A PROJECT REPORT ON

"Dairy Management System"

SUBMITTED TO

SHIVAJI UNIVERSITY, KOLHAPUR

FOR THE PARTIAL FULFILLMENT OF DEGREE OF

BSC COMPUTER SCIENCE ENTIRE

BCS-III SEM-VI (2022-2023)

UNDER THE FACULTY OF SCIENCE

SUBMITTED BY

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UNDER THE GUIDANCE OF

Miss S.S.VAYKUL

DEPARTMENT OF COMPUTER SCIENCE

THE NEW COLLEGE, KOLHAPUR

May 2022-23

CERTIFICATE

This is to certify that the project entitled **“Dairy Management System"** which is being submitted here with for the partial fulfillment of the degree of B.Sc. Computer Science (Entire) as laid down by Shivaji University, Kolhapur, is the original work completed in this college by **Mr. Vinayak Bhagavant Patil** under our supervision and guidance and to the best of our knowledge has not been submitted to any other university or examining body.

Place : Kolhapur

Date :

Project Guide **Examiner** **Dr. A.A. Kalgonda**
Co-ordinator

DECLARATION

I hereby declare that the project entitled **"Dairy Management System"** which is being submitted here with has been developed and completed by us is our original work and has not previously been submitted to any university or examining body for the award of any degree .

We have referred the websites given in the bibliography during the development of the project and have not copied any of written material or its part there of . This project is purely our own and on our merits.

Place : Kolhapur

Date :

Mr. Vinayak Bhagavant Patil

ACKNOWLEDGEMENT

The first and foremost person, we would like to thank is our guide **Miss S.S.VAYKUL** for her keen interest, valuable guidance and continuous encouragement throughout the development of this project work. We express our sincere thanks to other faculty members of computer science department for their valuable suggestions and support.

We express our sincere thanks to **Dr. V.M. Patil**, the Principal, The New College , Kolhapur and **Dr. A.A. Kalgonda**, The Co-ordinator, Department of Computer Science Entire for making us available the laboratory facilities.

We would like to express our deepest gratitude for constant support , understanding and care that we received from our parents who taught us to go ahead in the right way and never to be depressed even in the complicated situations .

Finally, we would like to express our sincere gratitude to those who have helped us directly or indirectly in our project .

Date :

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1. INTRODUCTION

Dairy milk management system can make day to day activities related to dairy easier. From managing milk procurement and product distribution, milk collection software takes care of everything. The entire process is streamlined, as you can track the movement of raw milk from the farm gate to the plant.

This present desktop application has considered as a one stop solution for all the problems faced by all the dairies. In this system all the operations are automated and well categorised right from collection of the milk from the milkman to the generation of the each day receipt or quarterly bill receipt.

In this process the various factors of the milk such as FAT, SNF, Rate and amount can be separated and stored as per the collection from COW or From Buffalo; each and every data will be categorised and stored in the sequential manner thus it will be very easy to access the data as well as to maintain the administration for the Dairy Milk Management. We have developed a very user friendly interface which enrols the accurate information and fields as per the standards benchmark of the milk collection. All the data can be stored in centralized manner and it can be easily fetched as well as it’s a very speedy and time saving process with zero error.

In Milkman Milk Dairy Management Software milk collection system is an excellent way to automate the entire milk collection process, making it efficient, transparent and with less time. Our system incorporates the correct solution by measuring weight, fat levels, and SNF. Based on the criteria collected, it calculates fees, saves transaction logs and prints transaction details. The farmer database is part of the management system functionality that can provide easy payment to farmers.

India lives in villages. More than 42 percent of our population is rural and 40 percent is dedicated to agribusiness. One in two rural households of approximately 7 million farm families is associated with the dairy industry. According to important statistical data related to Indian milk production, 60% of the milk supply in the country comes from small / marginal / landless farmers. Cows are more evenly distributed than agricultural land in India. The Milk dairy industry plays an important role in strengthening the rural economy of India.

It has been recognized as an important component of socioeconomic change in the country. There is an interdependent relationship between agriculture and dairy farming. Agricultural products provide food and fodder for livestock, while livestock produce a variety of dairy products such as milk, ghee, butter, cheese, condensed milk, powdered milk, yogurt, etc., in addition to providing

nutritional safety products. India has its own special place in the international market and is the world's largest milk producer and the second largest producer of dairy products. By the way, India produces milk at the lowest cost in the world at a rate of 24 cents per liter (43 cents in the United States and 2.4 in Japan). If the current trend continues, like the mineral water industry, the milk processing industry also has considerable potential for rapid growth. With a triple increase in the next 10 years, India will become the world's leading producer of dairy products.

1.1 EXISTING SYSTEM

In the existing system, each task is carried out manually and processing is also a tedious job. So it is not easy to maintain records & keep records. Generally all records are kept on registers or in notebooks. And there is no guarantee of permanent storage of records.

Preparing reports is also very time consuming and tedious task. For searching of a single record, whole register has to be searched which is very time-consuming task. Because of the manual maintenance there are number of difficulties and drawbacks present in this system.

1.2 NEED AND SCOPE OF COMPUTER SYSTEM

Main aim of developing Dairy Management System is not just to provide an easy way to all functionalities involved in Dairy Management, but also to provide full functional reports to manage the Dairy with details like members records, daily collection records, cow and buffalo rates, and billing detalis on one click.

- The system is designed in such a way that it saves records of members easily and can also update or delete them.
- The system is designed in such a way that further enhancement can be easily implemented along with the security and updation.
- The member code is unique for more security**.**
- Database is designed carefully to minimize the complication of data.
- It is user friendly and easy to operate.
- Improves the efficiency and accuracy.
- Provides quick access of information to the administrator and saves time.

2. PROPOSED SYSTEM

The problem with manual system is taken into consideration and a new system "Dairy Management System " is built to fulfil the requirements of Dairy, regarding the maintenance of records , calculations and reports generation.

- Dairy Management System is a window based application.
-
- System is developed using Eclipse IDE with Java as front-end and MySQL as back-end.

- Java Swing API is used create various forms and the system is made by binding them together in a single package.

- System is made of total 26 forms and 4 reports with management modules like 'Members', 'Milk Collection', 'Rate Management' and 'Billing Department'.

- The form entries are easy to enter and user friendly buttons are created which allows the administrator to access, view, update and delete the records.

- All mathematical calculations regarding cost of milk collection, management are done by computer so it improves efficiency and accuracy.

- The milk collection can be divided by collection date and its timing morning or evening are taken by Journal setup.

- Rate is decided by fat and SNF by both cow and buffalo and this rate

is multiplied by litre and also generates its amount.

- Various reports based on member details, collection details, litre, fat, SNF, Rate and amount can be generated.

2.1 OBJECTIVES -

- To improve the efficiency of Dairy Management System.
- Main goal is to reduce paperwork.
- To store up-to-date information of members.
- To generate accurate reports.
- User interface simplicity and user friendliness.
- Large volumes of data can be stored easily using database .
- Maintenance of collected milk is flexible.
- Records stored are updated now and then.
- Stored data and procedures can be easily fetched & edited.
- Accurate calculations are made .
- Less manpower required .
- Provides security, compatibility, credibility.

2.2 Requirement Gathering -

Information Gathering :

•**Admin details :** This is not for personal use it is for dairies only we provide there username and password.

•**Member details :** To Add a Member, we need member information like first name, middle name, last name and its animal type.

•**Milk Rate details** : Admin can add or update rates of both cow or buffalo so details like fat and SNF are required.

2.3 Software Requirements Specification(SRS) -

1. External Interface Requirements

- The system takes input from keyboard.
- The system generates printable output on the screen and peripherals.
- The system uses MySQL database to communicate with database.

2. User Interface

- The software provides good graphical interface for the admin. Specific administrator can operate the system by performing the required tasks such as create ,update ,view the details of the member, Bill ,and rates
- Allows admin to view reports like milk collection from date to to Date. Also separated by animal type or collection timing information made in between particular month or day.
- Able to generate reports based on the different criteria.

3. Hardware Interface

- Solid State Drive : 512 GB
- RAM : 8.00 GB
- Processor : Intel(R) Core(TM) i5-10300H
- System type : 64 bit
- Operating System : Windows 10

4. Software Interface

- Front End : Eclipse IDE 2022-12.
- Back End : Xampp with MySQL

5. Communication Interface

Microsoft Windows

6. Functional Requirement

- **Use Cases**

  The use cases describe the procedures and exemptions for each function.The appropriate permissions of each user are listed in User Characteristics of this document .

- **Item Entry**

  In this module we can store the details of packages,hotels,customers.

7. Performance Requirement

The system is required to support multiple terminals simultaneously. The system should handle reasonable number of requests without break or inconsistency.

8. Attributes

- **Reliability**

 The system should work reliably.

- **Security**

 The system is can only be accessed by admin though a verified username and password.

- **Maintainability**

 The document should be easy for the users who execute the system day to day, for the developers who wish to edit or develop further , and for the personnel who is in charge of the maintenance.

- **Portability**

 The system should be support all platforms.

- **Usability**

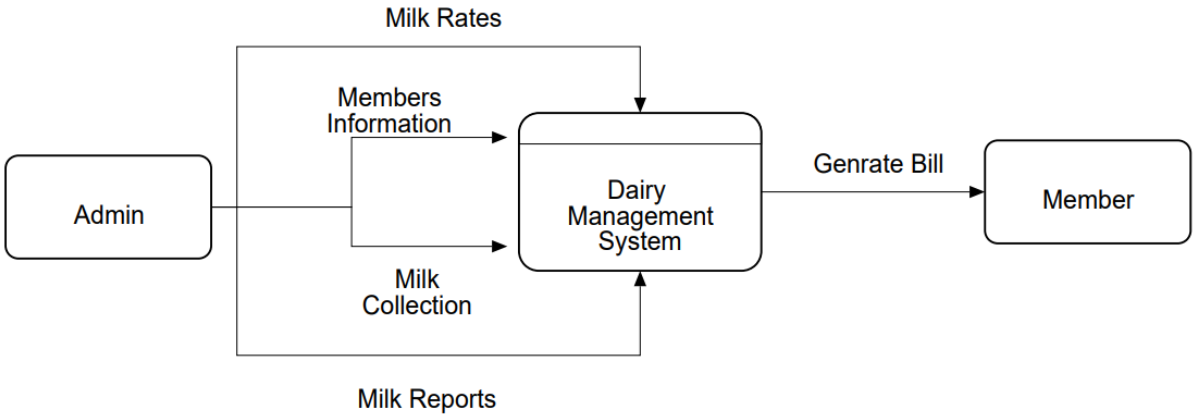
 An easy to understand documentation should be provided with the system.

3. SYSTEM ANALYSIS

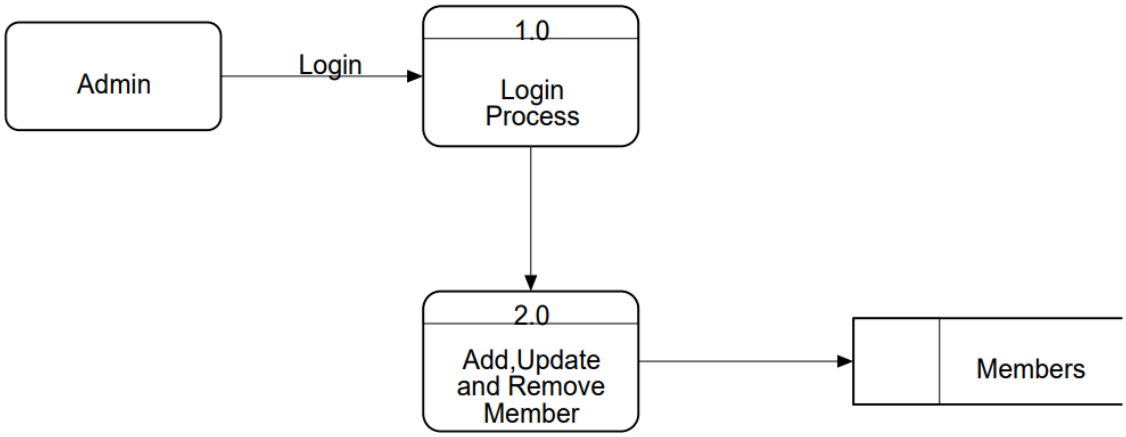
3.1 System Diagrams :

