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A Report On

“Dairy Management System”

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CERTIFICATE

Certifies that the project work titled “**Dairy Management System**” is a work carried out by **MANJUNATHA T(4NI19IS045), MOHAMMED ZABI(4NI19IS048), BHANUPRASAD L(4NI19IS021), GOURISH S ANKOLEKAR(4NI19IS033)** in partial fulfilment for the requirements of the fourth semester BE in Information Science & Engineering prescribed by The National Institute of Engineering, Autonomous Institution under Visvesvaraya Technological University, Belagavi. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated. The Project report has been approved as it satisfies the academic requirements in respect of the project work prescribed for the fourth semester in Data Base Laboratory.

Signature of Guides

Signature of HOD

Signature of Principal

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Name of the Examiner

Signature with Date

- 1.
- 2.

ABSTRACT

This project deals with the management of milk dairy. It deals with the purchase and sale of milk by making records in the database. The first step in the project is to add a staff member to the database, then make purchase by specifying the milk type and rates with quantity. These added values will be displayed in the stock section and sales made in the transaction section. All create, read, update and delete operations are supported in this project for complete CRUD representation.

This Database project system gives the user the information about the purchase and sale of milk by maintaining records in the database, it also gives user an easy way to analyze the quantity of milk sold/remaining, regularity of dealer with dairy and many things related to Dairy Management.

ACKNOWLEDGEMENT

The success and the final outcome of this project required a lot of guidance and assistance from many people and we are extremely fortunate to have got this all along the completion of project work.

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Also, we would like to extend our sincere regards to all the non-teaching staff of the IS&E Dept. for their timely support.

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INTRODUCTION

Milk is a perfect food. It is a part and parcel of the diet of all young and old. It is essential for the proper growth of the human body. It is a balanced diet. It contains proteins, carbohydrates, fats, minerals and vitamins in the ratio in which they are needed for the proper development of the body. This is why its best suit for babies and the sick.

This project deals with the management of milk dairy. It deals with the purchase and sale of milk by making records in the database. The first step in the project is to add a staff member to the database, then make purchase by specifying the milk type and rates with quantity. These added values will be displayed in the stock section and sales made in the transaction section. All create, read, update and delete operations are supported in this project for complete CRUD representation

We even created the relationship tables like inventory table, purchase table, sales table, seller table, staff table, transaction table.

PROPOSED SYSTEM

The proposed system is the Dairy Management System. This database contains the entities which are,

- inventorytable - It relates the staffid, milktype and quantity of milk in the stock.
- purchasetable - It relates amount of milk purchased from the seller and their information.
- stafftable - It relates staff's information like their gender, name, address and their contact number.
- transactiontable - It relates the transaction information like date of transaction, debit/credit card transaction, total bill and respective staffid.
- salestable – It relates to milk, quantity, its rate sold by staff and the customer/dealer name with total amount.
- sellertable – It relates to all the details of the seller/distributor of milk from the factory.

This system will give the user an easy way to analyze the milk dairy management system.

