

Wholesale Management System

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Course: Database Management System (CSE-361) by Shri Ravindranath Chaudhary

Client: Mr Rohit Rajwani, owner of Krishna-Kirana Wholesale store, Sagra, Varanasi, UP 221010

About Client and need for website:

The Client, Mr Rohit Rajwani, is the owner of Krishna-Kirana Wholesale store. It is a general wholesale store located in Sagra, Varanasi, UP. Their primary business is through wholesale supply to shopkeepers but they also sell products directly to retail customers. They mainly go to the shops to supply general products on demand, and even sell them at their shop.

Also, they have suffered from mismanagement of transactions and stock which have resulted in huge losses at times. A website would help the customers to know about the availability of different kinds of products available and help the client in managing sales and stock efficiently. On top of everything, customers would be made aware of the discounts available on general products.

Data Requirements:

1. Customers: Maintain information about the customers. This includes a unique customer id, customer name, contact number, email address, delivery address, area, and orders placed by the customer.
2. Shopkeepers: It includes a unique shopkeeper id, shopkeeper name, contact number, email address, delivery address, area, license number and scanned copy of the license, orders placed.
3. Admin: Maintain information about the owner data, including name, email address, contact number, password.
4. Products: Maintain all the information about all the products it sells. This includes a general product id, general product name, brand, category, general product description, an image of the product, in stock or out of stock.
5. Orders: Information about all orders with an order id, general product id, general product name, quantity, customer/shopkeeper id and name, order total price, (date), order status (placed, confirmed, canceled, or delivered)
7. Delivery areas: It lists all the areas in the locality. It contains an area-id, area name, and a Boolean indicating whether the delivery facility is available or not.
8. Discounts Rates: It includes product id and discount percentage for different quantity ranges.
9. FAQs: It includes question id, question description, answer description for FAQs.
10. Minimum Order Amount: It is an integer storing the minimum amount of order applicable for delivery. It should be set in the beginning, and only the owner should be able to modify it.
11. Shopping cart: It includes product id, customer/shopkeeper id and quantity of the products added to the shopping cart.
12. Contact Us: It includes details to contact the store owner, like business email id, business phone number, social media account details

Functional Requirements:

The website should provide an interface for purchasing general products to both retail customers and shopkeepers who buy in large quantities. It should also have an owner side that gives the store owner the required permissions to manage the store. Here, the client or owner is the wholesale store owner; customer refers to retail customers, and shopkeeper refers to the shopkeepers to whom he supplies the general products in bulk. The functional requirements of the website are:

Authentication:

1. There should be separate signup and login options available for retail customers, shopkeepers, and the owner.
2. The customers should be able to log in and sign up to the website. Signing up would require details like name, contact number, email, residential area and address, and setting up a password. The area should be selected from a dropdown menu. With each area in the menu, it should be indicated whether it is eligible for the delivery facility or not. There should be an 'other' option to match all areas not enlisted in the menu. Log in or sign up should not be necessary for searching for products.

Search product and shopping cart:

3. The customers should be able to view and search the products. There should be two types of search available:
 - a. A universal search bar where customers can type the general product name for any category and search for it.
 - b. Search based on general product categories which shows all available types of general products. Customers should be able to go to specific categories and then search for products from a search bar or a list.
4. On clicking on a product, all of its details should be visible. These details should include general product name, brand, price, description, image, availability, etc.
5. There should be an option to add general products to a shopping cart. This option should be available on the details page of the product and in the list of products i.e., the customer should be able to add general products to their shopping cart directly from the name without going to the general product details, or from the general product details, whichever they want.
6. There should also be an option to select the quantity of each general product.
7. From the shopping cart, the customer can select some general products to place an order. There should also be a button to select all the products on the list.

Placing order:

8. Customers must log in or sign up before placing the order.
9. For customers, the option to place an order (placing an order means requesting delivery at the specified address) should appear only if the order amount is greater than a specified value. If the amount is less than the value, a message should appear, which tells the minimum order amount required for placing the order.

10. For placing the order, the registered delivery address should appear. If the address is not present in the database, the customer should be asked to enter the address and a contact number. If an address is already registered, they should be asked if they want to change the delivery address or go with the registered one.
11. For entering the address, there should be a dropdown menu to select the area or locality of the delivery address. If the area is not available for delivery, the customer has to visit the store to purchase.
12. If the area is available for delivery, the customer should then enter their address and click to place their order. Then, a message should appear, showing that the order is placed and will be confirmed soon. When the client confirms or cancels the order, they shall receive an email stating the same.

Orders and FAQs:

13. Customers should be able to view their order status on the website.
14. There should be options to contact the owner through email, phone number, or Facebook.
15. A FAQ section should be present, which includes common questions and answers about the facilities and the website.
16. Shopkeepers should be able to register separately. The signup page for shopkeepers should include their name, contact number, email, license number and a scanned copy of the license, shop address and creating a password.
17. For shopkeepers, all other functions need to be the same as that for retail customers, except that there should be specified discounts for ordering general products in bulk, with some specified percentage of discount on specified ranges of quantity. For example, on orders in quantity 1-10, there shall be no additional discount. For quantity 10-20, there should be a discount of 3%. For quantity 20-30, there should be a discount of 6%, and likewise.

The Owner:

18. The owner should be able to include, remove or update details of any products on the website. For including a product, product name, price, and details should have to be added. The system should ask again for confirmation before deleting any product.
19. There should be options to label some products as out of stock and to remove this label.
20. The owner should be able to view all orders on one page, with the address, general products and quantity. There should be two buttons for each order, confirm and cancel. For canceling, he should have to choose a reason for cancellation from a list.
21. The confirmed orders should move to a separate confirmed orders list. On delivery, there should be an option to mark the order as delivered, and it should be moved from the confirmed orders list to delivered ones.
22. An email should be sent to the customer about both confirmation or cancellation of the order. If the order is canceled, the mail should contain the reason for cancellation.
23. The owner should also be able to update the quantity of any general product in an order. This would be helpful in case a sufficient quantity of general product is not available. In

this case, he can talk to the customer/shopkeeper and ask if they are okay with the changed quantity and supply it accordingly.

24. The owner should be able to view the requests and mark them as completed or cannot be fulfilled for now.
25. The owner should be able to add, update or remove FAQs.
26. The owner should be able to update the discount rules for all products, as well as for specific products. He should also be able to update the minimum order amount required for delivery.