1. Data Flow Diagram (DFD) : -

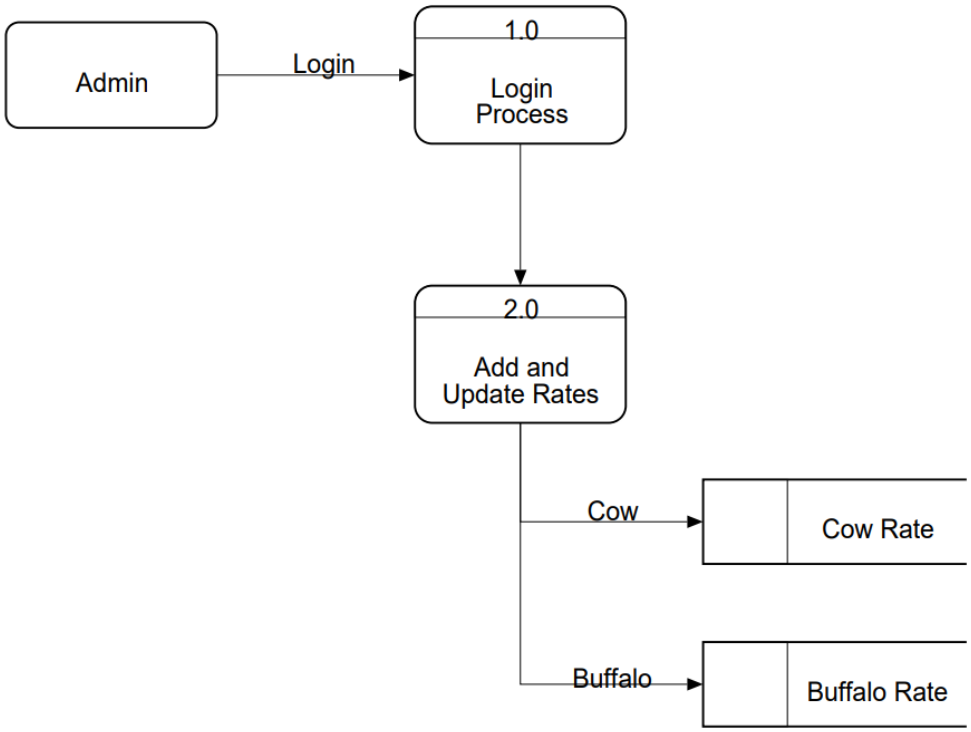
i) Zero Level DFD:-



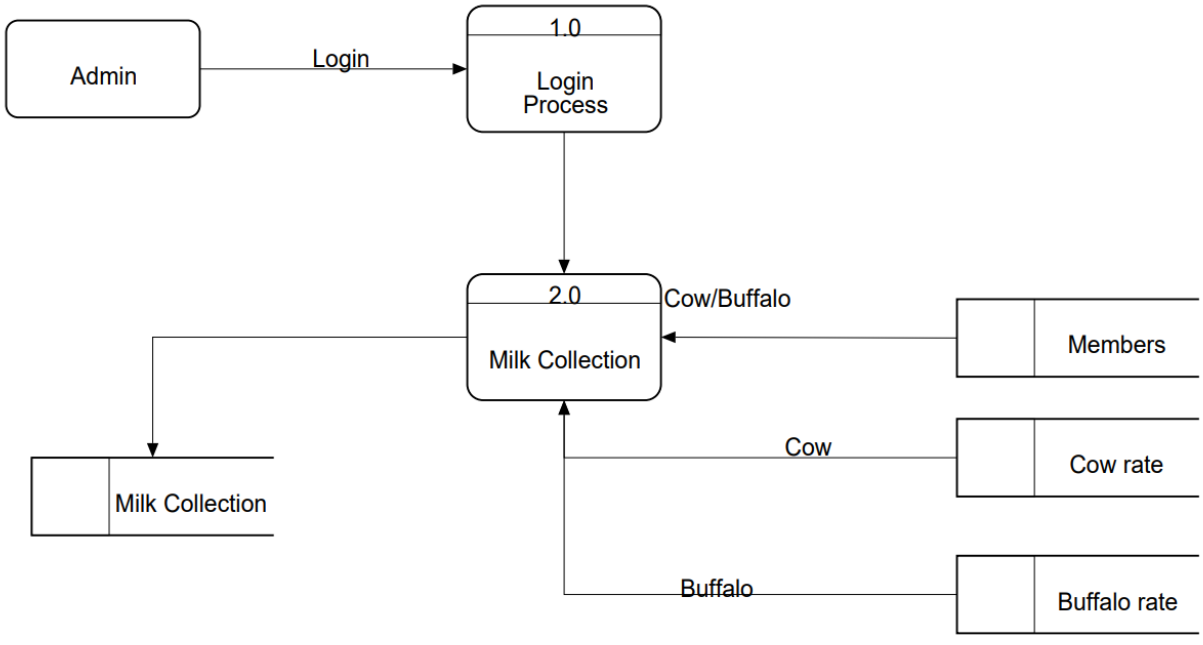
ii) 1st level DFD For Member: -



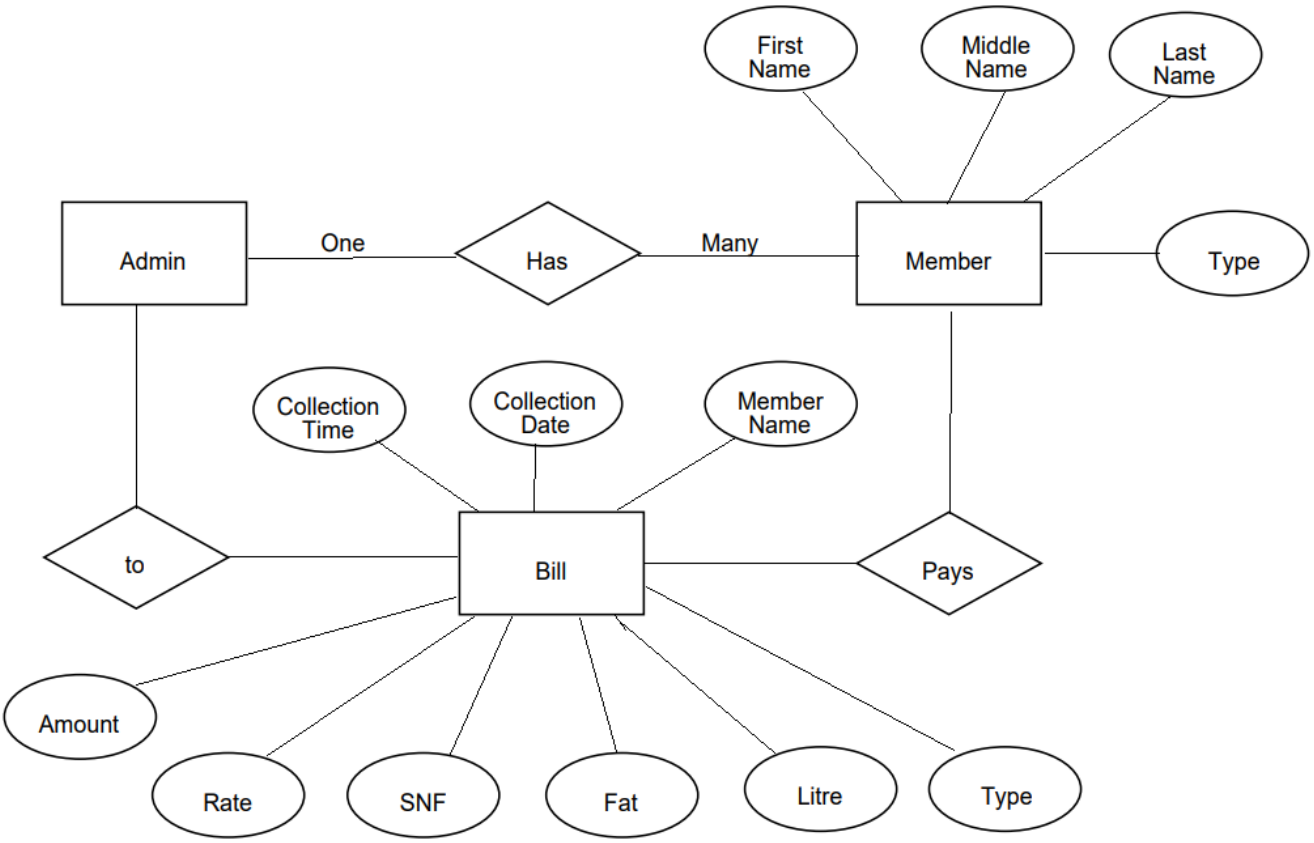
iii) 1st level DFD For Rate: -



iv) 1st level DFD For Milk Collection: -

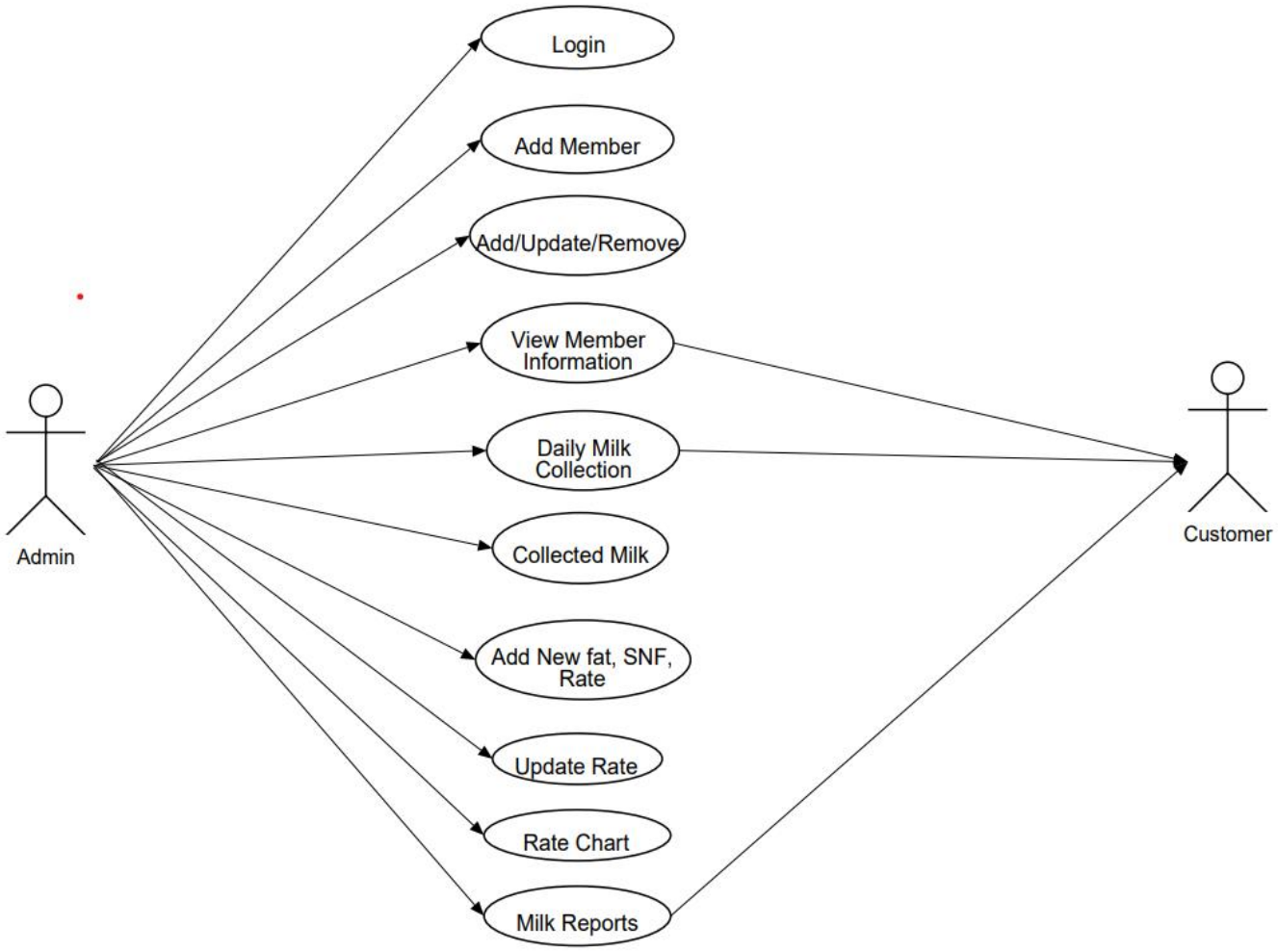


2.Entity Relationship Diagram (ERD) :



3.UML :

a. Use Case Diagram :



4. SYSTEM DESIGEN

4.1 Database Design :-

Database tables:

Login Table :

Column Name	Data Type	Nullable	Default	Extra
UserName	varchar(10)	No	-	-
Password	varchar(10)	No	-	-

Members table :

Column Name	Data Type	Nullable	Default	Extra
member_code	int	No	-	Primary key, auto_increment
first_name	varchar(15)	No	-	-
middle_name	varchar(15)	No	-	-
last_name	varchar(15)	No	-	-
Type	varchar(10)	No	-	-

Buffalo_Rate:

Column Name	Data Type	Nullable	Default	Extra
fat	decimal(6,2)	No	-	Primary key
snf	decimal(6,2)	No	-	Primary key
Rate	double	No	-	Primary key

Cow_Rate:

Column Name	Data Type	Nullable	Default	Extra
fat	decimal(6,2)	No	-	Primary key
snf	decimal(6,2)	No	-	Primary key
rate	double	No	-	Primary key

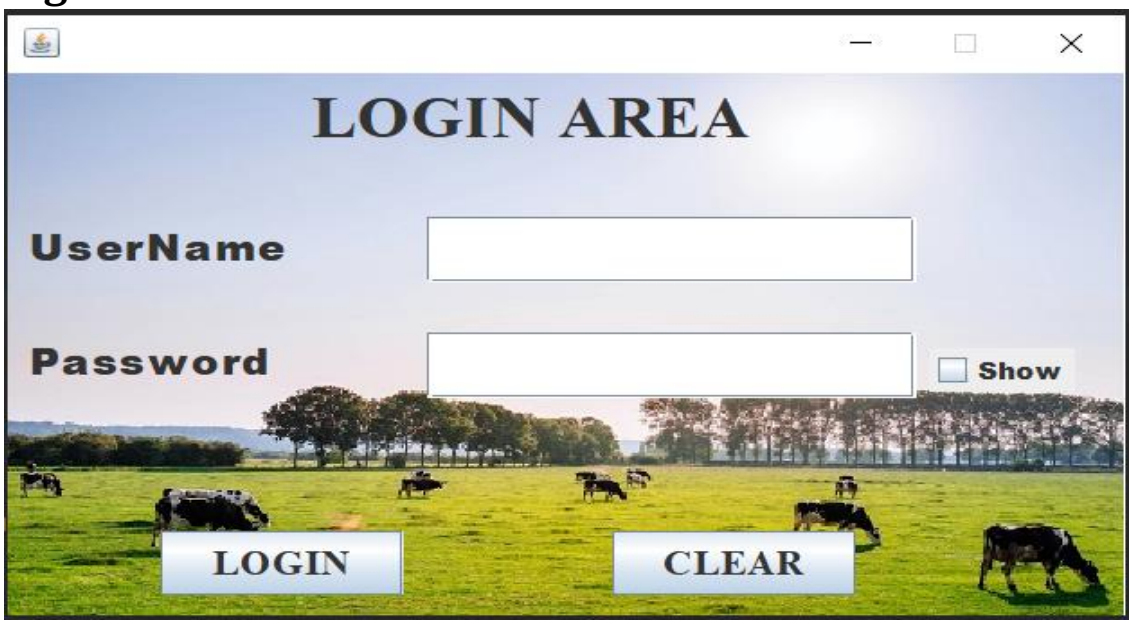
Milk_collection table :

Column Name	Data Type	Nullable	Default	Extra
collection_date	date	No	-	-
collection_timing	varchar(10)	No	-	-
member_code	int	No	-	-
member_name	varchar(30)	No	-	-
ype	varchar(10)	No	-	-
litre	double	No	-	-
fat	decimal(6,2)	No	-	-
snf	decimal(6,2)	No	-	-
rate	double	No	-	-
amount	double	No	-	-

4.2 DashBoard :

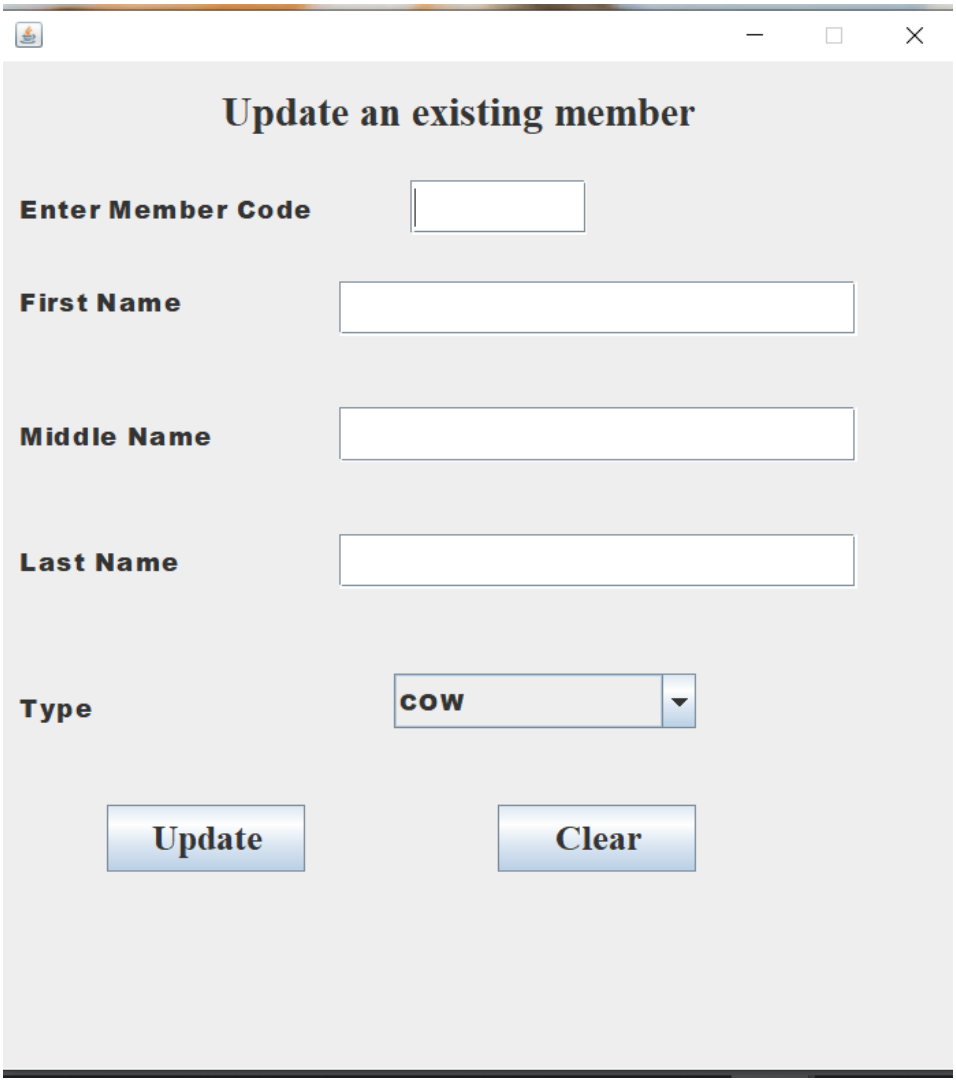
INPUT DESIGN

1) Login form :

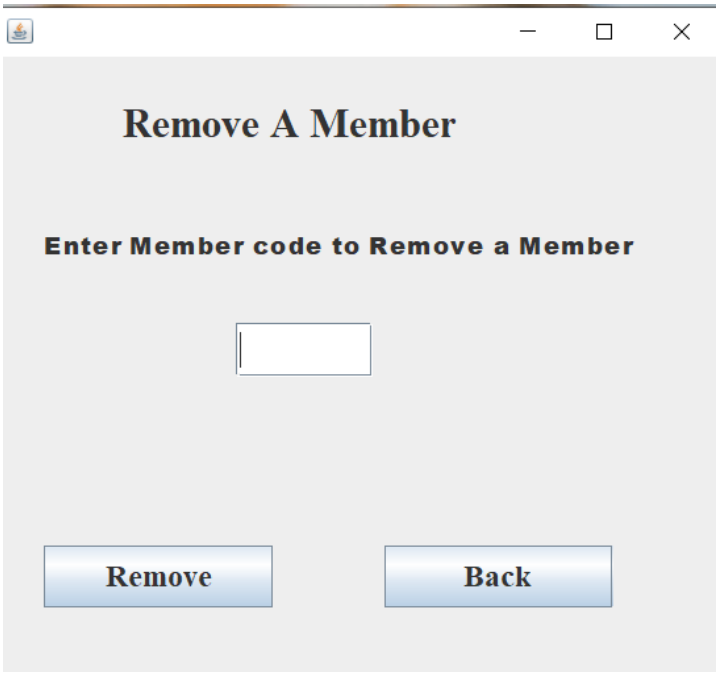


2) New Member Registration :