Software requirements

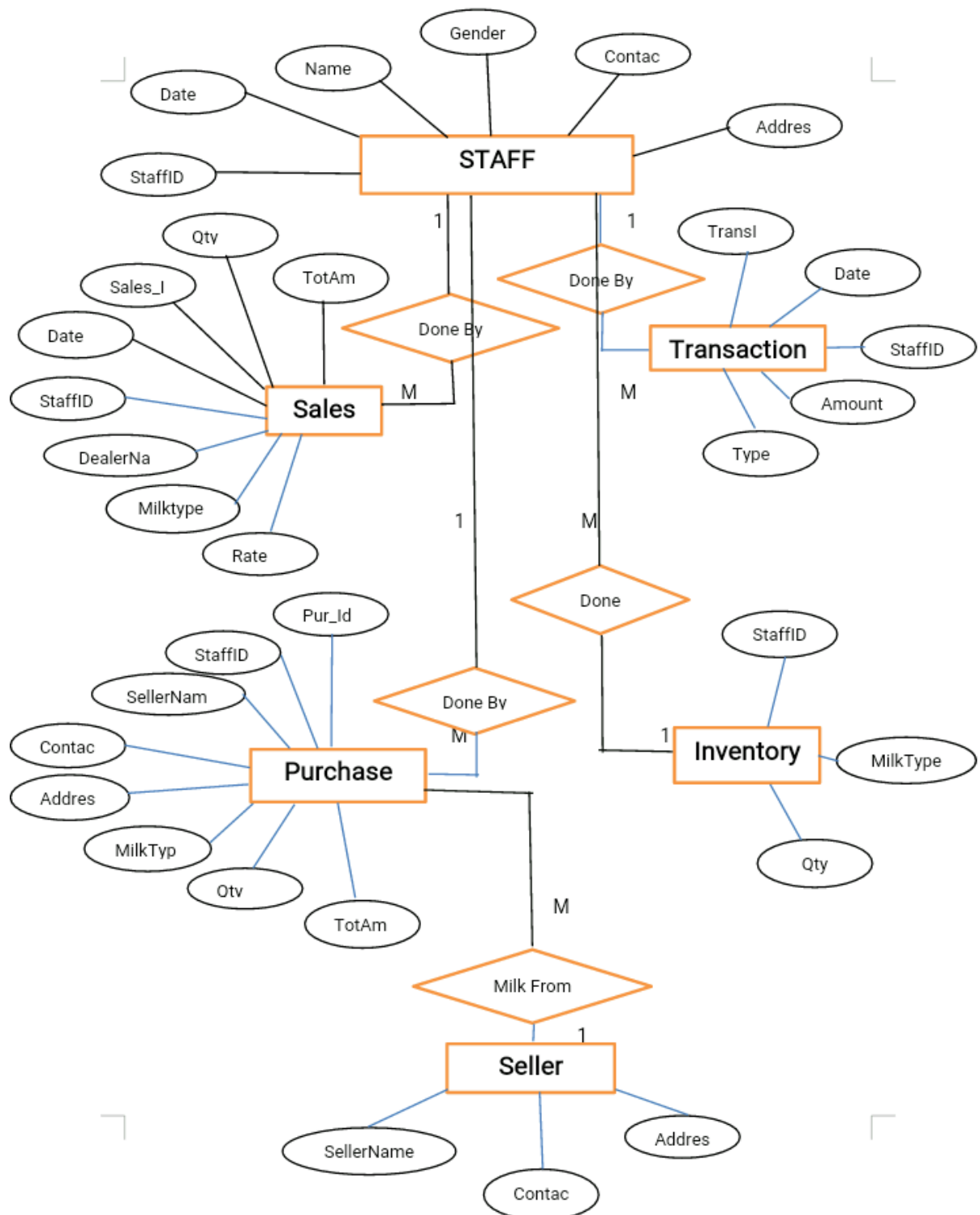
Operating System - Windows 10
Programming Language - Java, SQL
Tools - Eclipse, Mysql

