**Phase 1 DBMS Lab Project Idea (Approved)**

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**L1F20BSSE0291**

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**Supermarket Grocery Store**

**Description:**

**Introduction:**

The purpose of Supermarket Grocery Store management system is to make a better system that can work error free and that will be fast, secure and reliable to store all the valuable data and information for longer periods with easy accessing.

This will help organizations to store and maintain data without redundant entries. It will also minimize the manual work for managing large data of customers and products.

**Functionalities:**

* It will provide the searching facility based on various factors like customer, product type, supplier and product company.
* It will manage all the stock, product supplier and customer details online to prevent any loss.
* It will track all the information of the product like product type and id, product company and its supplier.
* It will increase the efficiency of managing products and customers.
* It will save all the transactions for future.
* Editing, updating or adding any Information will be easily done with it.

**Assumptions:**

* It is assumed that customer will enter right address for delivery as wrong delivery address can cause problems.
* It is assumed that almost 100 customers will buy things daily.
* It is assumed that almost 150 entries will be added daily and almost 50 entries will be updated.
* It is assumed that the system will help manage our sales and profit data more easily.
* It is assumed that this fast computerized system will attract more customers to the store and increase sales and profit.
* It is assumed that this software will not require high level hardware to work.
* It is assumed that this system will be very easy for new employees to learn and use.
* It is assumed that software will update data immediately into the database.

**Procedure and Flow:**

When system will be implemented after going through its designing, coding and testing the owner of this system will add all the items and products to its store database then hire employees to use and manage the system. Owner itself can manage employees and products.

When customer will come to select products from store he will give his details and whether he will take his order or he wants to be delivered after clearing his payments. All the products that customer will buy will be removed from database. Required new products that and brought by supplier will also be recorded and updated in database. Expired products will be removed from database.

This system will manage the details of the seller, customer, product, product type, product company, product supplier etc. It will manage all the information about the product customer and the supplier.

**Entities:**

1. Supplier
2. Order
3. Payment
4. Product
5. Delivery
6. Customer
7. Employee
8. Store
9. Login
10. Owner

**Attributes:**

**Supplier:**

* SupplierID(pk)
* SupplierEmail
* SupplierName
* SupplierContact
* SupplierAdress

**Customer:**

* CustomerID(pk)
* CustomerName
* CustomerContact
* CustomerAdress

**Order:**

* OrderId(pk)
* OrderNo
* CustomerID(fk)

**Payment:**

* PaymentID(pk)
* PaymentAmmount
* CustomerID(fk)
* OrderID(fk)

**Product:**

* ProductCode(pk)
* ProductName
* ProductCost
* ProductCompany
* ProductType
* ProductExpiry
* PaymentID(fk)
* SupplierID(fk)

**Delivery:**

* CustomerID(fk)
* DeliveryStatus
* DeliveryAdress

**Employee:**

* EmployeeID(pk)
* EmployeeName
* EmployeeLeaves
* EmployeeContact
* EmployeeAdress
* CustomerID(fk)

**Store:**

* StoreNo(pk)
* StoreName
* StoreLocation
* StoreContact

**Login:**

* LoginID(pk)
* LoginPass
* EmployeeID(fk)
* OwnerID(fk)

**Owner:**

* OwnerID(pk)
* OwnerName
* EmployeeID(fk)

**Relations among Entities:**

* Supplier & Product (M-N)
* Customer & Order (1-M)
* Customer & Payment (1-M)
* Customer & Delivery (1-M)
* Order & Payment (1-1)
* Product & Payment (1-1)
* Employee & Customer (1-M)
* Login & Employee (1-1)
* Login & Owner (1-1)
* Employee & Owner (M-1)