

Database Management Project

Requirements

Name: Shaan Kumar

Class: IDD

Roll No.: 19074015

Client: Madhuram Cafe, Mandla - 481661

About Client: Madhuram is a trademark of Mandla, They have a total of 3 shops: Madhuram Sweets, Madhuram Bakers, Madhuram Cafe. It is owned by Mr. Basant Agrawal.

Objective: Build a database system to provide the functionalities of all the three shops in just one application. The website in the user level should provide the functionality to order sweets/cakes/eateries and manage their order. From the client side, they should be able to fulfill the orders, manage stocks, etc.

Website Requirements

1. The website should have a good UI for customers to navigate through it in ease, It should give necessary details about the restaurant such as contact information, location using Map API and consumer's feedback.
2. There should be a section in the website giving the details about the shop like its history, etc. an overview of the products it offers, an attractive gallery for the shops, along with its business policies. This section would contain T&C for all the purchases made in the shop and the customer must accept them before making the purchase.
3. Before the customer should be able to place the order they must register themselves using the in-app registration form. If the user chooses for in-app registration, his email address must be validated to avoid some kind of attacks in the website.
4. Every customer upon signing up, needs to fill basic details such as name, address, phone number, etc. on the Customer Details Page. This would be used as a default address for all the deliveries and could also be used for further customer support. If a user chooses to skip this, he would be prompted to enter these while making their first order.
5. The customer would be given numerous methods to contact the managers of the shop such as they could write their complaint/feedback in the form provided within the website which would be redirected as an email to the client. They would also be given with the phone numbers and/or email addresses of the managers so that they can directly contact them in the case of discrepancy.
6. The user should be shown the list of items arranged in different categories along with its ingredients details, price, expiry, weight, etc. and should be able to choose the quantity

and add the items in his shopping cart(depending on the availability of the item). Some items here which have offers in them would be shown at a discounted price.

7. Once the user proceeds to buy the items in his cart, he should be asked to confirm the contents in his cart, shown the final price by adding other prices(Delivery Charge, GST, etc.). The customer should have the option to add a special delivery note to make a note for the vendor in case if he has any special requests, there should also be a feature of promocode which would offer special discounts in some special occasions. Once the user is done with this, he would be prompted to add a delivery address if not yet added and choose a payment option.
8. Payment should be facilitated through a wide variety of options such as Net Banking, Credit Card, Debit Card, UPI, e-wallets, etc. The payment must be secure enough and must be authenticated. Postpaid payment methods should also be provided to the customers, any abuse on this payment method should be monitored.
9. Once the user places the order he should be given order confirmation with an auto generated invoice and this order would now be added to live orders of the user. The auto generated invoice would contain all the information regarding the order, the details of the customer who ordered it, payment information, item details, etc.
10. The website should have FAQ section to help the customers with their common problems with delivery, payment, etc.

Database Management

1. A database containing all the items sold by the restaurant should be maintained which contains information such as item details, item ID, cost, details, image, expiry date, in-stock quantity, etc. If the stock goes below a threshold, a warning mail should be sent to the client for restocking the item. If a product expires, it is automatically removed from the database and the client is informed about it in the mail. The database of items should be neatly categorised according to the different varieties of products.
2. There should be a separate table about the information of all the customers currently registered in the website, with their contact details, addressed, etc. The table can be useful for filtering customers to send promotional offers in their email addresses. It would be convenient to assign a unique id to each of the customers.
3. The database should store all the orders that are been made in the website along with all the order details such as the customer who made the order, order amount, order content, status of the order, etc. This table along with the previous table could help know the orders created by each of the customers.
4. The database should keep track of all the valid promo codes which the user can apply, there could be a possibility where the promo code is user specific, hence this must be taken care. It must contain the current status of the promo code and the details about how much discount will it give and in which manner.

Admin view of the website

1. The owner and/or managers of the shop should be able to maintain these databases easily using the admin panel. Here they will be offered different functionalities like managing stocks of items, reviewing orders, etc. The admin of the page could create other admin accounts as well.
2. The owner should be able to add new items, remove already existing items, alter the details of the items from the admin panel. The admin can add offers to some items for some time period beyond which the offer would expire. He should also be able to generate new promo codes for the customers and specify its benefits along with specifying the domain of the promo code.
3. The owner should be able to retrieve the information of all orders made along with their details and should be able to alter the state of the order (Close an invalid order). He should be able to know the overall sale of the day along with stats about sale of each item.
4. The owner could mass mail a pool of customers regarding the site maintenance, new offers, promo codes, and other information regarding the shop.