Database Systems

Project Report

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Submitted To Bilal Khalid Dar

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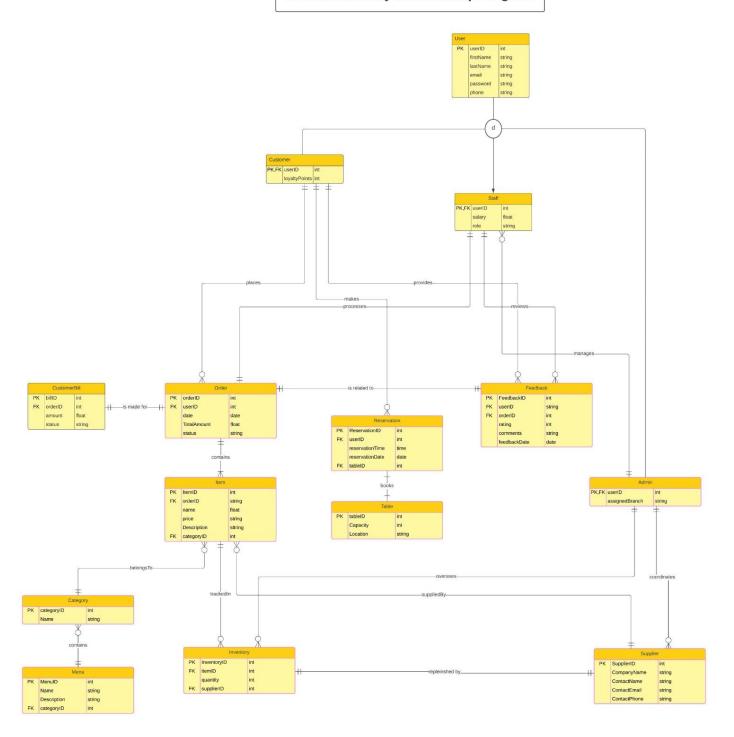
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ERD

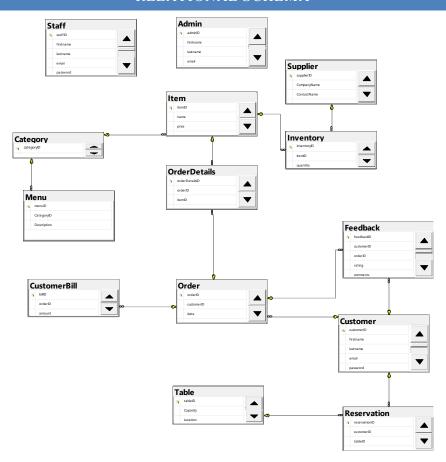
Entity Relationship Diagram staffID firstName string firstName string string lastName lastName string email string string password string string string string -processesmakes FK orderID orderID PK FeedbackID FK customerID float customerID string amount date FK orderID status date TotalAmount float rating feedbackDate reservationTime reservationDate FK tableID FK OrderID FK itemID date link toquantity subtotal firstName string lastName string Capacity email string password string phone string assignedBranch string price description string FK categoryID PK categoryID Name PK MenuID Name PK SupplierID Description FK itemID int CompanyName string quantity int int ContactName string FK supplierID ContactEmail string ContactPhone string

EERD

Enhanced Entity Relationship Diagram



RELATIONAL SCHEMA



NORMALIZATION

FIRST NORMAL FORM (1NF):

Each table has a primary key (e.g., customerID, orderID).

All attributes are atomic (no repeating groups or arrays).

If any multi-valued attributes exist, they should be removed to a separate table.

SECOND NORMAL FORM (2NF)

It's already in 1NF, All non-key attributes are fully functionally dependent on the primary key.

THIRD NORMAL FORM (3NF)

Already in 2NF, No transitive dependencies (no non-key attribute depends on another non-key attribute).

