

RESTAURANT MANAGEMENT SYSTEM

This project aims to create an integrated software for a restaurant that requires automation for its Management System in holding the records of the customers, food ordered, number of visits made by the customers and information of the employees. This emphasis in generating a report for calculated revenue of the company. The system will produce reports of the expenditures and also the average time on spent on the food service from the time ordered to the food delivered. The System will be accessible to multiple users such as the Manager, Food Manager , Supervisor, Chefs, customers and waiters. The systems also reports on days of traffic flow in a week, peak hours in a days and food that makes the maximum profit.

The system supports the above functionalities multiple restaurant branches.

DATA DESCRIPTION

There are restaurant branches at various location . All the functionalities and the information maintained will be the same across all restaurants. This would include the following details.

Restaurant Information:

- 1) Restaurant id
- 2) Open time and close time (this provides information on the restaurant working hours)
- 3) Address and phone number
- 4) Manager Id (Each restaurant has a manager who administers all the information and the activities at the restaurant.

Customer:

- 1) Customer Information : The customer name, email address, phone number, residential address , credit card details (for bill payment) and password.
- 2) Customer id

Employees :

Information about the employees (chef , manager, food manager, supervisor, waiter) should be maintained at each restaurants. The following are the information stored.

- 1) Employee Information: Name, Emp id , address, email id , phone number , hire date and account details
- 2) Username and password
- 3) Each employee will be working at a restaurant. Hence Restaurant id is stored
- 4) Salary

Employee Categorization :

- 1) **Manager** : He is authorised to view all the information about the employees, customer information. He can edit employee information in the system. He also edits the menu item with cost
- 2) **Supervisor** : He is authorised to view all the details of the employees and also the information on the food items placed for order by the customers. He maintains table of records of the meal items that has been ordered and records of food ratings
- 3) **Food Manager** : He maintains the records for all the food ingredient expenditures at the restaurant with their quantity and cost. He has the access to keep a track of all the ingredients present, waste and to be purchased list. He can view the orders placed but cannot have edit access to it.
- 4) **Chefs** : The chefs job to cook the food ordered by the customers. They can only view the table of records for the food items to be cooked
- 5) **Waiter** : The waiter can only view the customer information about the food ordered. The waiter keeps time record for the food service(enters the time of the order placed and the order serviced)

Menu :

- 1) Food item number
- 2) Food name
- 3) Types of food : Appetizer, Entrée and Dessert
- 4) Food items available during the course of time in the day
- 5) Each food time is assigned to cost
- 6) Food sizes vary : small , medium , large

Order Details:

Each time a customer walks in, he/she makes an order and those details are maintained.

- 1) Order Number
- 2) Item number
- 3) Customer ID
- 4) Waiter Id and the Chef id (for each order placed, a waiter is associated to service the food and a chef to cook).
- 5) Restaurant id
- 6) Date of walk in
- 7) Time order placed
- 8) Time order fulfilled
- 9) Total of food items placed
- 10) Quantity of each food item
- 11) Cost in total

Item Purchase Info:

Information regarding all the purchases made for the restaurant are maintained in the database.

This includes:

- 1) Vendor Information:
Vendor Id, Company Name, Vendor representative name
- 2) Items Purchased:
Ingredients name , Unit, Unit Price(price of each item), Item Group(food or furniture), Inventory(Number of available Items),Vendor Id.

Here,we have included the vendor details as the same item can be purchased from different vendors.

Order Survey:

Each time the the order is made,there will be an option to provide survey for each order and the following details are captured and stored in the database during the phase.

- 1) Survey Number
- 2) Order Number
- 3) The rating for the food ordered (On a scale of 1-5 the customer rates the food)
- 4) The rating for the Service (On a scale of 1-5 the customer rates the service)

Note:Here,The Rating provided by the customer will be optional.

Walk-in details:

The customer can walk in into the restaurant during any time of the day,and the information regarding this is stored to understand the peak hours of the restaurant ,the waiting time for each customer and average waiting time for each restaurant.

- 1) Customer Id
- 2) Restaurant Id
- 3) Date
- 4) Walk in Time
- 5) Walk out Time

FUNCTIONALITIES :

The manager should be able to view all the information about the expenditures on food, customer information, employee information and the ratings the customers provide for the food.

The Manager produces a report of the customers who made visits more than 10 times.

The supervisor assigns each customer to a waiter to service the food and a chef to cook the order placed. The supervisor gives a performance rating to waiters based on the food service.

Generate a report on the number of foods being sold,

The salaries for the employees will be maintained by the manager.

The supervisor produces a report of the food ordered and he should also be able to produce a report of the food ordered the maximum and the minimum and also produce the report of all the foods on a weekly basis

The food manager maintains a record of the food expenditures for the food ingredients with cost and quantity (vendor details). He will produce information on the ingredients left out with cost and quantity. He should be able to produce the information on the stocks and the purchase list.

The Manager has access to the rating information provided by the waiter and produces the maximum and the min rates for all the food in the menu

The Supervisor should be able to produce a report on a daily basis on the number of customers serviced and also on the hourly basis. This is find out the peak hours of service and the days that hits with maximum customers.

The manager evaluates the supervisor, the food manager and the chefs and determines the salary based on the performance rate.

The manager should be able to calculate the revenue made by the restaurant. He should be able to generate the cost of the food ingredients/ month and calculate

the bills of each customer for that month. Calculation is based on the cost price and the selling price.