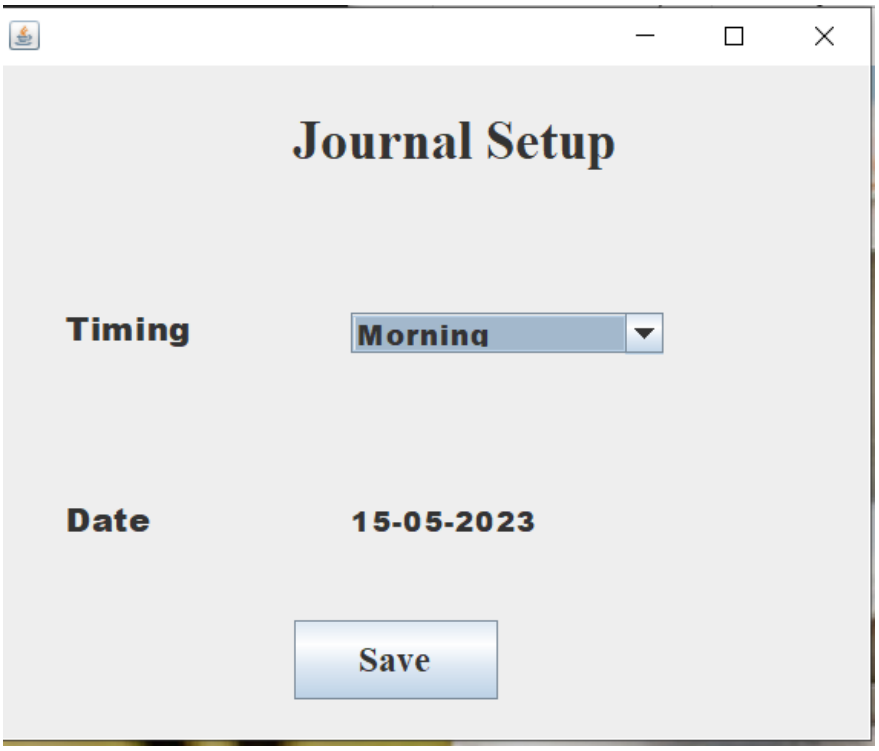
3) Update A Member:-



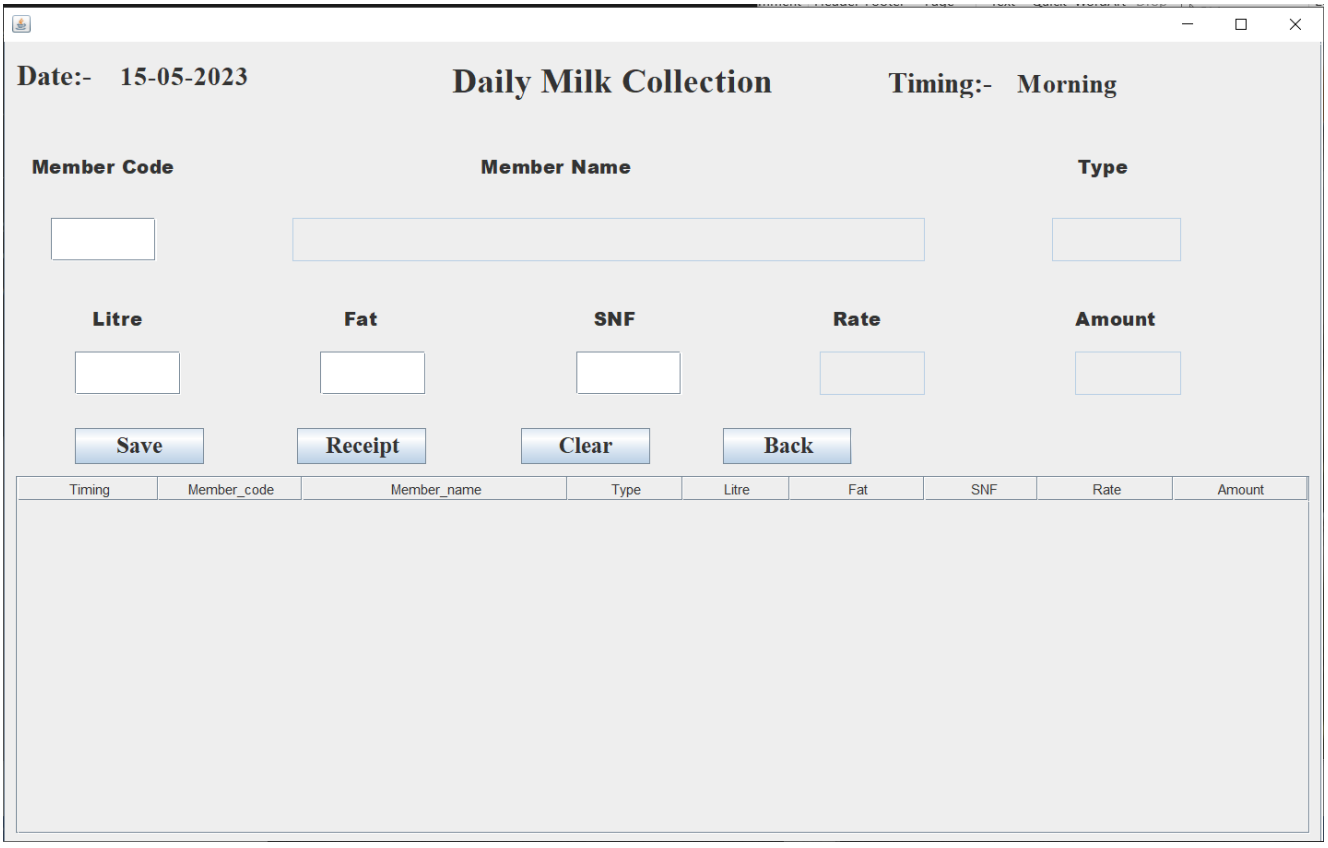
4) Remove A Member:-



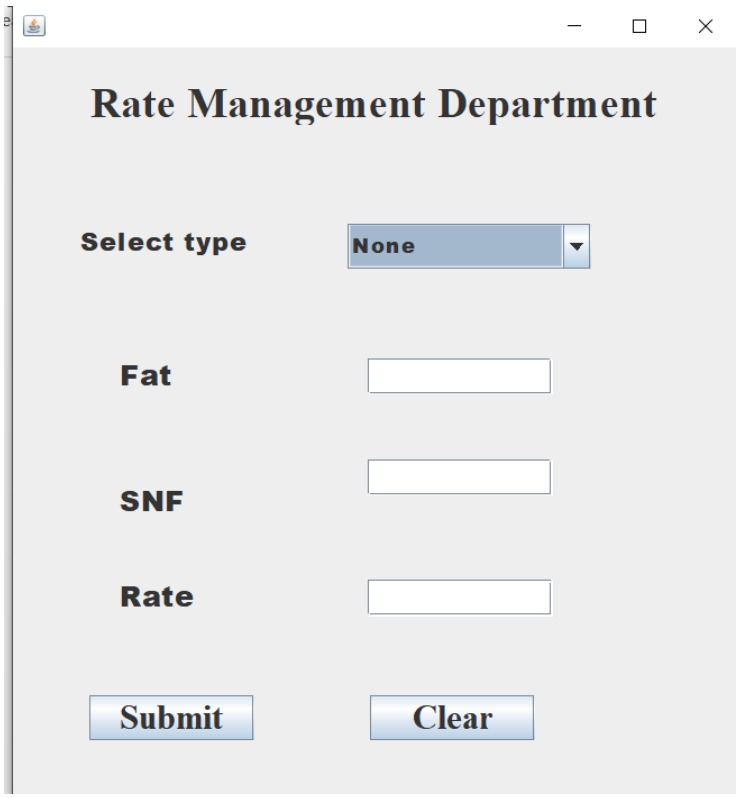
5) Journal Setup:



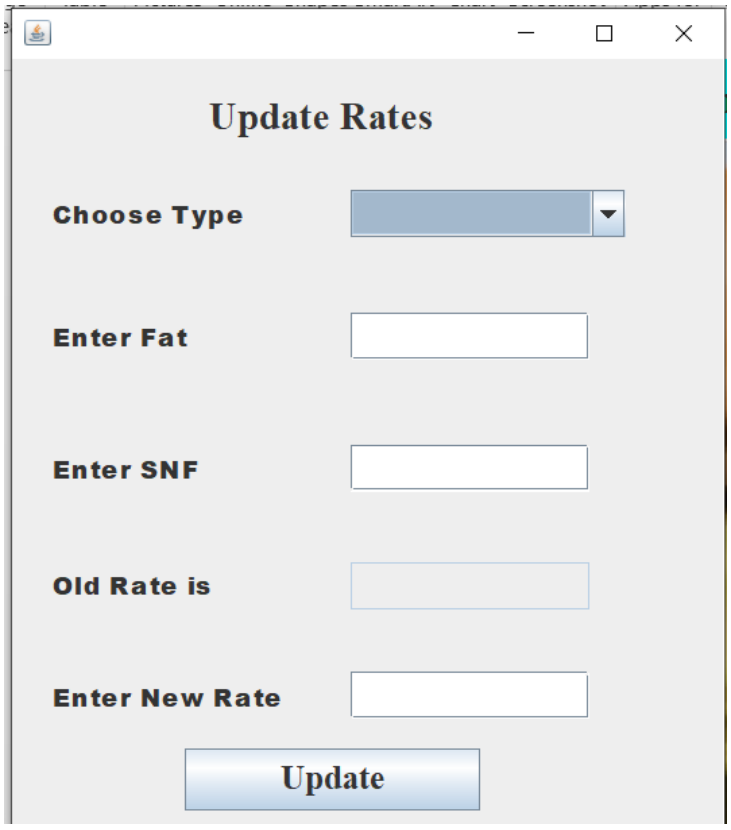
6) Daily Milk Collection:



7) Add Rates:



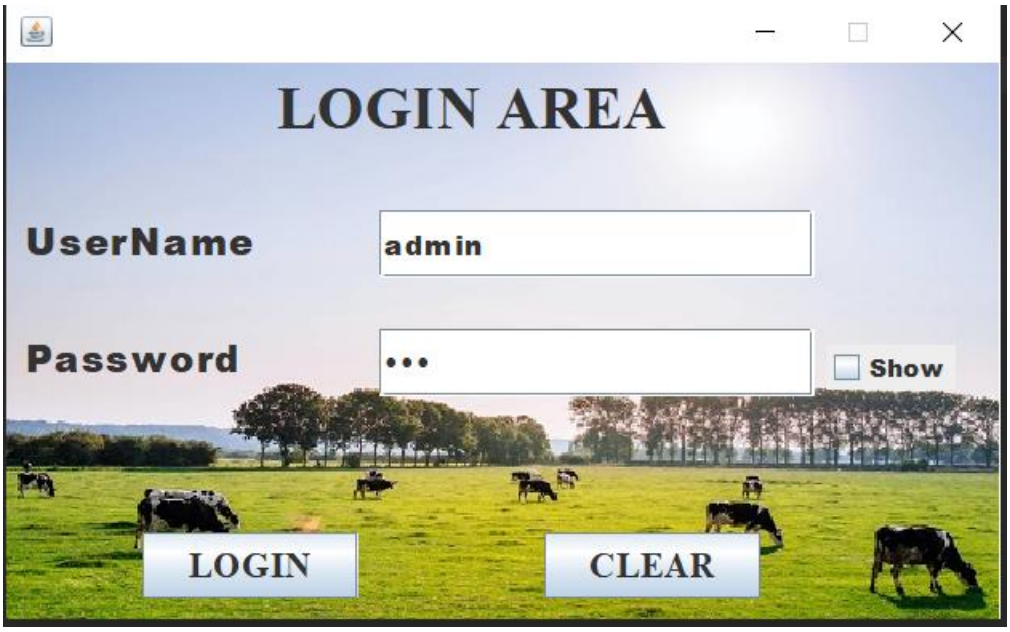
8) Update Rates:-



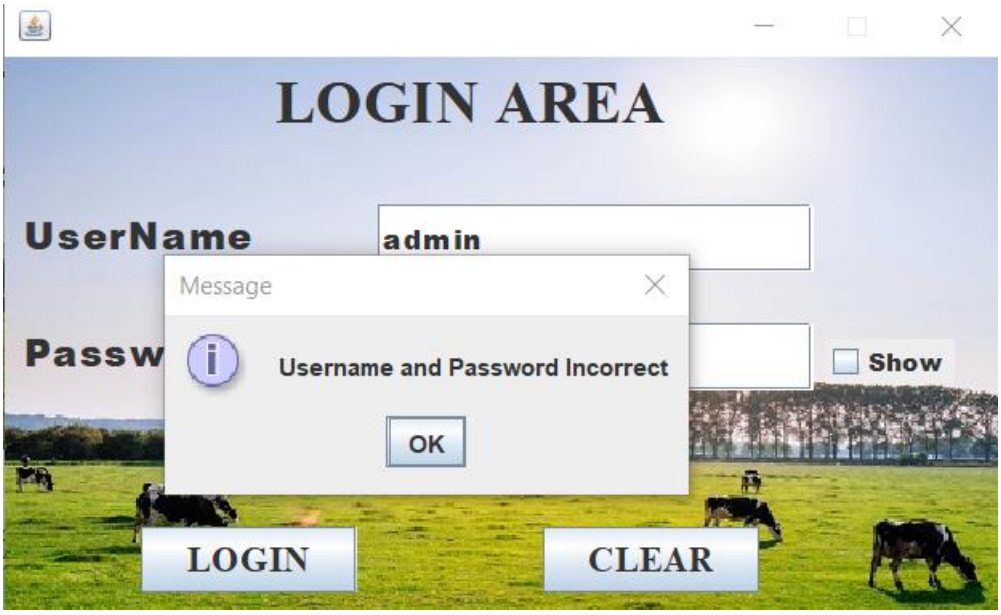
4.3 OUTPUT DESIGN

1) Login :

a) Successful Login :

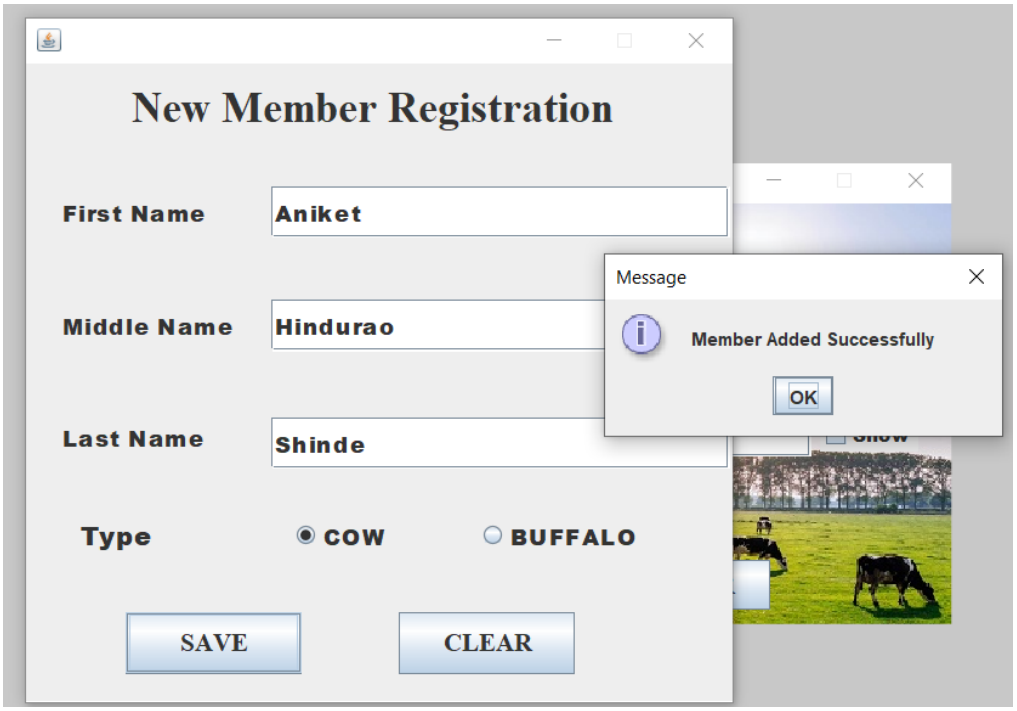


b) Unsuccessful Login :

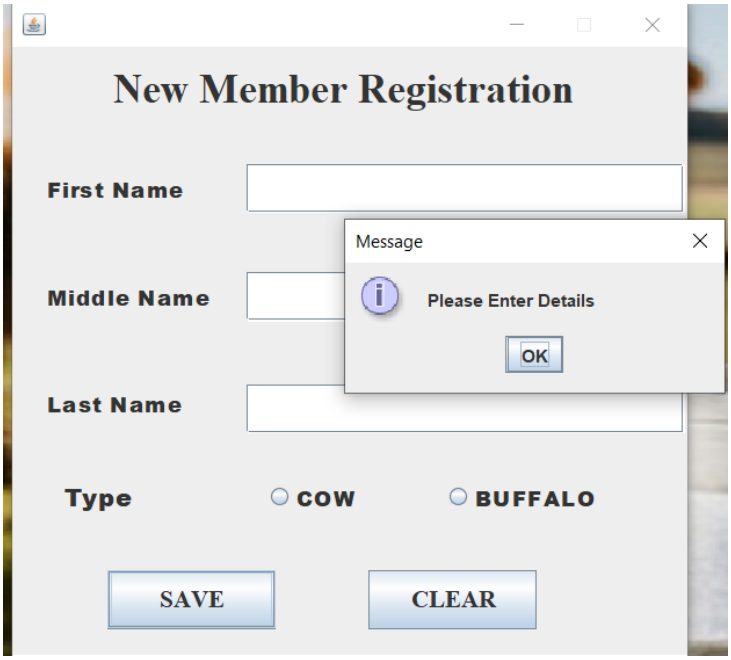


2) Members

i) Add A Member

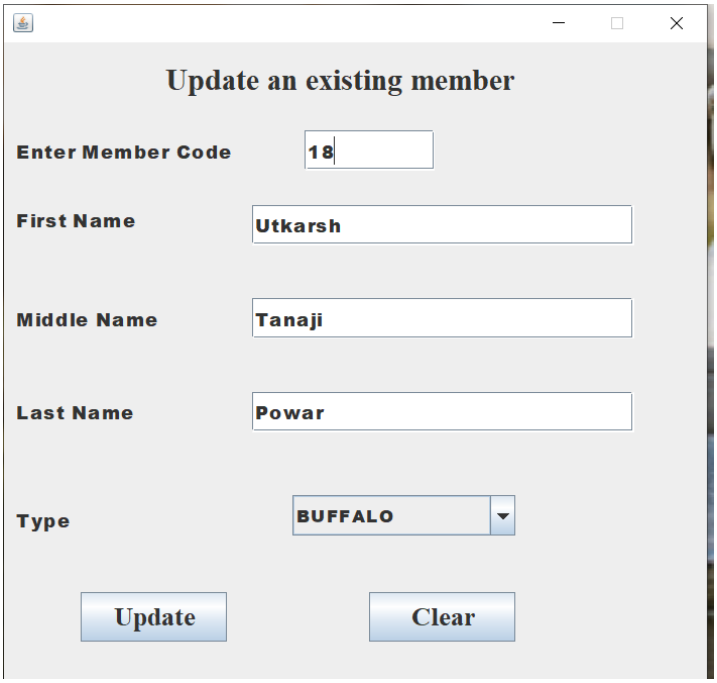


If nothing is input:

