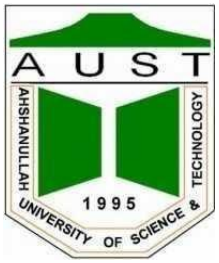
Ahsanullah University of Science & Technology
Department of Computer Science & Engineering

FALL 2021



Super Shop Management System

CSE 3104: Project Report

Submitted By:

ID	NAME
190204064	Md. Redowan Rahman Rafid
190204067	Mirza Mahir Faiaz
190204068	Syed Asheq Ullah
190204077	Tabassum Jahan Lamia

Table of Contents

1. Motivation of the project:

- Providing the facility of managing the activity of a shop having various kinds of products.
- Managing the products of the shop i.e expiry date of products and details of a particular lot.
- Making the work easy, resulting in reduction of human effort or manual labor.

2. Project Goal

To produce software which manages the activities done in a Super Shop :-

- To maintain the stock details.
- To reduce time in calculation of Sales activities.
- To store large amounts of data in the database which will reduce clumsiness.
- To reduce paper work; so that users can spend more time on monitoring the Super Shop.

3. Project Cost Calculation

Time required to complete: 7 weeks.

Considering 4 people working on this project for 7 weeks, one day each week:
Salary of the software developer team = 40,000 BDT (Approximately) monthly.

Payment for the team for each working day will be = 1500 BDT

Utilities such as internet cost would be around 2,000 BDT.

For selling the software, we would consider starting the price from

- 8,000 BDT/month.
- 7,200 BDT/year (Customer saves 10%).

4. Potential Customers/Product Market

The interested Customers of this project will be
● New Super Shop Owners
● Grocery Shop Owners