Hardware Requirements

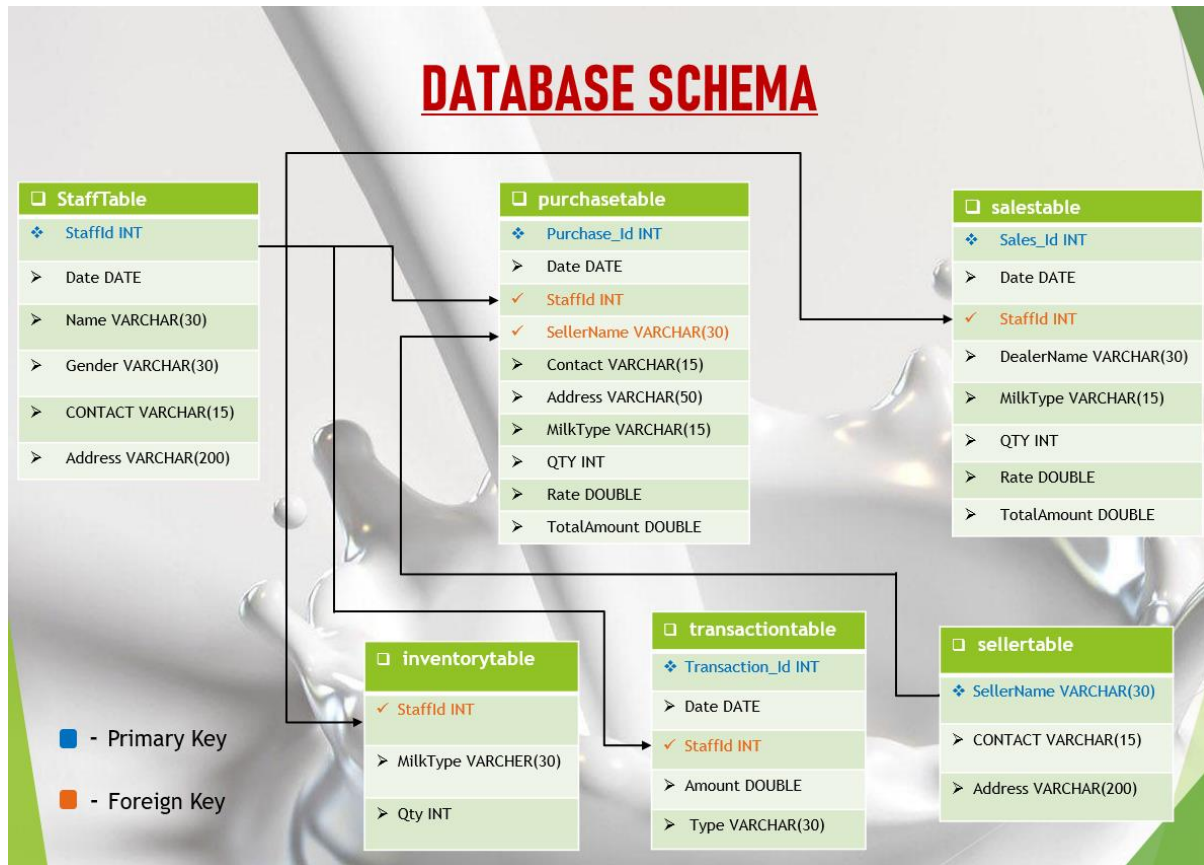
**Processor - i3 or above versions/
AMD Ryzen 3 or above versions.**
Memory - 10GB or above
Any other devices - Peripheral Devices

SYSTEM DESIGN

1. ER diagram



2.Schema Diagram



Implementation

Purchase table:

```
CREATE TABLE PurchaseTable(  
    Purchase_Id` INT NOT NULL,  
    Date` Date NOT NULL,  
    StaffId` INT NOT NULL,  
    SellerName` VARCHAR(30) NOT NULL,  
    Contact` VARCHAR(15) NOT NULL,  
    Address` VARCHAR (50) NOT NULL,  
    MilkType` VARCHAR (15) NOT NULL,  
    QTY` INT NOT NULL,  
    Rate` DOUBLE NOT NULL,  
    TotalAmount` Double NOT NULL,  
  
    PRIMARY KEY (`Purchase_Id`), FOREIGN KEY (StaffId) references  
    StaffTable(StaffId),  
    FOREIGN KEY (SellerName) references SellerTable(SellerName));
```

Seller table:

```
CREATE TABLE `SellerTable` (  
    SellerName` VARCHAR(30) NOT NULL,  
    CONTACT` VARCHAR (15) NOT NULL,  
    Address` VARCHAR(200) NOT NULL,  
  
    PRIMARY KEY (`SellerName`));
```

Salestable:

```
CREATE TABLE SalesTable(  
    Sales_Id` INT NOT NULL,  
    Date` Date NOT NULL,  
    StaffId` INT NOT NULL,  
    DealerName` VARCHAR(30) NOT NULL,  
    MilkType` VARCHAR (15) NOT NULL,  
    QTY INT NOT NULL,  
    Rate DOUBLE NOT NULL,  
    TotalAmount Double NOT NULL,  
    PRIMARY KEY (`Sales_Id`), FOREIGN KEY (StaffId) references StaffTable(StaffId));
```

Staff table:

```
CREATE TABLE StaffTable(  
  `StaffId` INT NOT NULL,  
  `Date` Date NOT NULL,  
  `Name` VARCHAR(30) NOT NULL,  
  `Gender` VARCHAR(30) NOT NULL,  
  `CONTACT` VARCHAR (15) NOT NULL,  
  `Address` VARCHAR(200) NOT NULL,  
  
  PRIMARY KEY (`StaffId`));
```