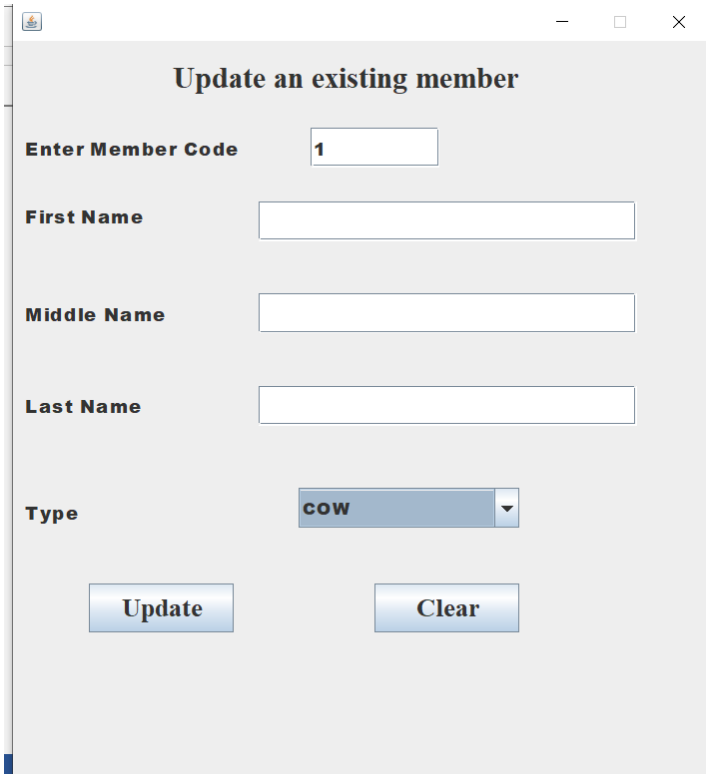


ii) Update A Member :

a) If Member is Available:-

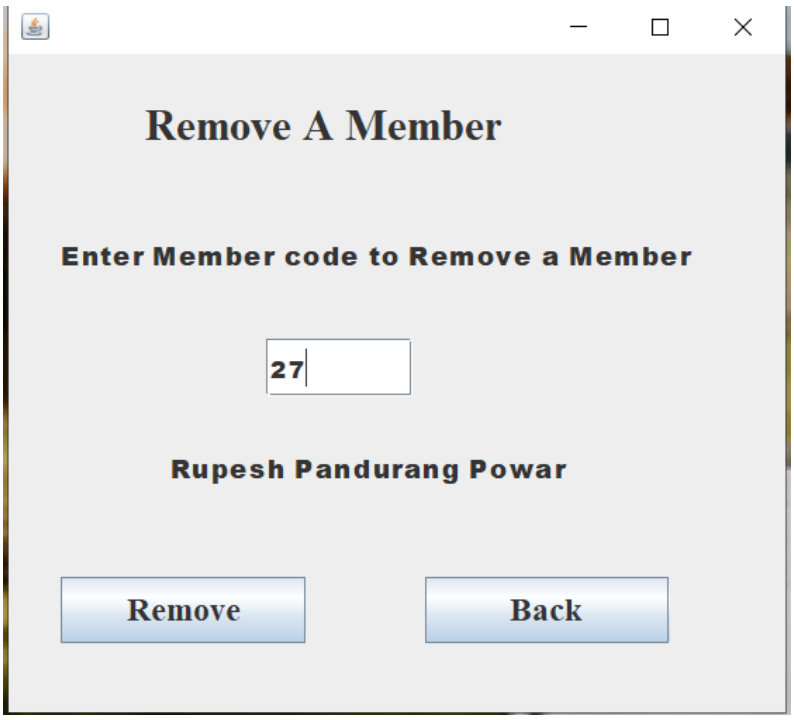


b) If Member is Unavailable

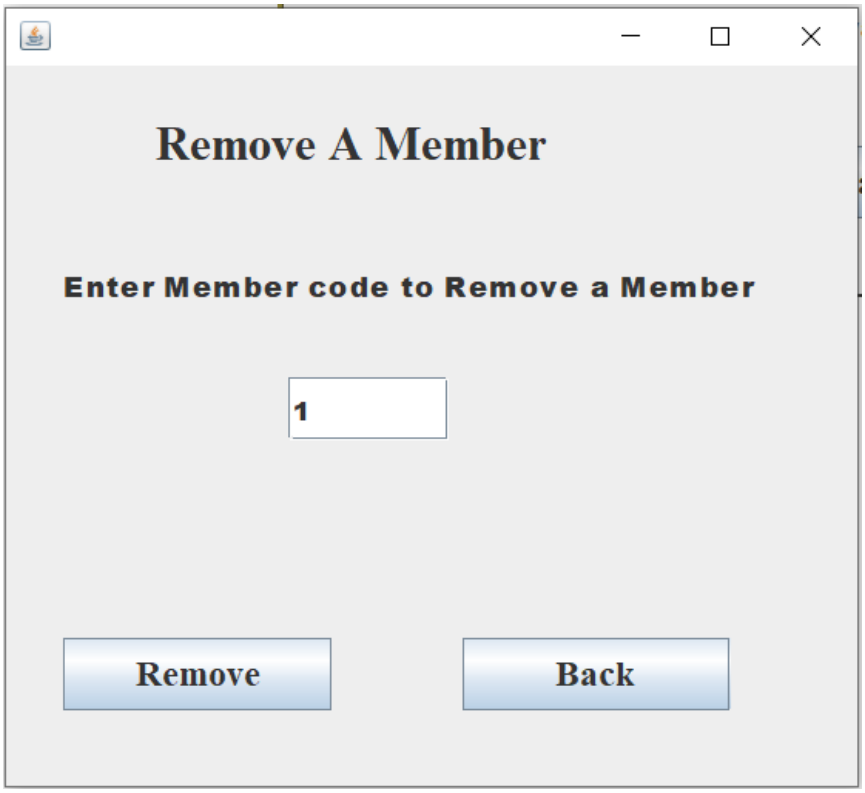


iii) Remove A Member:

a) If Member is Available:-

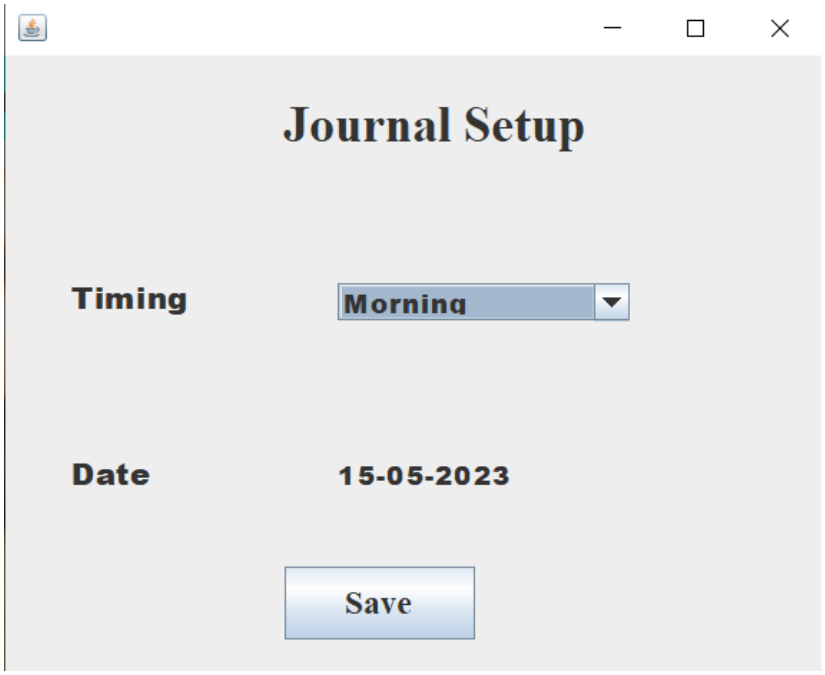


b) If Member is Unavailable: -

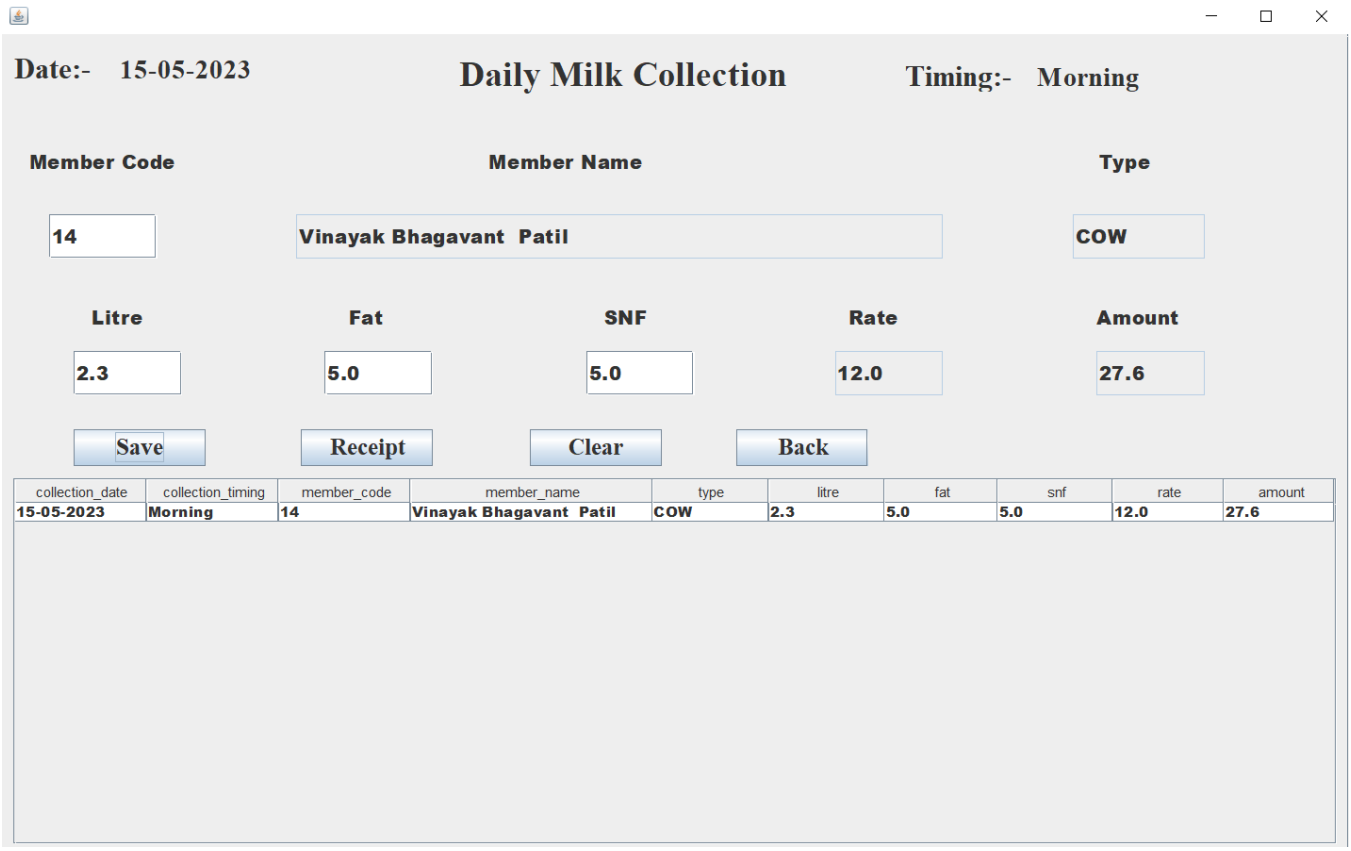


3) Daily Milk Collection:-

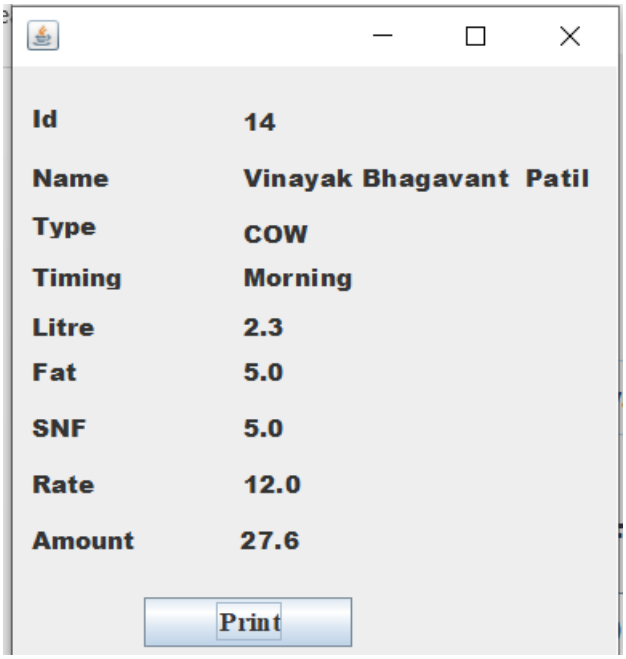
i) Journal Setup:-



a) Daily Collection:-

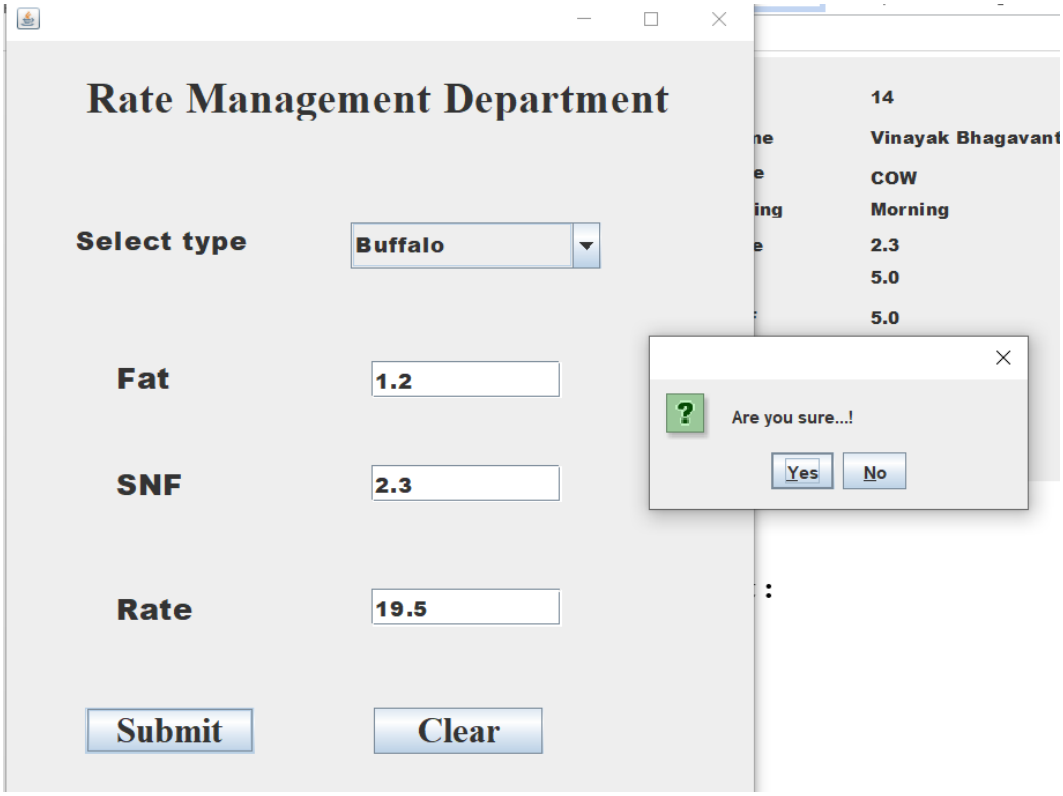


If Receipt is Clicked:-

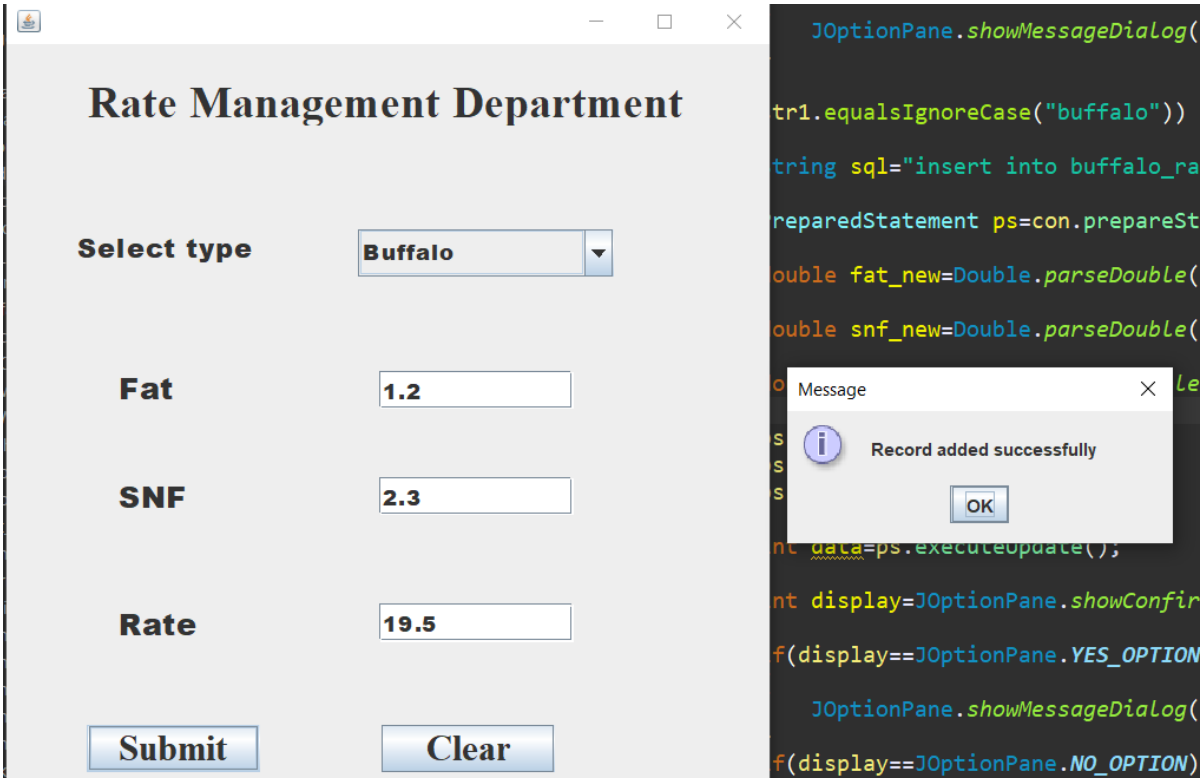


4) Rate Management :