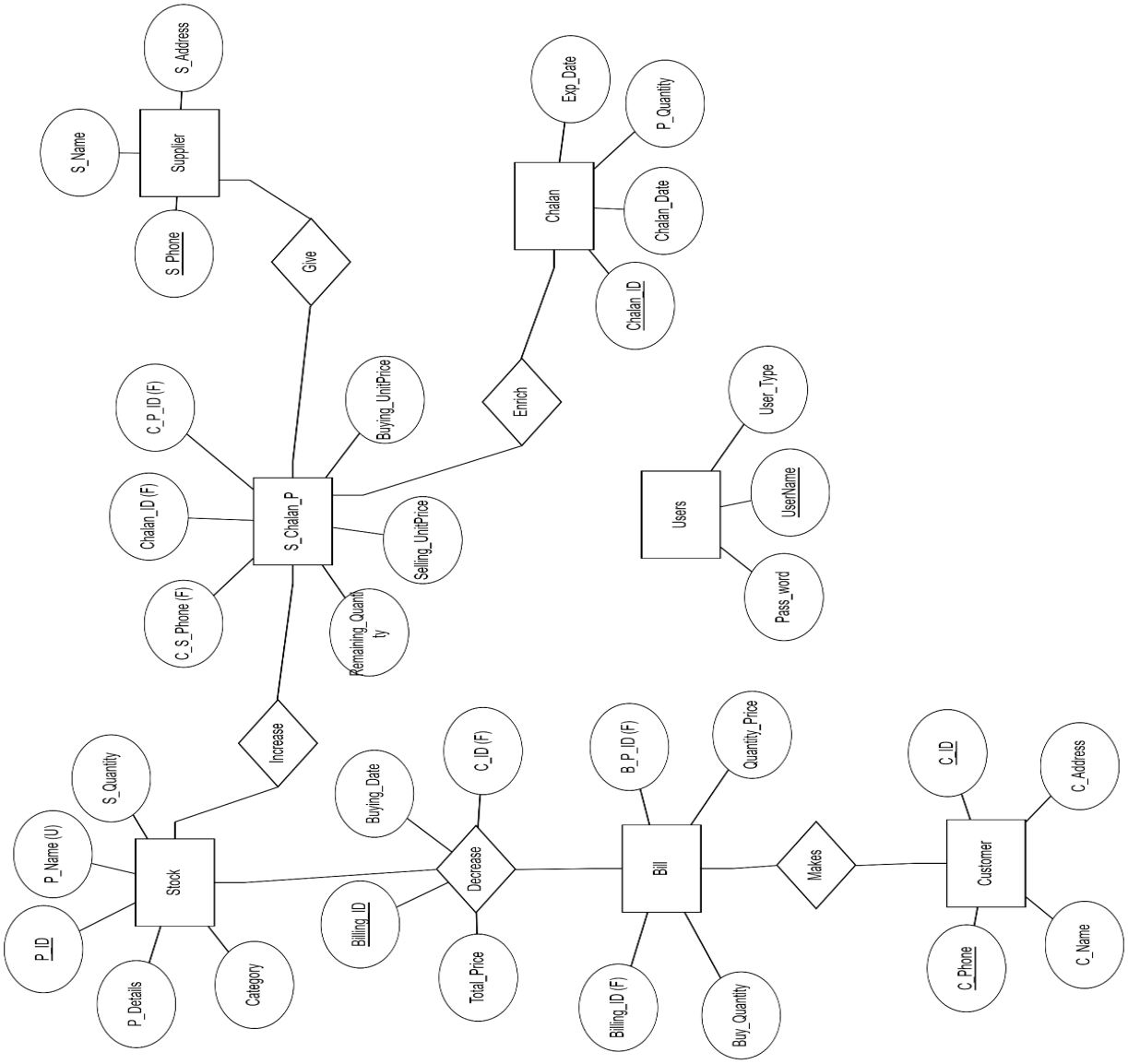
5. Requirement Analysis

Features of the software:

- Log-in as Staff and Admin
- Notification system
- Stock Details
- Viewing Expiry Date of Products
- ‘Chalan’ Details
- Weekly/Monthly/Yearly Selling Details
- Admin Control

As the project is still under development, some new functions may be added in the future.

6. Entity Relationship Diagram



7. Schema/Tables

Possible Entities:

- Customer
- Product
- Stock_Product
- Users
- Seller

Possible Relationships:

- Sell
- Buy
- Come_From

Possible Attributes:

- **Customer :** Customer_ID (Primary Key), Customer_Name, Phone_No (Unique), Address.
- **Product :** Product_ID (Primary Key), Product_Name, Buying_Cost_Per_Unit, Unit_Price, Quantity, Description.
- **Stock_Product :** Chalan_ID (Primary Key), Product_Name, Product_ID (Foreign Key), Unit_Price, Exp_Date, Quantity, Product_Details.
- **Users :** User_Name (Primary Key), Password, Position.
- **Seller :** Seller_ID (Primary Key), Seller_Name, Phone, Seller_Address.

8. Project Risk

Today's competitive environment is forcing companies to optimize the procurement processes and Super shop levels while at the same time ensuring accuracy of controls and implementation of standard procedures for the flow of materials. However, in the absence of appropriate systems and information infrastructure, companies are finding it difficult to achieve smooth and efficient Materials planning and execution due to the following information-based limitations.

If these reflect your procurement and Super shop management limitations as well, then Super shop Control and Valuation System by Core Solutions has the right answers to these critical problems providing the right solutions for an efficient materials management.