ENTITIES AND ATTRIBUTES:

- Staff (staffID, firstname, lastname, email, password)
 - Primary Key: staffID

- Admin (adminID, firstname, lastname, email)
 - Primary Key: adminID
- Customer (customerID, firstname, lastname, email, password)
 - Primary Key: customerID
- Supplier (supplierID, CompanyName, ContactName)
 - Primary Key: supplierID
- Item (itemID, name, price)
 - Primary Key: itemID
 - Foreign Key: categoryID references Category
- Order (orderID, customerID, date)
 - Primary Key: orderID
 - Foreign Key: **customerID** references **Customer**
- OrderDetails (orderDetailID, orderID, itemID)
 - Primary Key: orderDetailID
 - Foreign Keys: orderID references Order, itemID references Item
- Inventory (inventoryID, itemID, quantity)
 - Primary Key: inventoryID
 - Foreign Key: **itemID** references **Item**
- Feedback (feedbackID, customerID, orderID, rating, comments)
 - Primary Key: feedbackID
 - Foreign Keys: **customerID** references **Customer**, **orderID** references **Order**
- Category (categoryID, name)
 - Primary Key: categoryID
- Menu (menuID, categoryID, description)
 - Primary Key: menulD
 - Foreign Key: categoryID references Category

- CustomerBill (billID, orderID, amount)
 - Primary Key: billID
 - Foreign Key: orderID references Order
- Table (tableID, capacity, location)
 - Primary Key: tableID
- Reservation (reservationID, tableID, customerID)
 - Primary Key: reservationID
 - Foreign Keys: tableID references Table, customerID references Customer

FUNCTIONAL REQUIREMENTS

1. CUSTOMER MANAGEMENT MODULE

Customer Registration: Allows customers to register, creating a profile that includes information such as name, contact details, and preferences.

Profile Management: Customers can update their profiles, including contact information and passwords.

Loyalty Points Tracking: Customers earn points on purchases, which can be tracked and redeemed for discounts or free items.

Order History: Allows customers to view their past orders and their statuses.

2. ORDER MANAGEMENT MODULE

Menu Display: Shows available menu items with prices, descriptions, and images.

Order Placement: Customers can place orders, specifying item quantities and special instructions.

Order Modification: Allows modification of orders before final submission.

Order Status Tracking: Real-time updates on order preparation and readiness.

Order Feedback: Allows customer to give feedback on each order.

3. INVENTORY MANAGEMENT MODULE

Stock Entry: Entry of new stock items into the system, including quantities and expiration dates.

Stock Monitoring: Monitoring current stock levels to prevent shortages.

Inventory Reporting: Generate reports on inventory levels.

4. STAFF MANAGEMENT MODULE

Employee Profiles: Manage profiles for all employees, including roles, salaries, and schedules.

5. REPORTING MODULE

Sales Reports: Generate detailed sales reports by date, item, or category to analyze trends and performance.

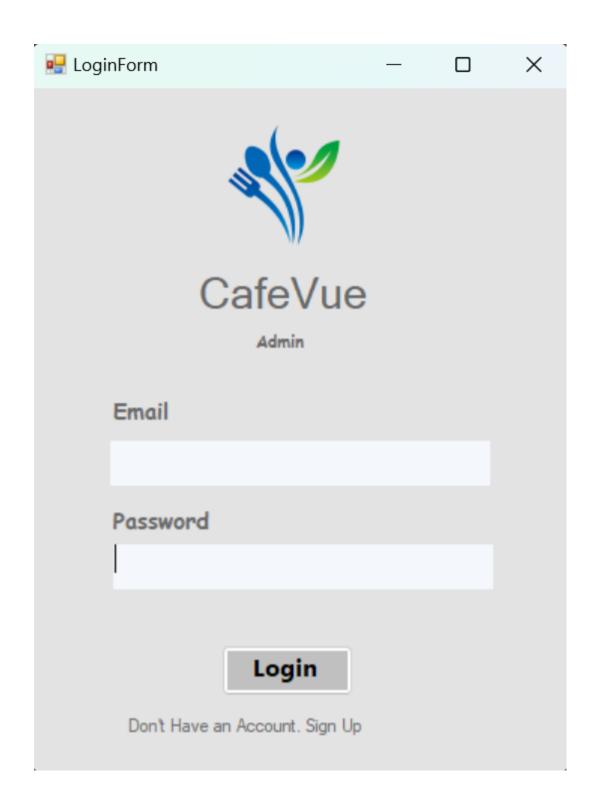
Inventory Reports: Detailed reports on stock levels, usage rates, and purchase needs.