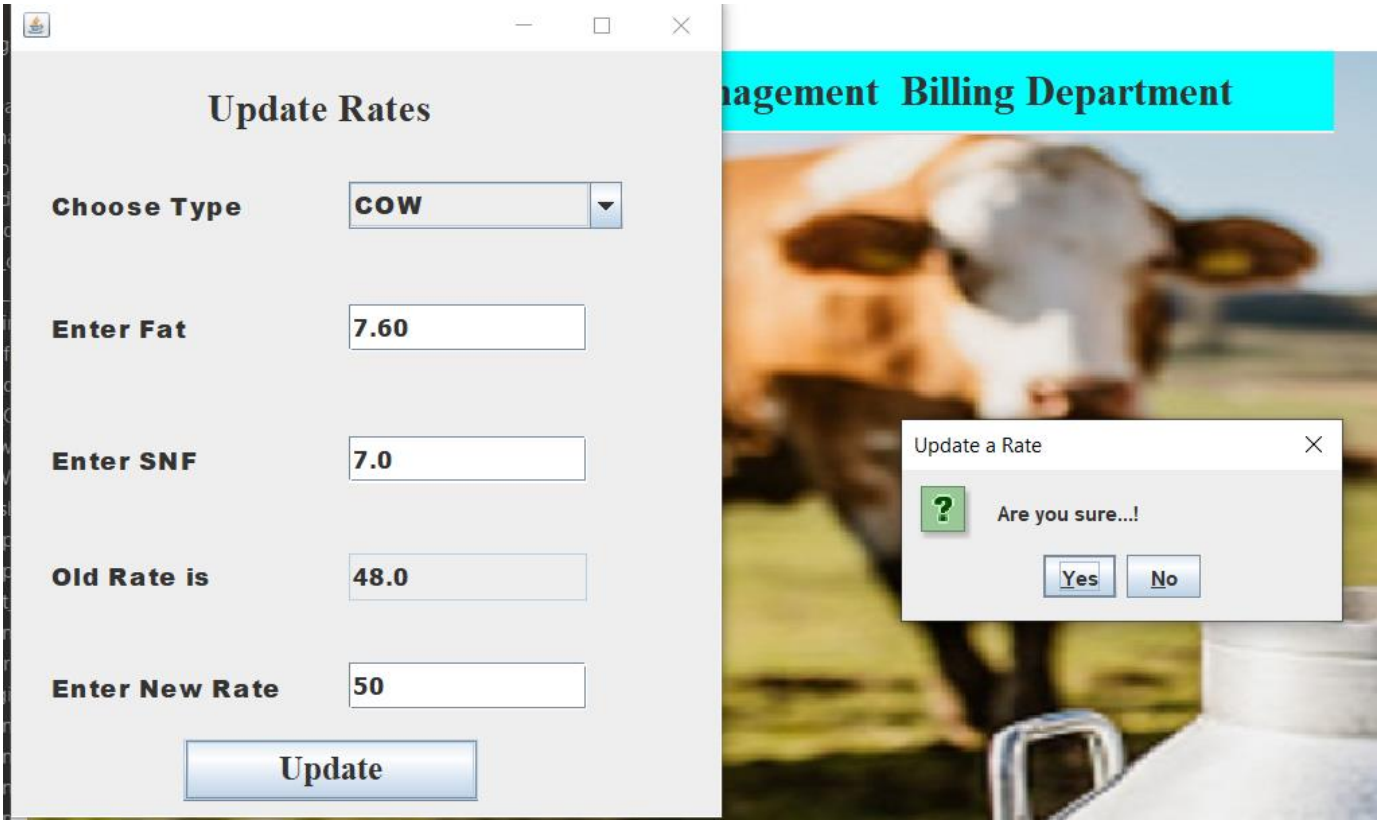
i) Add Rates:-



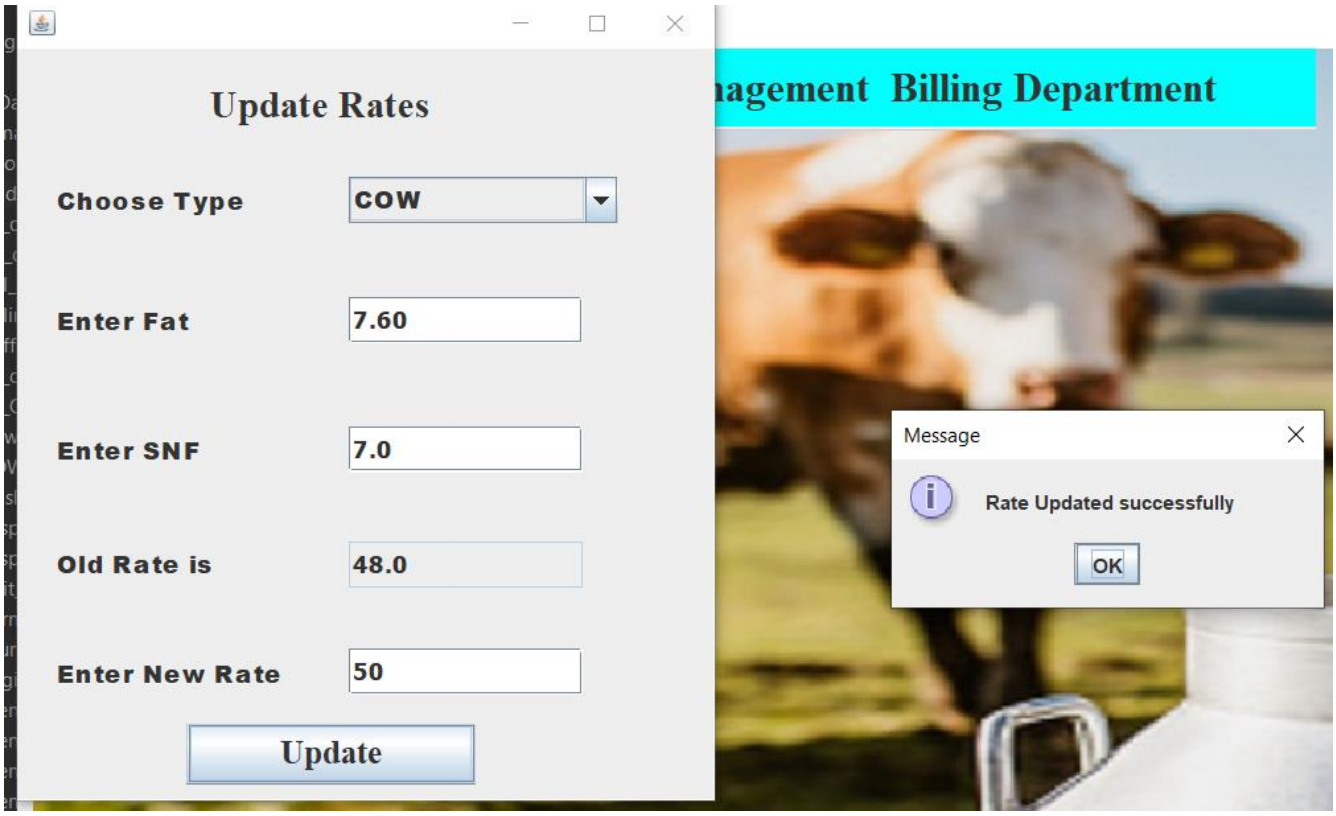
If Yes Is Selected



5) Update Rate:



If Yes Is Selected



5. User Guidelines-

When you run the application, first the login window opens on which there are two options – 1) Login & 2) Clear .

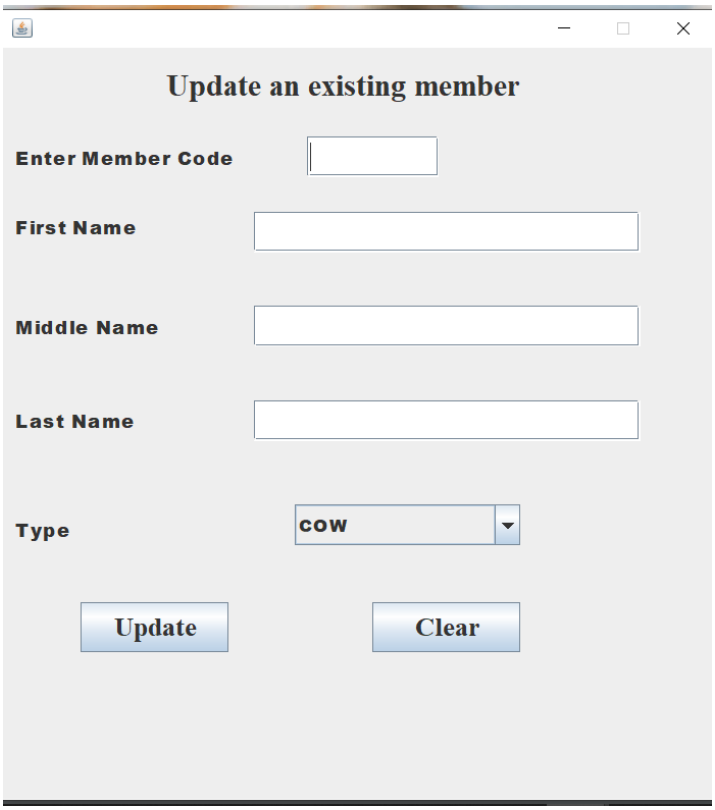
After successful login , ‘Dashboard’ window opens.

On ‘Dashboard’ there are different managing modules :

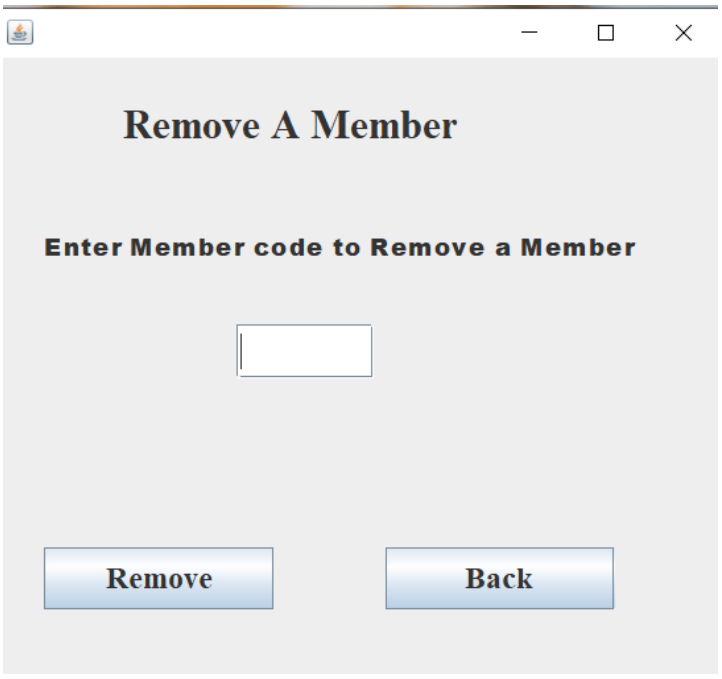
1) Members: There are four options to add a member, update a member, remove a member and display all data of members.

   i) Add a Member:- Here we adding new member information such as there first name, middle name and last name also we added there animal type.

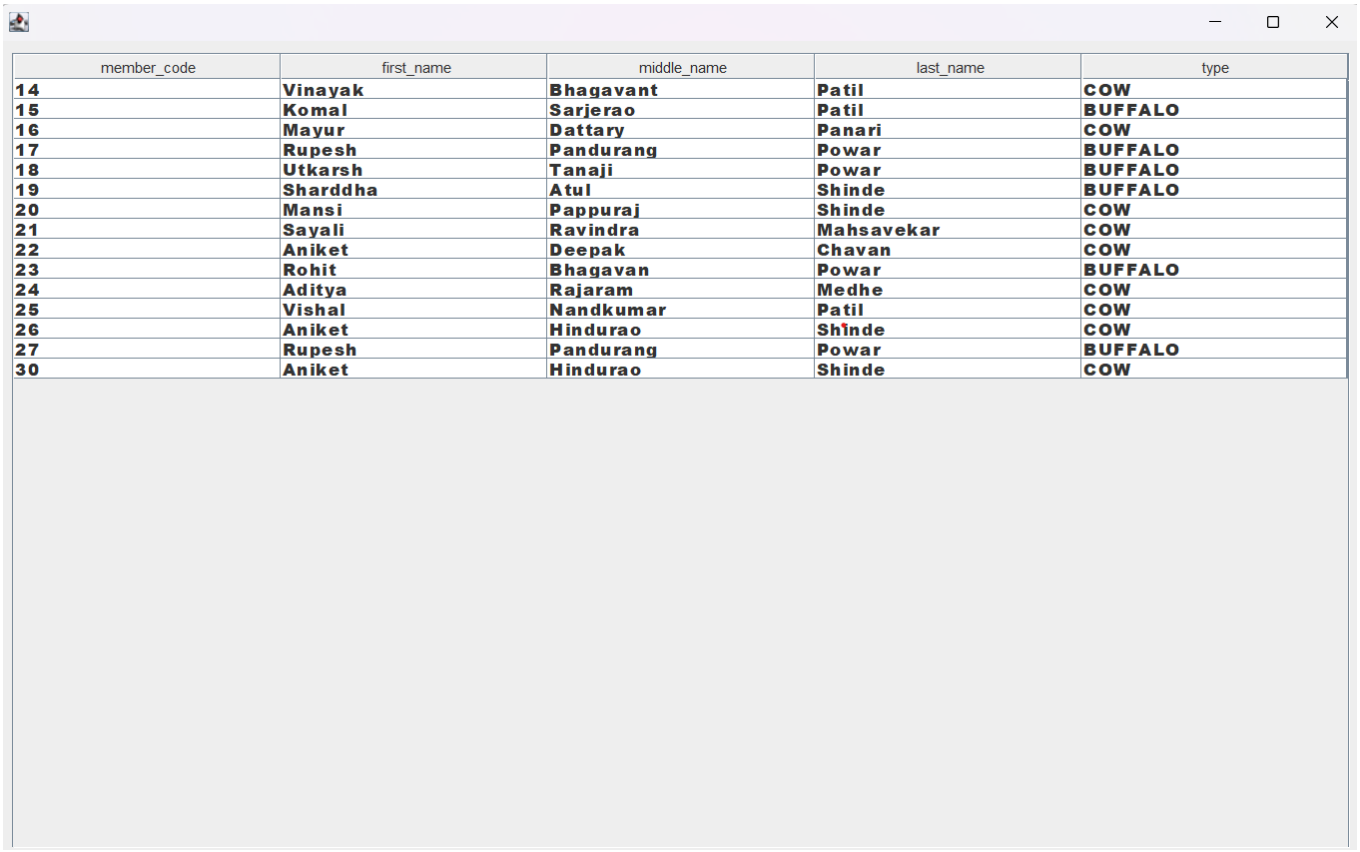
   ii) Update a Member:- Here we updating existing member information by there member code such as there first name, middle name ,last name and animal type.



iii) Remove a Member:- Here we Removing existing member by there member code.



iv) Display All Members - Here we display all members details



member_code	first_name	middle_name	last_name	type
14	Vinayak	Bhagavant	Patil	COW
15	Komal	Sarjerao	Patil	BUFFALO
16	Mayur	Dattary	Panari	COW
17	Rupesh	Pandurang	Powar	BUFFALO
18	Utkarsh	Tanaji	Powar	BUFFALO
19	Sharddha	Atul	Shinde	BUFFALO
20	Mansi	Pappuraj	Shinde	COW
21	Sayali	Ravindra	Mahsavekar	COW
22	Aniket	Deepak	Chavan	COW
23	Rohit	Bhagavan	Powar	BUFFALO
24	Aditya	Rajaram	Medhe	COW
25	Vishal	Nandkumar	Patil	COW
26	Aniket	Hindurao	Shinde	COW
27	Rupesh	Pandurang	Powar	BUFFALO
30	Aniket	Hindurao	Shinde	COW

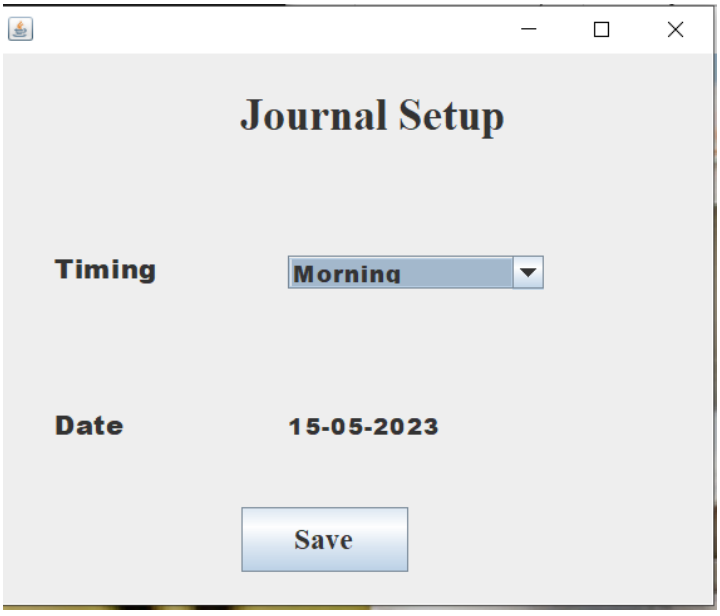
2) Milk Collection: There are two options to daily milk collection and collected milk.