9. SQL QUERIES

```
CREATE DATABASE Super_Shop

USE Super_Shop

CREATE TABLE Users(
        UserName varchar(50) primary key not null,
        Pass_word varchar(50) not null,
        UserType varchar(50) check (UserType='admin' or UserType='seller') not null
)

Create Table Supplier(
        S_Phone varchar(11) primary key not null,
        S_Name varchar (50) not null,
        S_Address varchar (100) not null

)

Create Table Chalan(
        Chalan_ID int primary key identity (10001,1),
        Chalan_Date Date not null,
        P_Quantity int not null,
        Exp_Date Date

)

Create Table Stock(
        P_ID int primary key identity (1,1),
        P_Name varchar(150) Unique not null,
        S_Quantity int not null,
        P_Details varchar(200),
        Category varchar (50)
)


Create Table S_Chalan_P(
        C_S_Phone Varchar(11) NOT NULL FOREIGN KEY REFERENCES Supplier(S_Phone),
        Chalan_ID int NOT NULL FOREIGN KEY REFERENCES Chalan(Chalan_ID),
        C_P_ID int  NOT NULL FOREIGN KEY REFERENCES Stock(P_ID),
        Buying_UnitPrice money not null,
        Selling_UnitPrice money not null,
        Remaining_Quantity int not null
```

```
)


Create Table Customer(
	C_ID int primary key identity(1,1),
	C_Phone Varchar(11) UNIQUE NOT NULL,
	C_Name varchar(50) not null,
	C_Address varchar(100) not null
)


Create Table Decrease(
	Billing_ID int identity(300,1) Primary Key not null,
	Buying_Date Date not null,
	C_ID int NOT NULL FOREIGN KEY REFERENCES Customer(C_ID),
	Total_Price money not null
)

Create Table Bill(
	Billing_ID int NOT NULL FOREIGN KEY REFERENCES Decrease(Billing_ID),
	B_P_ID int NOT NULL FOREIGN KEY REFERENCES Stock(P_ID),
	Buy_Quantity int not null default '1',
	Quantity_Price money not null
)
```

Some Advance queries in the App-

```
Select Selling_UnitPrice,Exp_Date from S_Chalan_P
inner join Stock on
S_Chalan_P.C_P_ID = Stock.P_ID
inner join Chalan on
S_Chalan_P.Chalan_ID = Chalan.Chalan_ID
where (Stock.P_ID = 9 AND Exp_Date>'2022-09-04') Order by Exp_Date
```

Last inserted identity value retrieved-

```
SELECT IDENT_CURRENT('Stock')
```

10. Normalization

Here in our project all the relations are in 3NF. Because these are also in 2NF and there is no transitive dependency. To be in 2NF a relation has to be in 1NF. Besides, it should not have any partial dependency. All the non key attributes are fully functional dependent on the primary key. In our project, all the relations are also in 1NF, there is not any partial dependency as well. And to be in 1NF, it should have single valued attributes, all the columns should have unique names, values stored in a column should be of the same domain. Here all the attributes are single valued. All the columns of all the tables have unique names. Therefore, we can say that our relations in the project are in 3NF.

11. Future Work

1. We have built software for managing department stores. Here it is done for only one branch of the store. A departmental store has multiple branches. In the future we will upgrade our software for handling multiple branches.
2. In our project we have been able to store the invoice in a pdf file. In the future we will upgrade our software to print the invoice directly from the software.

12. Conclusion

We are confident that this Super shop management software system specification for real-life customer service refers to a departmental super shop ability to satisfy the management of super shop needs.

13. Contribution

ID- 190204064 : (25%)

1. View Stock, Searching option (According to the user choice) on that page
2. Logic Design
3. Executed some queries (to show data, search…)
4. Deletion of Expired Chalan
5. One of the ERD designer
6. UI Design
7. PDF Generate

ID- 190204067 : (25%)

1. Add Stock, Searching Option of seller & product to make easy to fill up the form.
2. Logic Design
3. Edit Seller
4. One of the ERD designer
5. UI Design
6. Executed some queries(Search, add…)

ID- 190204068 : (25%)

1. LogIn page
2. Executed some queries (Update, Delete…)
3. Helped in Edit user
4. UI Design
5. Customer Page

ID- 19020077 : (25%)

1. Loading page.
2. UI Design
3. Helped in Edit user
4. Executed some queries (Edit, Add…)
5. Customer Page