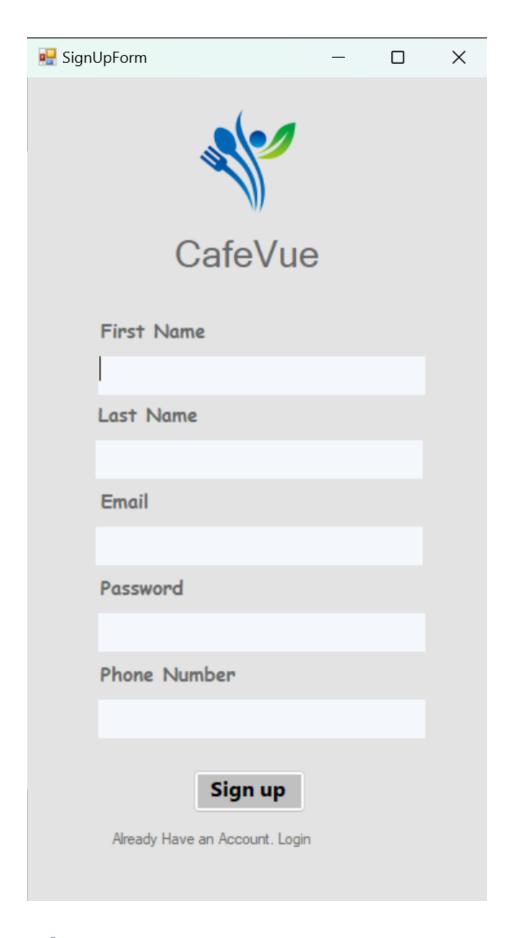
6. TABLE RESERVATION MODULE

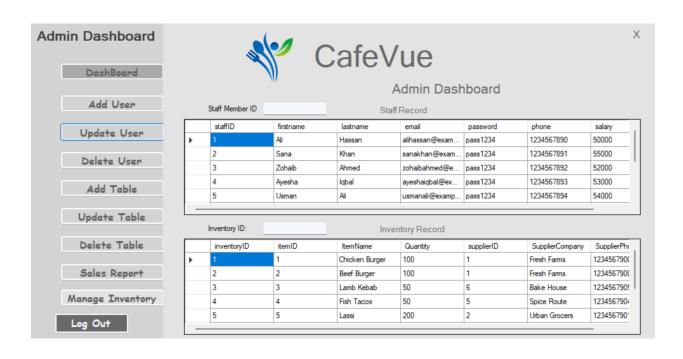
Reservation Management: Customers can reserve tables for specific dates and times.

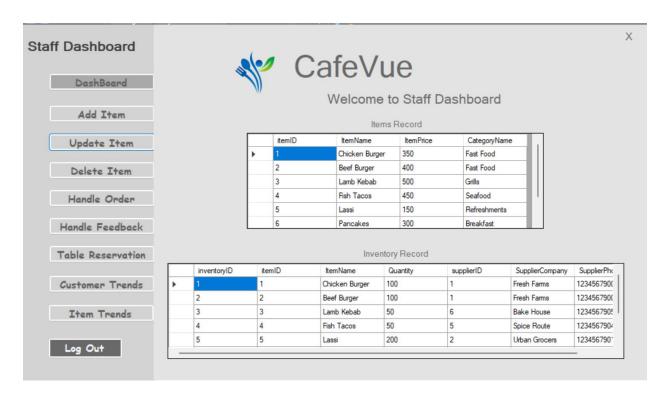
Table Availability: Displays real-time table availability.