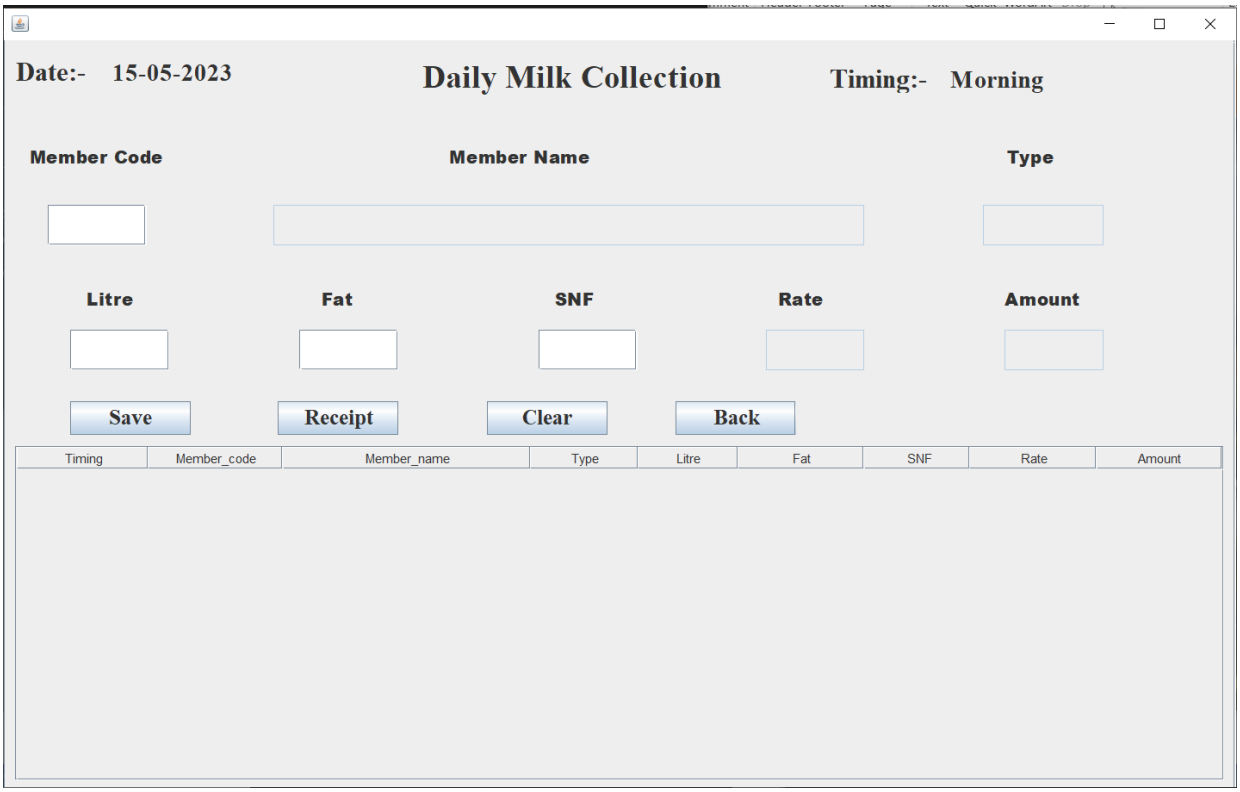
i) Daily Milk Collection :-Here we first asking journal setup. In journal setup we decide collection time i.e Morning or evening ,collection date will be automatically updated from current date of your PC and Save it.

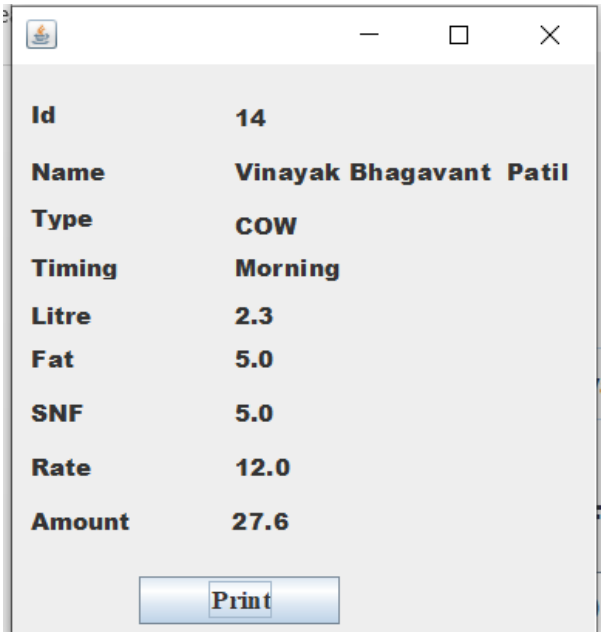
When you have hit the save Button Then you have to open the milk collection page in this page we first have to enter member code their member name And their type will be cached automatically. Then first you have

to enter their Litre, fat, SNF. By this entered fat and SNF the rate will be calculated according to there animal type and rate multiplied by litre and their amount will be displayed in amount box. After that when you hit the save button this all information i.e collection time, collection date, member code member name, type, litre, fat, SNF, rate and amount will be stored and displayed below the save button.

Then we also have two more buttons i.e clear and receipt. After clicking clear button all entered information will be cleared and after clicking on receipt button all information of member i.e collection time, collection date, member code member name, type, litre, fat, SNF, rate and amount will be display on the receipt.




Date:- 15-05-2023
Daily Milk Collection
Timing:- Morning
Member Code
Member Name
Type
Litre
Fat
SNF
Rate
Amount
Save
Receipt
Clear
Back
Timing
Member_code
Member_name
Type
Litre
Fat
SNF
Rate
Amount


Id 14
Name Vinayak Bhagavant Patil
Type COW
Timing Morning
Litre 2.3
Fat 5.0
SNF 5.0
Rate 12.0
Amount 27.6
Print

ii) Collected Milk:-Here collected milk reports display (form date) to (to date) by two methods a) by timing wise and b) by type wise.

a) by timing wise:-Here both Morning and Evening wise reports will be shown directly.

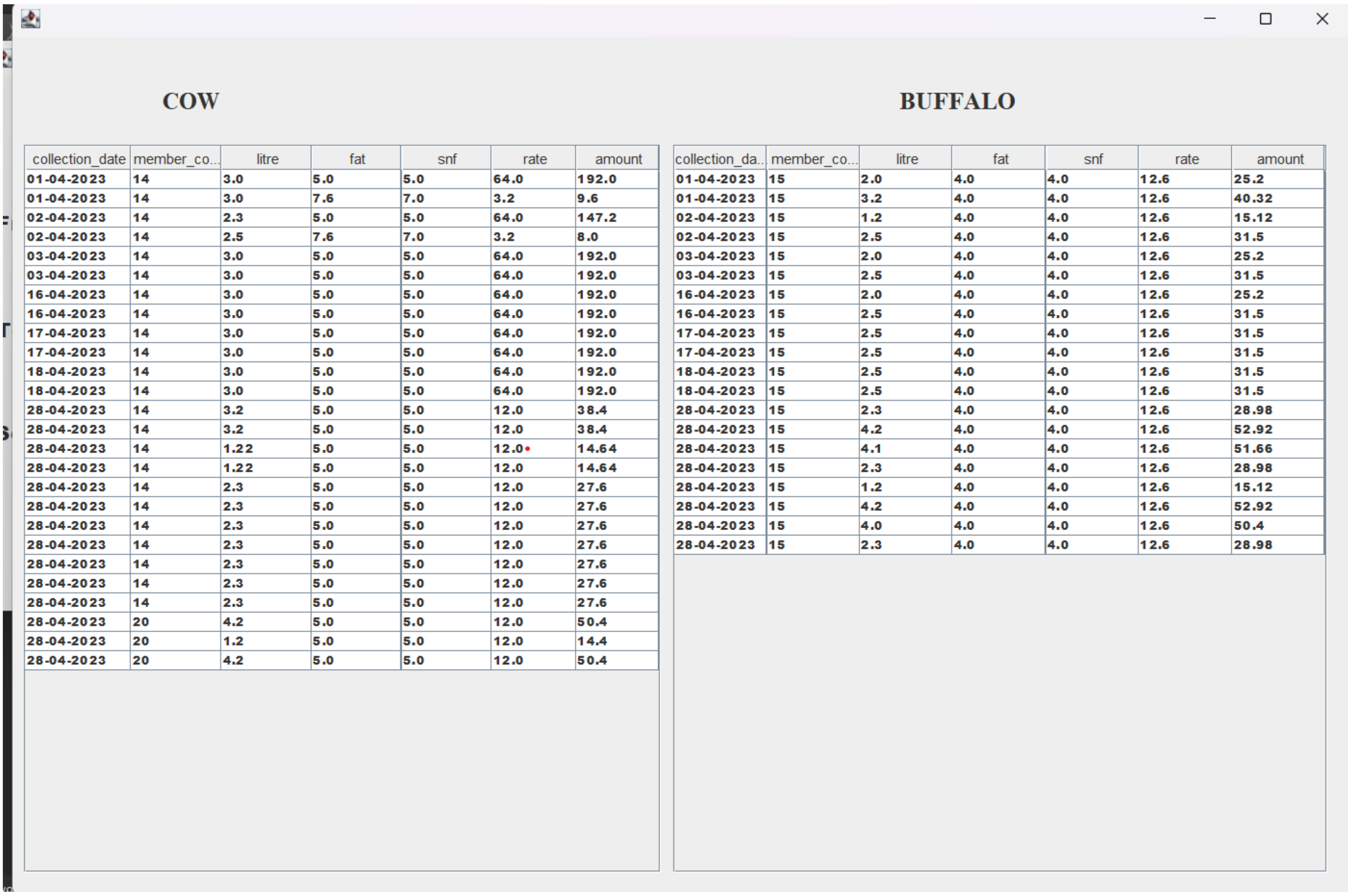
Morning Wise

collection_da...	member_co...	litre	fat	snf	rate	amount
01-04-2023	14	3.0	5.0	5.0	64.0	192.0
01-04-2023	15	2.0	4.0	4.0	12.6	25.2
02-04-2023	14	2.3	5.0	5.0	64.0	147.2
02-04-2023	15	1.2	4.0	4.0	12.6	15.12
03-04-2023	14	3.0	5.0	5.0	64.0	192.0
03-04-2023	15	2.0	4.0	4.0	12.6	25.2
16-04-2023	14	3.0	5.0	5.0	64.0	192.0
16-04-2023	15	2.0	4.0	4.0	12.6	25.2
17-04-2023	14	3.0	5.0	5.0	64.0	192.0
17-04-2023	15	2.5	4.0	4.0	12.6	31.5
18-04-2023	14	3.0	5.0	5.0	64.0	192.0
18-04-2023	15	2.5	4.0	4.0	12.6	31.5
28-04-2023	14	3.2	5.0	5.0	12.0	38.4
28-04-2023	14	3.2	5.0	5.0	12.0	38.4
28-04-2023	14	1.22	5.0	5.0	12.0	14.64
28-04-2023	14	1.22	5.0	5.0	12.0	14.64
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	15	2.3	4.0	4.0	12.6	28.98
28-04-2023	15	4.2	4.0	4.0	12.6	52.92
28-04-2023	20	1.2	5.0	5.0	12.0	14.4

Evening Wise

collection_da...	member_co...	litre	fat	snf	rate	amount
01-04-2023	14	3.0	7.6	7.0	3.2	9.6
01-04-2023	15	3.2	4.0	4.0	12.6	40.32
02-04-2023	14	2.5	7.6	7.0	3.2	8.0
02-04-2023	15	2.5	4.0	4.0	12.6	31.5
03-04-2023	14	3.0	5.0	5.0	64.0	192.0
03-04-2023	15	2.5	4.0	4.0	12.6	31.5
16-04-2023	14	3.0	5.0	5.0	64.0	192.0
16-04-2023	15	2.5	4.0	4.0	12.6	31.5
17-04-2023	14	3.0	5.0	5.0	64.0	192.0
17-04-2023	15	2.5	4.0	4.0	12.6	31.5
18-04-2023	14	3.0	5.0	5.0	64.0	192.0
18-04-2023	15	2.5	4.0	4.0	12.6	31.5
28-04-2023	15	4.1	4.0	4.0	12.6	51.66
28-04-2023	15	2.3	4.0	4.0	12.6	28.98
28-04-2023	15	1.2	4.0	4.0	12.6	15.12
28-04-2023	15	4.2	4.0	4.0	12.6	52.92
28-04-2023	20	4.2	5.0	5.0	12.0	50.4
28-04-2023	20	4.2	5.0	5.0	12.0	50.4
28-04-2023	15	4.0	4.0	4.0	12.6	50.4
28-04-2023	15	2.3	4.0	4.0	12.6	28.98

b) by type wise:-Here both COW and BUFFALO wise reports will be shown directly.



COW

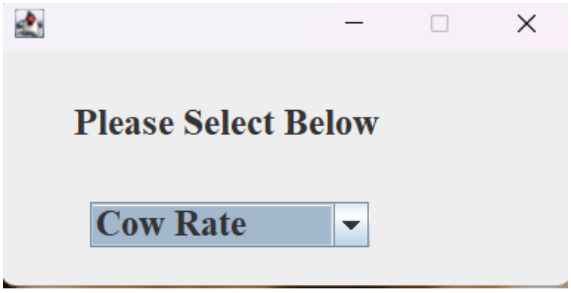
collection_date	member_co...	litre	fat	snf	rate	amount
01-04-2023	14	3.0	5.0	5.0	64.0	192.0
01-04-2023	14	3.0	7.6	7.0	3.2	9.6
02-04-2023	14	2.3	5.0	5.0	64.0	147.2
02-04-2023	14	2.5	7.6	7.0	3.2	8.0
03-04-2023	14	3.0	5.0	5.0	64.0	192.0
03-04-2023	14	3.0	5.0	5.0	64.0	192.0
16-04-2023	14	3.0	5.0	5.0	64.0	192.0
16-04-2023	14	3.0	5.0	5.0	64.0	192.0
17-04-2023	14	3.0	5.0	5.0	64.0	192.0
17-04-2023	14	3.0	5.0	5.0	64.0	192.0
18-04-2023	14	3.0	5.0	5.0	64.0	192.0
18-04-2023	14	3.0	5.0	5.0	64.0	192.0
28-04-2023	14	3.2	5.0	5.0	12.0	38.4
28-04-2023	14	3.2	5.0	5.0	12.0	38.4
28-04-2023	14	1.22	5.0	5.0	12.0	14.64
28-04-2023	14	1.22	5.0	5.0	12.0	14.64
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	20	4.2	5.0	5.0	12.0	50.4
28-04-2023	20	1.2	5.0	5.0	12.0	14.4
28-04-2023	20	4.2	5.0	5.0	12.0	50.4

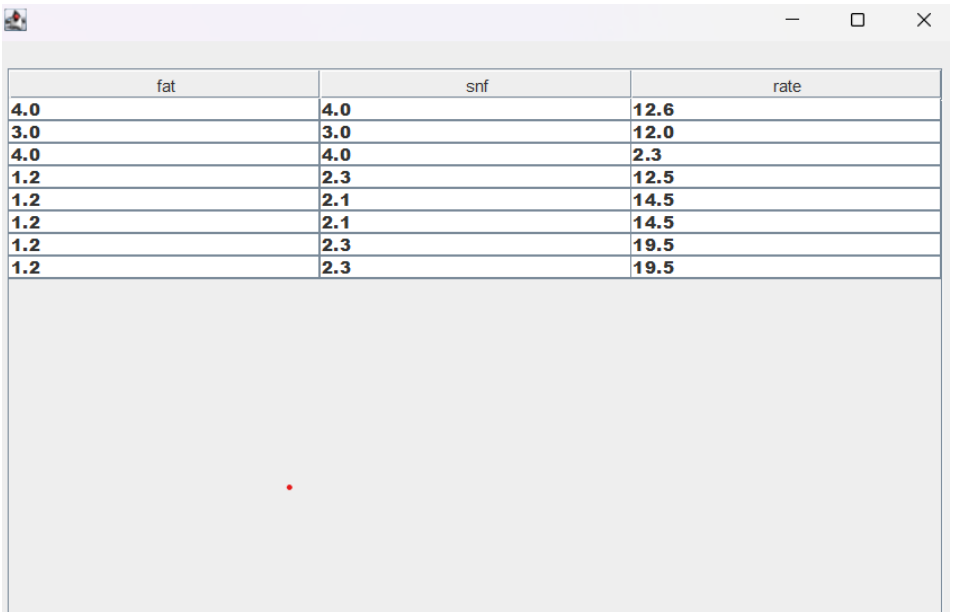
BUFFALO

collection_da...	member_co...	litre	fat	snf	rate	amount
01-04-2023	15	2.0	4.0	4.0	12.6	25.2
01-04-2023	15	3.2	4.0	4.0	12.6	40.32
02-04-2023	15	1.2	4.0	4.0	12.6	15.12
02-04-2023	15	2.5	4.0	4.0	12.6	31.5
03-04-2023	15	2.0	4.0	4.0	12.6	25.2
03-04-2023	15	2.5	4.0	4.0	12.6	31.5
16-04-2023	15	2.0	4.0	4.0	12.6	25.2
16-04-2023	15	2.5	4.0	4.0	12.6	31.5
17-04-2023	15	2.5	4.0	4.0	12.6	31.5
17-04-2023	15	2.5	4.0	4.0	12.6	31.5
18-04-2023	15	2.5	4.0	4.0	12.6	31.5
18-04-2023	15	2.5	4.0	4.0	12.6	31.5
28-04-2023	15	2.3	4.0	4.0	12.6	28.98
28-04-2023	15	4.2	4.0	4.0	12.6	52.92
28-04-2023	15	4.1	4.0	4.0	12.6	51.66
28-04-2023	15	2.3	4.0	4.0	12.6	28.98
28-04-2023	15	1.2	4.0	4.0	12.6	15.12
28-04-2023	15	4.2	4.0	4.0	12.6	52.92
28-04-2023	15	4.0	4.0	4.0	12.6	50.4
28-04-2023	15	2.3	4.0	4.0	12.6	28.98

