

DBMS Project

Supermarket

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Requirements:

Who are the users of this system?

Admin

Managers

Cashiers

Non-Login Users (Customers, Other Employees)

Roles:

Admin: Can Access and Modify all entries of the database.

Managers: Can Hire/Fire Employees of his own department, Update vacancies in his department, Update Employee details of his department, Can add/remove/modify/order a product from its suppliers, and update the supply table when product is supplied. Can create a new discount or modify an existing one. Has read access to all the tables and Modify access to only tables required to do the above tasks for his own department only.

Cashiers: Can create a new bill, add/remove items from a bill, may apply discount if applicable, has read access to products, discounts, and customer details. Can also add/modify the details of a customer. On customer request, he can also produce details of a bill.

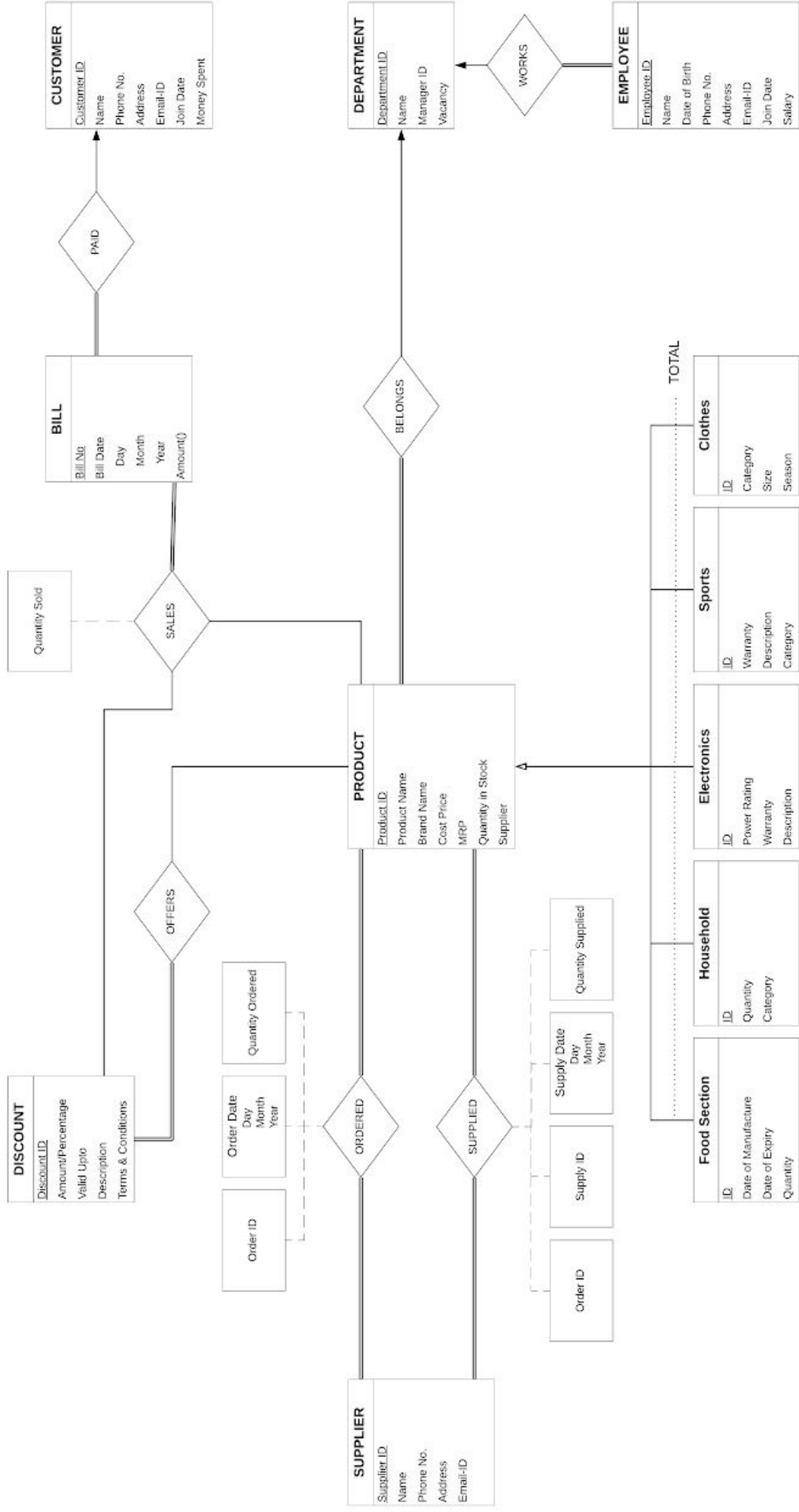
Non-Login Users can check details of a product and applicable discounts.

Update the stock of the product automatically when an order is supplied.

The order can be fulfilled through multiple supplies, and multiple orders can be fulfilled through a single supply.

Update the stock of the product automatically when it is added/removed from a bill.

An interface for the admin and managers (for his own department) to perform few important combination of queries such as profit/loss in a given time period, etc.



View details

1. Create views for employees of different department to see the details of products of their respective departments ($5 \times \{\text{department}\}\text{Details}$) = 5 views
 2. Create view for customer to see relevant details of products of all departments ($5 \times \text{view}\{\text{department}\} + 1 \text{ viewProduct}$) = 6 views
 3. Create a view viewDiscount to see all valid discounts applicable across products
 4. Create views for manager to update product/employee details in their own departments ($5 \times [\text{product/employee}]\{\text{department}\} + \text{employeeCashier}$) = 11 views
- Total - 23 views

Roles

1. Admin role (all privileges)
2. Individual managers of 5 product department + cashier
3. Customer
4. Cashier
5. Employees of each department