Transaction Table:

```
CREATE TABLE TransactionTable(  
  
  `Transaction_Id` INT NOT NULL,  
  `Date` Date NOT NULL,  
  `StaffId` INT NOT NULL,  
  `Amount` Double NOT NULL,  
  `Type` VARCHAR(30) NOT NULL,  
  PRIMARY KEY (`Transaction_Id`), FOREIGN KEY (StaffId) references  
  StaffTable(StaffId));
```

Inventory table:

```
CREATE TABLE InventoryTable(  
  
  `StaffId` INT NOT NULL,  
  `MilkType` VARCHAR (30) NOT NULL,  
  `Qty` int NOT NULL,  
  FOREIGN KEY (StaffId) references StaffTable(StaffId));
```

CONCLUSION

This Database project system gives the user the information about the purchase and sale of milk by maintaining records in the database, it also gives user an easy way to analyze the quantity of milk sold/remaining, regularity of dealer with dairy and many things related to Dairy Management.

FUTURE ENHANCEMENTS

For the better Enhancement of this database system, we can implement a GUI and adding of various types of other products of milk so that it increases the information in the database system. Also, it will be even more helpful for the user to select even more DAIRY PRODUCTS and abstract their information. We can add even more tables and columns to make the information of the dairy more briefer.

SCREENSHOTS

```

mysql> select * from salestable;
10 rows in set (0.00 sec)

mysql> select * from salestable;
+-----+-----+-----+-----+-----+-----+-----+
| Sales_Id | Date       | StaffId | DealerName | MilkType | QTY | Rate | TotalAmount |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | 2021-01-12 | 1006 | Lokesh | Cow_milk | 5 | 20 | 100 |
| 2 | 2021-02-14 | 1003 | Kiran | Cream_milk | 4 | 30 | 120 |
| 3 | 2021-03-30 | 1007 | Chethan | Goat_milk | 2 | 150 | 300 |
| 4 | 2021-04-09 | 1009 | Revathi | Buffalo_milk | 3 | 60 | 180 |
| 5 | 2021-04-23 | 1004 | Neha | Cow_milk | 6 | 20 | 120 |
| 6 | 2021-05-01 | 1010 | Roshan | Cream_milk | 5 | 30 | 150 |
| 7 | 2021-05-03 | 1002 | Bindu | Goat_milk | 3 | 150 | 450 |
| 8 | 2021-05-19 | 1008 | Anand | Buffalo_milk | 7 | 60 | 420 |
| 9 | 2021-06-01 | 1001 | Sakshi | Cow_milk | 8 | 20 | 160 |
| 10 | 2021-06-20 | 1005 | Thrilok | Cream_milk | 3 | 30 | 90 |
| 11 | 2021-02-27 | 1006 | Nithin | Buffalo_milk | 6 | 60 | 360 |
| 12 | 2021-01-22 | 1007 | Keerthana | Cow_milk | 3 | 20 | 60 |
| 13 | 2021-01-16 | 1003 | Darshan | Goat_milk | 4 | 150 | 600 |
| 14 | 2021-06-10 | 1009 | Prathiksha | Cream_milk | 6 | 30 | 180 |
| 15 | 2021-05-13 | 1004 | Monisha | Buffalo_milk | 1 | 60 | 60 |
| 16 | 2021-04-11 | 1010 | Faran | Cow_milk | 2 | 20 | 40 |
| 17 | 2021-06-26 | 1002 | Kulkum | Goat_milk | 1 | 150 | 150 |
| 18 | 2021-04-26 | 1008 | Alvin | Cream_milk | 2 | 30 | 60 |
| 19 | 2021-03-06 | 1001 | Rachel | Buffalo_milk | 3 | 60 | 180 |
| 20 | 2021-05-29 | 1005 | Salman | Cow_milk | 10 | 20 | 200 |
+-----+-----+-----+-----+-----+-----+-----+
20 rows in set (0.00 sec)

mysql> select * from sellertable;
4 rows in set (0.00 sec)

mysql> select * from inventorytable;
6 rows in set (0.00 sec)

```

SellerName	CONTACT	Address
Arjun	9110269600	Mysore
Ramesh	9482805626	Hassan
Suresh	7829572899	Udupi
Vinod	9349928477	Mandya