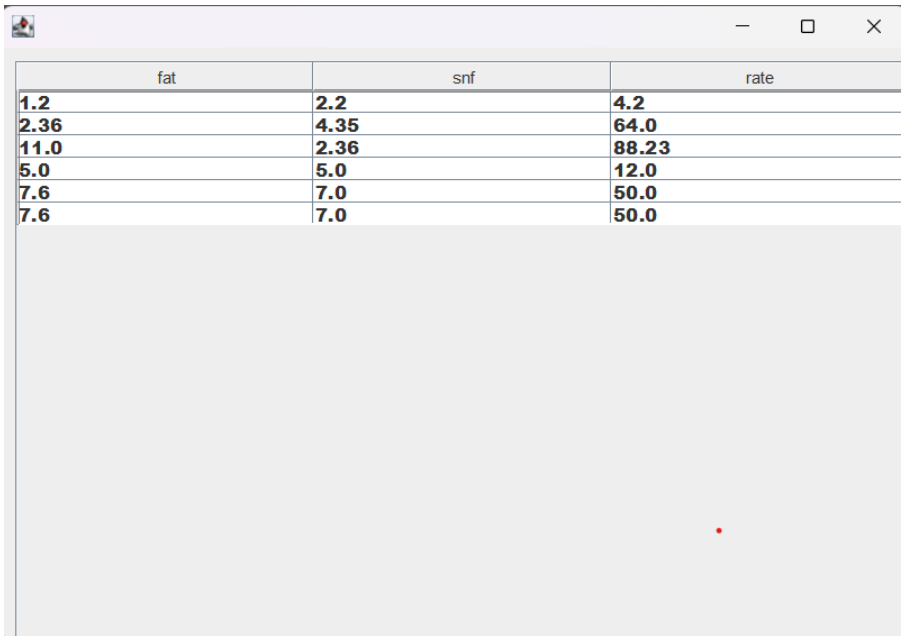
3) Rate Management: There are three options Display Chart, (Add New Fat, SNF, Rate), Update New Rates.

i) Display Chart :- In display chart you have to select one option from Cow Rate and Buffalo Rate it. After selecting cow rate you will get rate chart of cow and after selecting buffalo rate you will get rate chart of Buffalo.



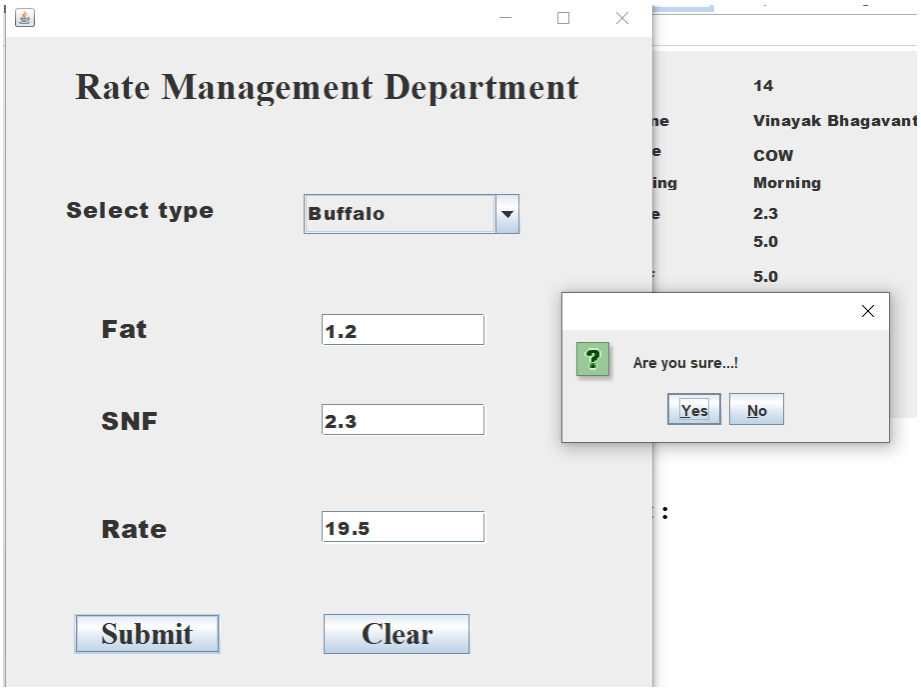


fat	snf	rate
4.0	4.0	12.6
3.0	3.0	12.0
4.0	4.0	2.3
1.2	2.3	12.5
1.2	2.1	14.5
1.2	2.1	14.5
1.2	2.3	19.5
1.2	2.3	19.5

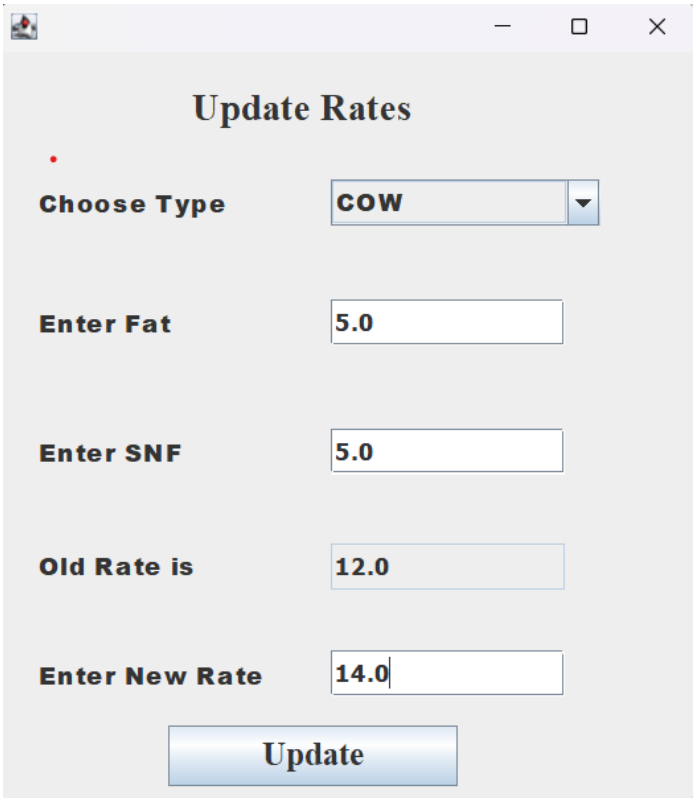


fat	snf	rate
1.2	2.2	4.2
2.36	4.35	64.0
11.0	2.36	88.23
5.0	5.0	12.0
7.6	7.0	50.0
7.6	7.0	50.0

ii) Add New Fat, SNF and Rate:- After clicking on add new fat SNF and rate we have to select from cow or Buffalo. After that enter the fat and SNF and read. Finally after clicking on submit button the new rate of that particular fat and SNF are added.

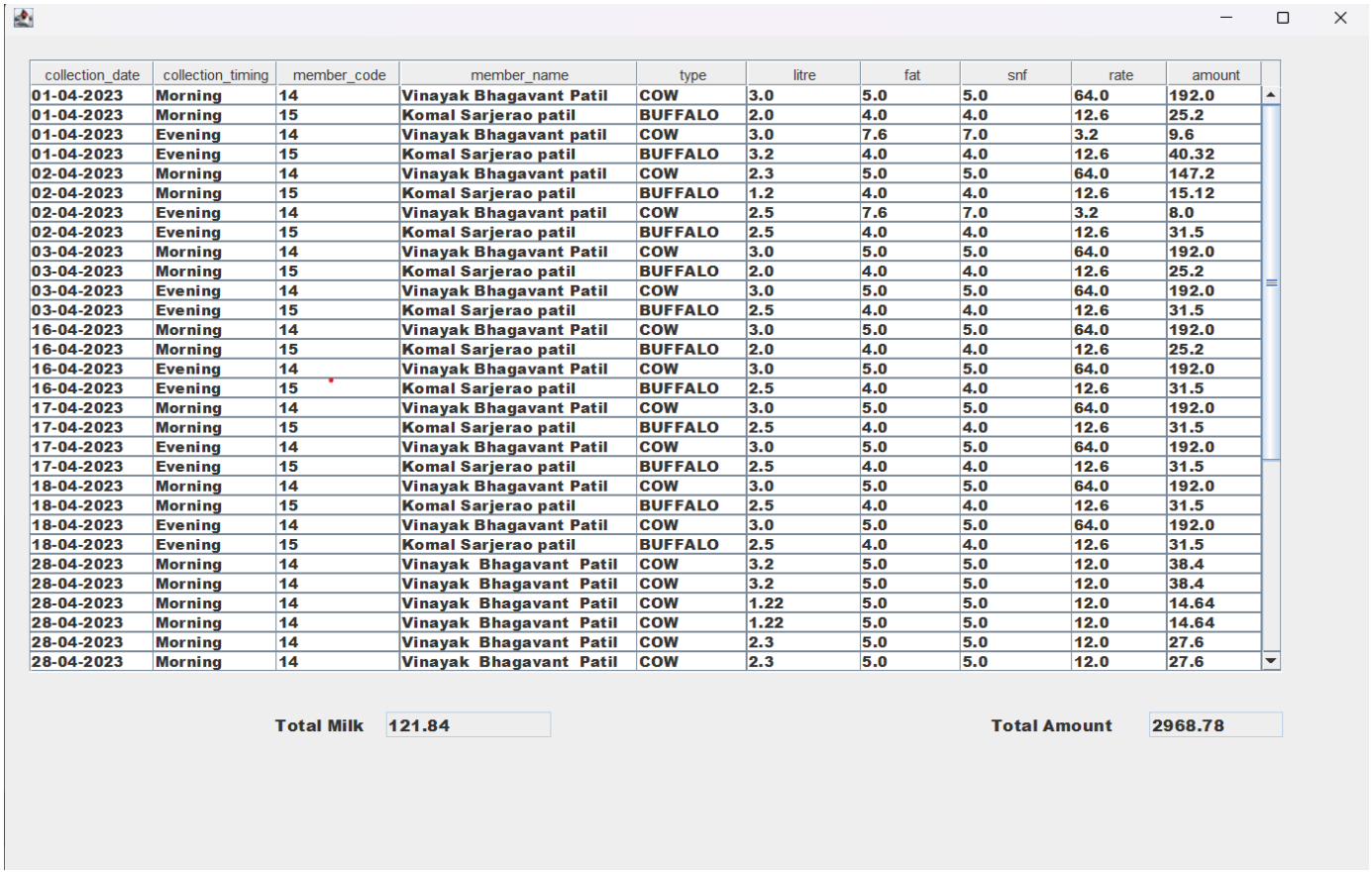


iii) Update Rate:- after clicking on update rate you have to select the type of animal and enter the SNF and fat after that you will get the older rate of that particular fat and SNF and now you can enter the new rate for that. Finally, after clicking on submit button the new rate are updated at the place of older rate.



4) Billing Department:- In billing department you can choose the milk report option. Here firstly you have to enter the from date (i.e starting date of the report) and to date (i.e ending date of the report). After that in select category you have to select any one option from ‘all member’ and ‘by one separate member’.

i) All members: - By choosing all members category we can view all records of those days i.e. (from date – to date). You can also view those days total milk quantity (in litres) and amount (in Rs).

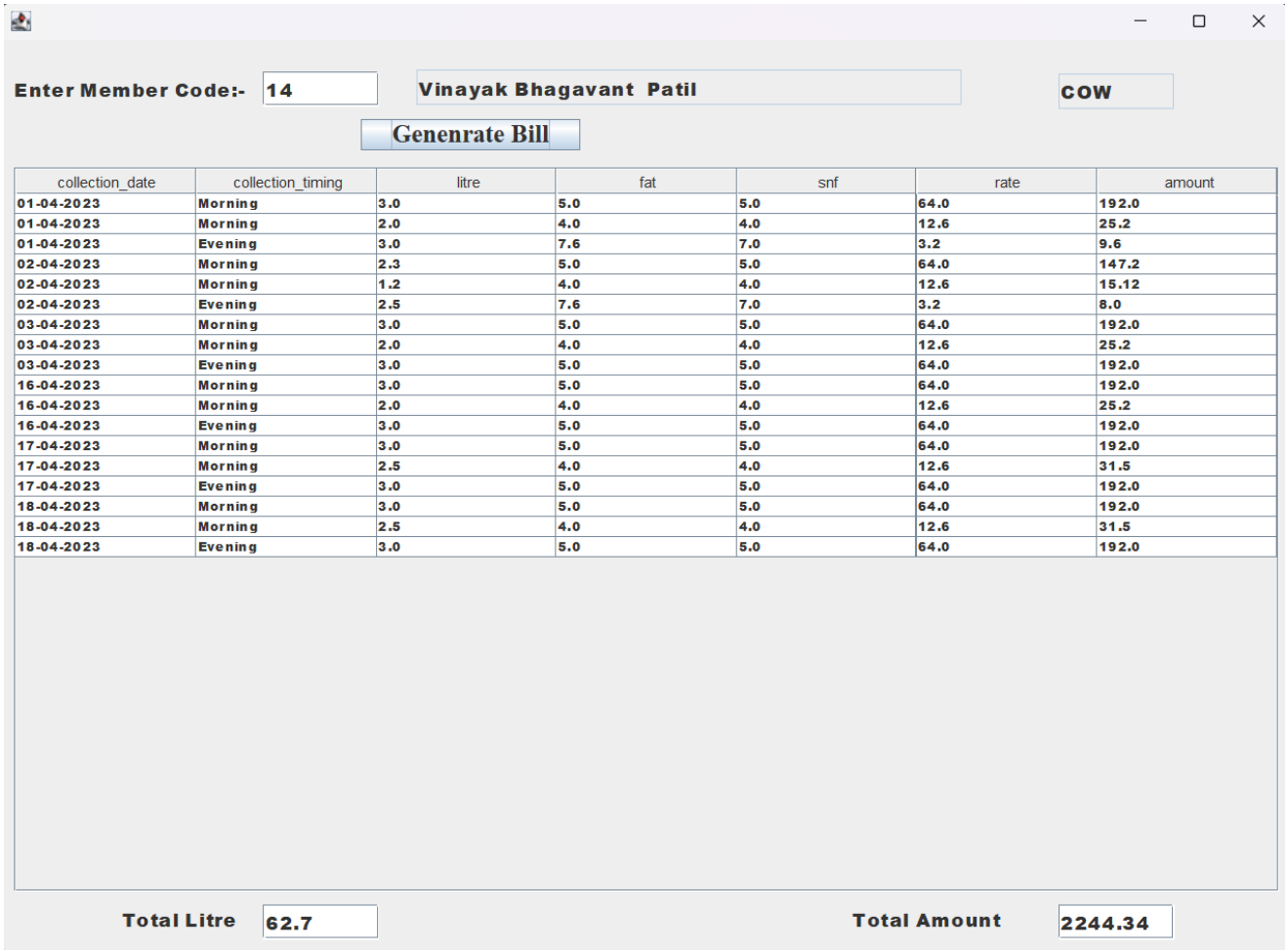


collection_date	collection_timing	member_code	member_name	type	litre	fat	snf	rate	amount
01-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
01-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.0	4.0	4.0	12.6	25.2
01-04-2023	Evening	14	Vinayak Bhagavant patil	COW	3.0	7.6	7.0	3.2	9.6
01-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	3.2	4.0	4.0	12.6	40.32
02-04-2023	Morning	14	Vinayak Bhagavant patil	COW	2.3	5.0	5.0	64.0	147.2
02-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	1.2	4.0	4.0	12.6	15.12
02-04-2023	Evening	14	Vinayak Bhagavant patil	COW	2.5	7.6	7.0	3.2	8.0
02-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
03-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
03-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.0	4.0	4.0	12.6	25.2
03-04-2023	Evening	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
03-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
16-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
16-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.0	4.0	4.0	12.6	25.2
16-04-2023	Evening	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
16-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
17-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
17-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
17-04-2023	Evening	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
17-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
18-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
18-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
18-04-2023	Evening	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
18-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.2	5.0	5.0	12.0	38.4
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.2	5.0	5.0	12.0	38.4
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	1.22	5.0	5.0	12.0	14.64
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	1.22	5.0	5.0	12.0	14.64
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	2.3	5.0	5.0	12.0	27.6
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	2.3	5.0	5.0	12.0	27.6

Total Milk 121.84

Total Amount 2968.78

ii) By one separate member: - By choosing by one member separate category by entering there member code and click on the generate bill button we can view all records of those days i.e. (from date – to date). You can also view those days total milk quantity (in litres) and amount (in Rs).