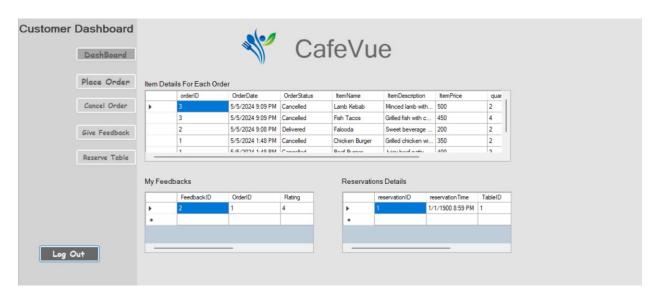


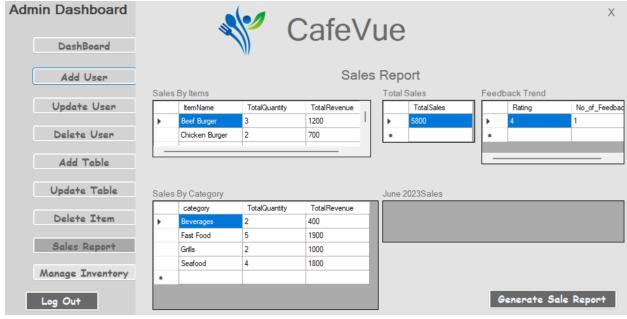














USER DOCUMENTATION AND HELP

Overview

Welcome to the CaféVue Café Management System. This user guide provides detailed instructions on how to navigate and use the various functionalities provided by CaféVue. The system is designed to cater to three types of users: Admin, Staff, and Customer. Each user role has specific functionalities tailored to their needs and responsibilities.

General Navigation

- Homepage: The homepage offers the option to continue as Admin, Staff, or Customer. Choose the
 appropriate option based on your role.
- **Login**: Each role has a secure login page. Enter your registered email and password to access your dashboard.
- **Signup**: New users can sign up by providing essential details such as First Name, Last Name, Email, Password, and Phone Number.

Customer Dashboard

Dashboard Overview

- Place Order: Navigate to the menu and place orders.
- Cancel Order: Cancel your orders before they are processed.
- Give Feedback: Provide feedback on orders.
- Reserve Table: Make reservations for dining in.

• Log Out: Securely log out of your account.

Placing and Managing Orders

- View Menu: Access a detailed menu with item descriptions and prices.
- Add to Cart: Select the desired items and quantities and add them to your cart.
- Review Order: Check your cart before checkout to make adjustments or proceed to payment.

Feedback and Reservations

- **Submit Feedback**: Post feedback on your dining experience or specific orders.
- Make a Reservation: Choose the date, time, and number of guests to book a table.

Staff Dashboard

Dashboard Overview

- Add Item: Add new menu items.
- **Update Item**: Modify details of existing menu items.
- **Delete Item**: Remove items no longer available.
- **Handle Orders**: Process and update the status of customer orders.
- Handle Feedback: Review and respond to customer feedback.
- **Table Reservation**: Manage table bookings and availability.

Managing Inventory and Orders

- **Inventory Record**: View and manage stock levels and update inventory as necessary.
- Order Processing: Confirm new orders, update statuses, and finalize orders after delivery.

Admin Dashboard

Dashboard Overview

- Add User: Register new staff members.
- Update User: Edit details of existing staff.
- **Delete User**: Remove staff from the system.
- Add/Delete Table: Manage the details of tables available for reservation.
- Sales Reports: Generate detailed sales reports.
- Manage Inventory: Oversee and update inventory records.

Reporting and User Management

- Generate Sales Report: Create reports based on items, categories, or custom queries.
- Feedback Trends: Monitor customer satisfaction and feedback trends to improve service.

Troubleshooting and Support

- **Login Issues**: Ensure the email and password are entered correctly. Use the password recovery option if necessary.
- Order Errors: Contact system support if there are issues with order submissions or cancellations.
- **Feedback and Reservation**: For immediate assistance with reservations or feedback responses, refer to the contact details provided on the dashboard.

Conclusion

The CaféVue System is designed to streamline café management tasks, enhance customer service, and improve operational efficiency. Should you encounter any difficulties or require further assistance, please contact our system support team through the help menu on your dashboard. Enjoy using CaféVue for your daily management needs!