StaffId	MilkType	Qty
1005	Cow_milk	50
1002	Buffalo_milk	40
1009	Goat_milk	20
1006	Cream_milk	50
1007	Cow_milk	60
1001	Buffalo_milk	60

```

mysql> show tables;
6 rows in set (0.00 sec)

mysql> select * from stafftable;
10 rows in set (0.00 sec)

mysql> select * from purchasetable;
10 rows in set (0.00 sec)

mysql> select * from salestable;
10 rows in set (0.00 sec)

```

StaffId	Date	Name	Gender	CONTACT	Address
1001	2021-06-01	Abhi	M	9362830541	Mysore
1002	2021-05-03	Bhuvan	M	9936291759	Mandya
1003	2021-02-14	Chithra	F	9458262046	Hassan
1004	2021-04-23	Shyla	F	7361926480	Udupi
1005	2021-06-20	Rohan	M	9993628368	Mandya
1006	2021-01-12	Lakshmi	F	8326173074	Hassan
1007	2021-03-30	Vogesh	M	8983635272	Mysore
1008	2021-05-19	Rohan	M	7894736280	Udupi
1009	2021-04-09	Kavitha	F	9127483290	Mysore
1010	2021-05-01	Pavan	M	7832972194	Mysore

Purchase_Id	Date	StaffId	SellerName	Contact	Address	MilkType	QTY	Rate	TotalAmount
1	2021-06-01	1001	Arjun	9110269600	Mysore	Buffalo_milk	30	60	1800
2	2021-02-14	1003	Ramesh	9482805626	Hassan	Cow_milk	40	20	800
3	2021-06-20	1005	Vinod	9349928477	Mandya	Goat_milk	20	150	3000
4	2021-05-01	1010	Suresh	7829572899	Udupi	Cream_milk	40	30	1200
5	2021-01-12	1006	Ramesh	9482805626	Hassan	Cow_milk	50	20	1000
6	2021-04-09	1009	Arjun	9110269600	Mysore	Goat_milk	15	150	2250
7	2021-04-23	1004	Vinod	9349928477	Mandya	Buffalo_milk	40	60	2400
8	2021-03-30	1007	Ramesh	9482805626	Hassan	Cream_milk	50	30	1500
9	2021-05-03	1002	Suresh	7829572899	Udupi	Cow_milk	60	20	1200
10	2021-05-19	1008	Arjun	9110269600	Mysore	Cow_milk	70	20	1400

```
MySQL 8.0 Command Line Client
Arjun | 9110269600 | Mysore
Ramesh | 9482809626 | Hassan
Suresh | 7829572899 | Udupi
Vinod | 9349928477 | Mandya
4 rows in set (0.00 sec)

mysql> select * from inventorytable;
+-----+-----+-----+
| StaffId | Milktype | Qty |
+-----+-----+-----+
| 1005 | Cow_milk | 50 |
| 1002 | Buffalo_milk | 40 |
| 1009 | Goat_milk | 20 |
| 1006 | Cream_milk | 50 |
| 1007 | Cow_milk | 60 |
| 1001 | Buffalo_milk | 60 |
| 1003 | Goat_milk | 30 |
| 1004 | Cow_milk | 40 |
| 1010 | Buffalo_milk | 50 |
| 1002 | Cream_milk | 30 |
| 1006 | Buffalo_milk | 30 |
| 1004 | Cream_milk | 25 |
| 1008 | Cow_milk | 35 |
| 1007 | Goat_milk | 12 |
| 1001 | Cow_milk | 55 |
+-----+-----+-----+
15 rows in set (0.00 sec)

mysql> select * from transactiontable;
+-----+-----+-----+-----+-----+
| Transaction_Id | Date | StaffId | Amount | Type |
+-----+-----+-----+-----+-----+
| 101 | 2021-01-12 | 1006 | 1000 | Debit |
| 102 | 2021-02-14 | 1003 | 3000 | Credit |
| 103 | 2021-03-06 | 1001 | 2000 | Credit |
| 104 | 2021-04-09 | 1009 | 1500 | Debit |
| 105 | 2021-05-01 | 1010 | 1800 | Debit |
| 106 | 2021-06-20 | 1005 | 4000 | Credit |
| 107 | 2021-04-23 | 1004 | 2000 | Debit |
| 108 | 2021-05-19 | 1008 | 2400 | Debit |
| 109 | 2021-01-22 | 1007 | 3500 | Credit |
| 110 | 2021-06-25 | 1002 | 2800 | Credit |
+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql>
```

*****THE END*****