Cairo University
Faculty of Engineering
CMPN202

CHS – Team #17

Introduction to Database Systems

Hypermarket System (HMS)

Project Proposal Report

Team Number: *#17*

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Hypermarket Proposal

Overview:

A desktop application database system to manage the day to day operations of a hypermarket by recording all transactions during the day. The system offers many functionalities for different kinds of employees present in the hypermarket.

Users:

1- IT Manager
2- Cashier
3- Inventory Manager
4- Procurement Manager
5- Sales Manager

Tables:

- Employees (id, F.name, L.name, type, salary, department)

- Customer (id, F.name, L.name, phone number, address, e-mail)

- Inventory (product id, name, quantity, price)

- Product (product id, name, price)

- Supplier (supplier id, name)

- Departments (department number, address)

Functionality:

IT Manager:

1- Views different types of hired employees.

2- Inserts a record for a new employee into the database after being hired.

3- Modifies data of hired employees as salary and working hours.

4- Deletes data of employees who are no longer working for the hypermarket.

Cashier:

1- Updates the sales of a product; modify the number of sales of a certain product.

2- Inserts a new customer record into the database for new customers.

3- Updates loyalty points to a customer record.

4- Views the info of a customer for home delivery.

Inventory Manager:

1- Views the current inventory of products. (to send for a product restock)

2- Updates the inventory of products when products are taken from storage.

3- Updates the inventory of products when a new shipment arrives from suppliers.

Procurement Manager:

1- Inserts new products into the database.

2- Deletes products which the hypermarket no longer offers.

Sales Manager:

1- Modifies the info of present products. (as the price of the product)

2- Orders a query to calculate total salaries, average of salaries, average of working hours for each type of hired employees.

3- Orders a query to calculate the net profit of the hypermarket per day.

4- Orders a query to find the most/least sold products.

5- Orders a query to calculate the profits or losses of a certain product.