3 **External Interface requirements:-**

3.1 **User interfaces:-**

The restaurant interface provided to the user is very easy to understand and all the options are visible right in front of the user. The interface in the website contains the following components: -

1.Initially a welcome page is visible with the name of the restaurant and some options.

2.In order to use the website and avail services from the restaurant the user first needs to register by providing some basic details like name, phone number, address, e-mail id and also needs to create a password.

3.After the user is successfully registered the user is brought back to the home page where there is an option called login and now the user needs to login with the information provided earlier.

4.Now the user can login by the information provided earlier, if any of the information entered is wrong the user can’t login and is requested to check all the details and try again, if the user isn’t registered it says to register and then login.

5.Looking back at the main page there are many other options available like contact, when clicked on it the user can see information about the restaurant like phone number, timings, e-mail id, location, payment methods accepted.

6.The user can also select the about us option which gives a bit more information about the restaurant like opened date, main people involved in the restaurant, customer reviews, etc.

7. Finally the user can see all the different cuisines available in the restaurant and can pick anyone cuisine and select the item to order, the user can also search for any items of their wish and order them, the user can also select multiple items.

8.After selecting all the items needed the items can be added to the cart and the total bill value is automatically calculated and presented to the user.

9.The items are now ordered from the cart if the user wishes to do it, and if the user does order there is nothing much to do and the user can safely logout from the restaurant’s website.

3.2 **Administrator interfaces:-**

The administrator can also access the website and make changes according to the restaurant’s operating procedure, the changes allowed by the administrator are detailed as follows: -

1.The administrator also see’s a similar interface like the user but when the login details are entered the interface changes and the option to edit the website is now available.

2.Now the administrator can do many things like edit the website details, add food items based on that day’s menu, remove any food items, add and delete a new restaurant if a new location is opened or closed, etc.

3.After all the required changes are made by the administrator, he can logout just like the user and the website will now be updated according to the administrator’s preference.

3.3 **Software Interfaces:-**

In order for all the above methods to function we need a software that can do it all and in this project the software used are: -

1.All the login data of customers and the administrator and the previous order data of the customer can be stored using MySQL.

2.All the main headings and names in the website and the interface seen by the user when first logged in is done by using HTML.

3.HTML might be useful to create a website but in order to design and make the website more appealing for both the user and administrator CSS is also used which makes the website a bit easier to understand.

4.As mentioned earlier that the website is interactive and various requests can be executed, in order for all of this to work smoothly JavaScript is used in this website.

3.4 **Communications Interfaces:-**

After the order is placed by the user the website needs to send the order details and the customer details to the restaurant and the restaurant needs to confirm the order, in order for all of this to function smoothly the following software’s are used: -

1.The data collected from the user is sent through a server to the restaurant and the application which helps this to happen is called xampp, the main use of this software is to create a server which helps in transfer of the data.

4 **System Features:-**

4.1 **Ordering and Account Management:-**

The website is designed in a way so that the user can order food online without the help of anyone or by not asking anyone. The functions of the system is as follows: -

This all begins when the user enters the URL of the website in a browser, after the user does this the website starts loading and after the loading is done the user can see the main home page containing different sections like about us, categories, contact, login, register.

In order for the user to use the website first thing that need’s to be done is registering in the website, the process of registering is simple and can be done by anyone who have a valid e-mail id, after this is done the user can now login and see all the different types of food’s available in the restaurant, the user can also search for any specific type of item and add it to the cart, after the items are added to the cart the total bill value is automatically generated after this step the user can choose the delivery location or add a new address and can also select the payment method and after this step the order is accepted by the restaurant and the food is prepared and delivered to the user, now the user has placed the order successfully and can now logout from the restaurant’s website or can order something else from the menu.

Meanwhile the above is what the user can see, but the administrator has a completely different view of the website, the administrator can whatever he wants to the website some actions include adding and deleting food items, changing the price of items and also adding or deleting any new locations of the restaurant, after the administrator is done with all the needed changes the changes are saved and the administrator can logout.

4.2 **Validity Checks:-**

The main functionality of the website is to accept order requests from the user, this is only possible if the user logs in to the website and the process of logging in is done by the user by entering the correct e-mail id and password provided by the user during the registering process.

The administrator can also login similarly like the user but there are a lot of functions that can be performed by the administrator.

4.3 **Sequencing Information:-**

The information of all the registered user’s and the administrator is stored in a database so that they don’t have to register every time they access the website.

4.4 **Error Handling:-**

Error messages are generated if the user or the administrator make any mistakes while logging in or while ordering, the messages are clear and guide the users to correct the mistakes.

5 **OTHER NON FUNCTIONAL REQUIREMENTS:-**

5.1 **PERFORMANCE REQUIREMENTS:-**

5.1.1 **Capacity:-**

It depends on the timing of the restaurant.

5.1.2 **Dynamic requirements:-**

\* After filling the register details it will confirm you with in 5 sec under normal server workload.

\* After enter your login credits in login page it will get into the main menu within 7 sec under normal server workload.

\* After complication of your order you will logout from the website must not exceed 3 sec under normal server workload.

\* Touch screen and button response time must not exceed 5000ms.

5.1.3 **Quality:-**

our aim is to to produce quality software as the quality of a piece of a software is difficult to measure quantitatively the following Guidelines Will be used when judging the quality of the software.

1. Consistency- All code will be consistent with respect to the style.

2.Test cases- All functionally will be thoroughly tested.

5.2 **Software system attributes:-**

5.2.1 **Reliability:-**

The software ensures reliability and quality of the customers data.

The memory system were the data is stored is non volatile.

5.2.2 **Availability:-**

The software is available for every customer it is available to use in any device for the comfort of the customer as per the customer suggestions the administrator will update the software for making the interface of the software better than the previous versions.

5.2.3 **Security:-**

Every user should create their account by their email address and the software will suggest the password if required otherwise user can choose their own password we are implementing this procedure to avoid false orders from the customers and maintain the details of the customer if the user forgets his login credentials like password by performing the instructed procedure in the software user will get the password resetting link to the given email address the password can contain alphabets numbers and any other characters.

5.2.4 **Maintainability:-**

There are some issues which come up in the user environment to fix those issues updates are released.and to enhance the software to some better versions maintenance is done to deliver these changes in the customer environment.

5.3 **Business rules:-**

The business rules for the software are as follows:-

The administrator has the authority to fix the rules and regulations and to set up or update the policies and edit the menu like he wanted the administrator cannot use the customer info for his personal use the administrator will keep the account of the user updated as soon as the

user updates his details so that the data is in consistent state.

6 **Other Requirements:-**

None.

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