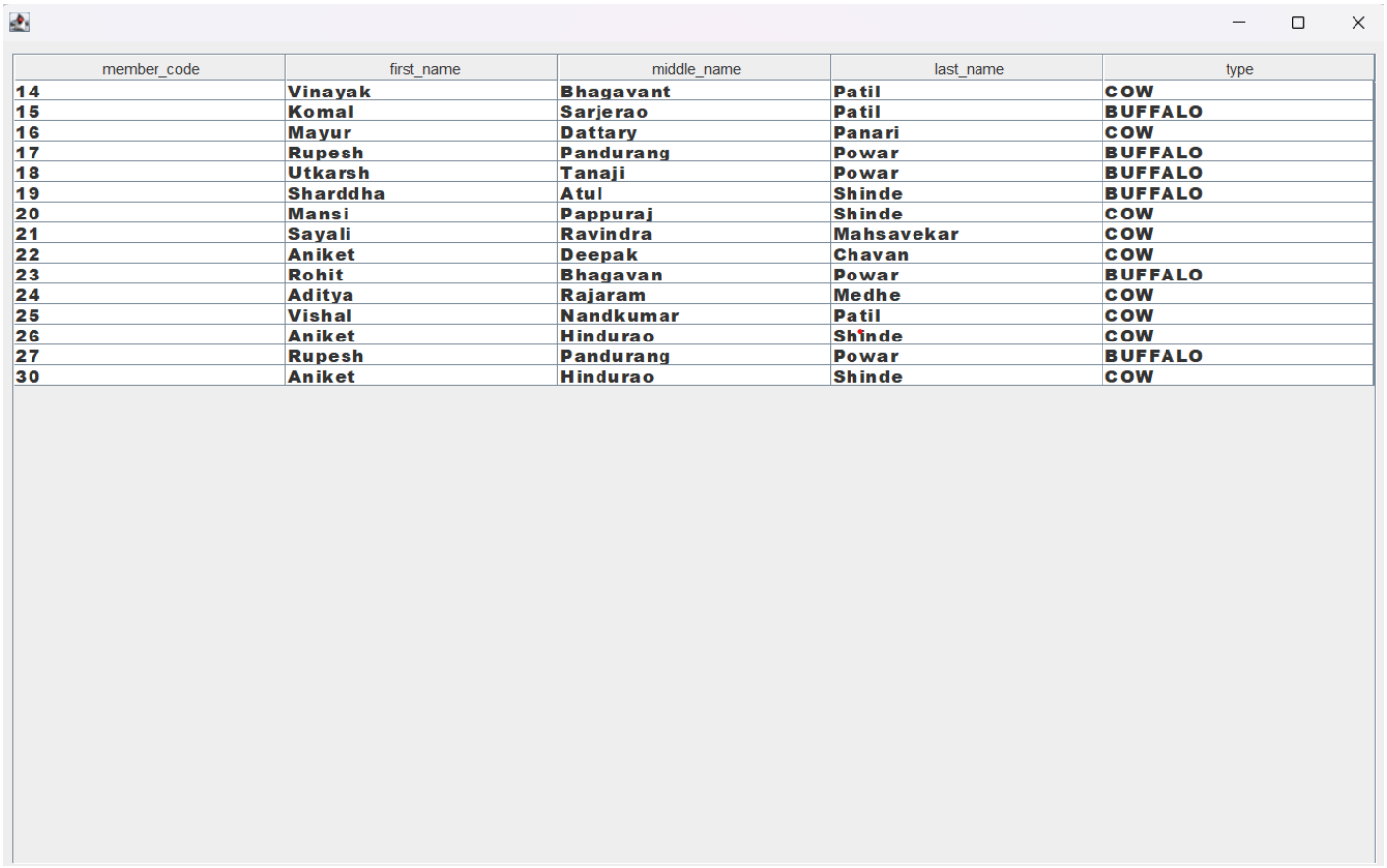


collection_date	collection_timing	litre	fat	snf	rate	amount
01-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
01-04-2023	Morning	2.0	4.0	4.0	12.6	25.2
01-04-2023	Evening	3.0	7.6	7.0	3.2	9.6
02-04-2023	Morning	2.3	5.0	5.0	64.0	147.2
02-04-2023	Morning	1.2	4.0	4.0	12.6	15.12
02-04-2023	Evening	2.5	7.6	7.0	3.2	8.0
03-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
03-04-2023	Morning	2.0	4.0	4.0	12.6	25.2
03-04-2023	Evening	3.0	5.0	5.0	64.0	192.0
16-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
16-04-2023	Morning	2.0	4.0	4.0	12.6	25.2
16-04-2023	Evening	3.0	5.0	5.0	64.0	192.0
17-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
17-04-2023	Morning	2.5	4.0	4.0	12.6	31.5
17-04-2023	Evening	3.0	5.0	5.0	64.0	192.0
18-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
18-04-2023	Morning	2.5	4.0	4.0	12.6	31.5
18-04-2023	Evening	3.0	5.0	5.0	64.0	192.0

6. OUTPUT REPORTS

Member_Details Reports:

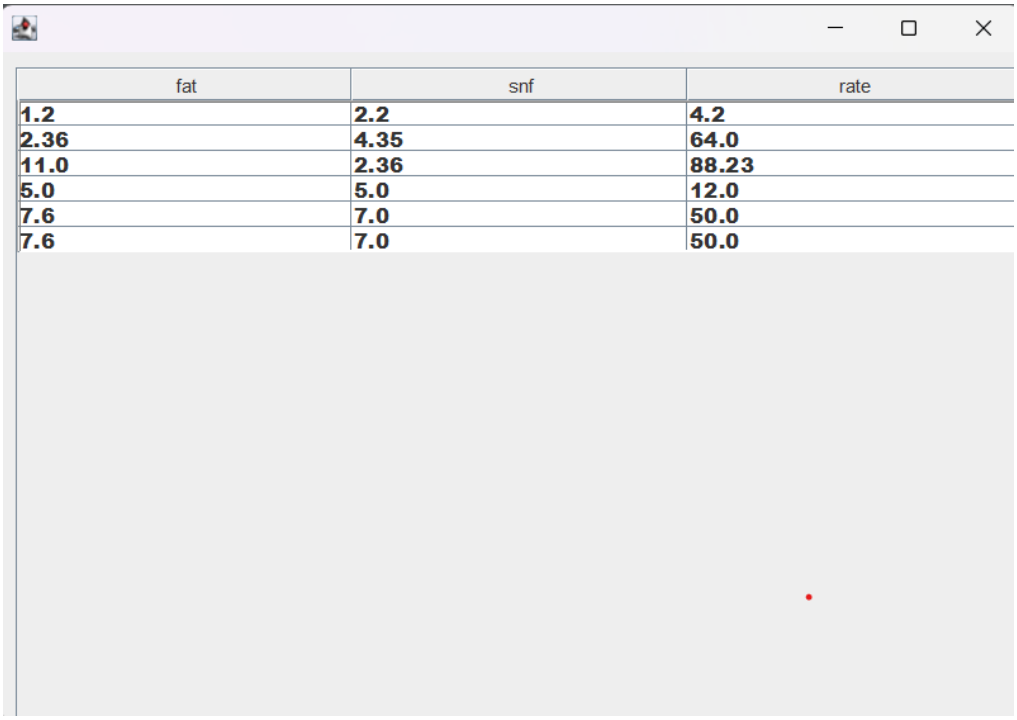
1. All Members :



member_code	first_name	middle_name	last_name	type
14	Vinayak	Bhagavant	Patil	COW
15	Komal	Sarjerao	Patil	BUFFALO
16	Mayur	Dattary	Panari	COW
17	Rupesh	Pandurang	Powar	BUFFALO
18	Utkarsh	Tanaji	Powar	BUFFALO
19	Sharddha	Atul	Shinde	BUFFALO
20	Mansi	Pappuraj	Shinde	COW
21	Sayali	Ravindra	Mahsavekar	COW
22	Aniket	Deepak	Chavan	COW
23	Rohit	Bhagavan	Powar	BUFFALO
24	Aditya	Rajaram	Medhe	COW
25	Vishal	Nandkumar	Patil	COW
26	Aniket	Hindurao	Shinde	COW
27	Rupesh	Pandurang	Powar	BUFFALO
30	Aniket	Hindurao	Shinde	COW

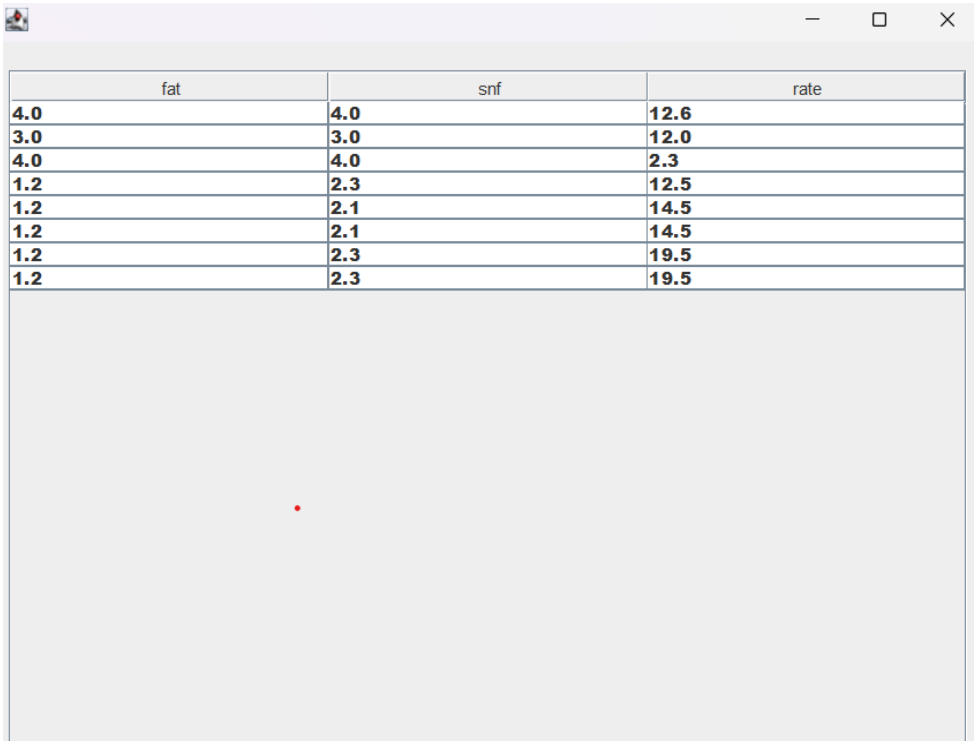
Rates Reports :

1) Cow Rate



fat	snf	rate
1.2	2.2	4.2
2.36	4.35	64.0
11.0	2.36	88.23
5.0	5.0	12.0
7.6	7.0	50.0
7.6	7.0	50.0

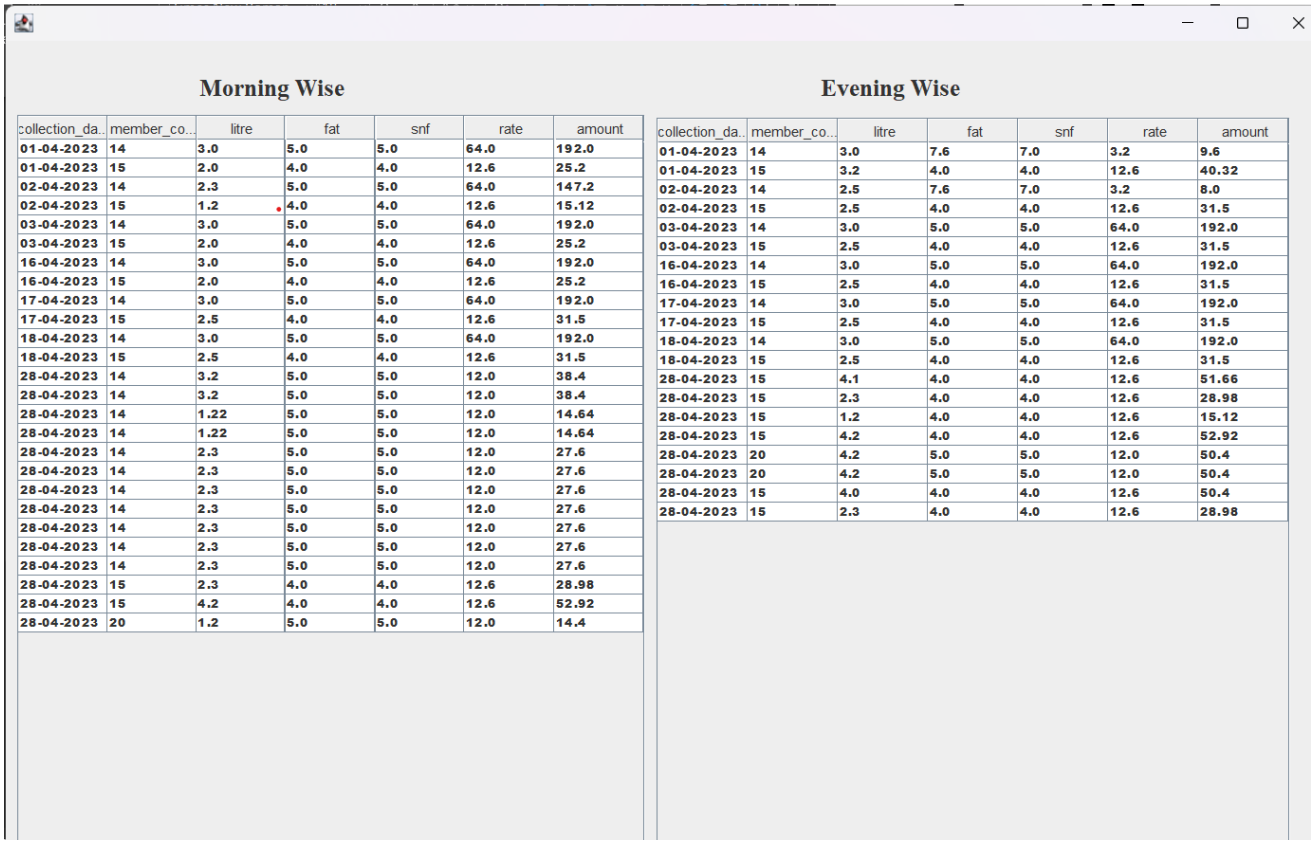
2) Buffalo Rate:-



fat	snf	rate
4.0	4.0	12.6
3.0	3.0	12.0
4.0	4.0	2.3
1.2	2.3	12.5
1.2	2.1	14.5
1.2	2.1	14.5
1.2	2.3	19.5
1.2	2.3	19.5

3) Collected milk :-

i) Timing wise:-



Morning Wise

collection_da..	member_co...	litre	fat	snf	rate	amount
01-04-2023	14	3.0	5.0	5.0	64.0	192.0
01-04-2023	15	2.0	4.0	4.0	12.6	25.2
02-04-2023	14	2.3	5.0	5.0	64.0	147.2
02-04-2023	15	1.2	4.0	4.0	12.6	15.12
03-04-2023	14	3.0	5.0	5.0	64.0	192.0
03-04-2023	15	2.0	4.0	4.0	12.6	25.2
16-04-2023	14	3.0	5.0	5.0	64.0	192.0
16-04-2023	15	2.0	4.0	4.0	12.6	25.2
17-04-2023	14	3.0	5.0	5.0	64.0	192.0
17-04-2023	15	2.5	4.0	4.0	12.6	31.5
18-04-2023	14	3.0	5.0	5.0	64.0	192.0
18-04-2023	15	2.5	4.0	4.0	12.6	31.5
28-04-2023	14	3.2	5.0	5.0	12.0	38.4
28-04-2023	14	3.2	5.0	5.0	12.0	38.4
28-04-2023	14	1.22	5.0	5.0	12.0	14.64
28-04-2023	14	1.22	5.0	5.0	12.0	14.64
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	15	2.3	4.0	4.0	12.6	28.98
28-04-2023	15	4.2	4.0	4.0	12.6	52.92
28-04-2023	20	1.2	5.0	5.0	12.0	14.4

Evening Wise

collection_da..	member_co...	litre	fat	snf	rate	amount
01-04-2023	14	3.0	7.6	7.0	3.2	9.6
01-04-2023	15	3.2	4.0	4.0	12.6	40.32
02-04-2023	14	2.5	7.6	7.0	3.2	8.0
02-04-2023	15	2.5	4.0	4.0	12.6	31.5
03-04-2023	14	3.0	5.0	5.0	64.0	192.0
03-04-2023	15	2.5	4.0	4.0	12.6	31.5
16-04-2023	14	3.0	5.0	5.0	64.0	192.0
16-04-2023	15	2.5	4.0	4.0	12.6	31.5
17-04-2023	14	3.0	5.0	5.0	64.0	192.0
17-04-2023	15	2.5	4.0	4.0	12.6	31.5
18-04-2023	14	3.0	5.0	5.0	64.0	192.0
18-04-2023	15	2.5	4.0	4.0	12.6	31.5
28-04-2023	15	4.1	4.0	4.0	12.6	51.66
28-04-2023	15	2.3	4.0	4.0	12.6	28.98
28-04-2023	15	1.2	4.0	4.0	12.6	15.12
28-04-2023	15	4.2	4.0	4.0	12.6	52.92
28-04-2023	20	4.2	5.0	5.0	12.0	50.4
28-04-2023	20	4.2	5.0	5.0	12.0	50.4
28-04-2023	15	4.0	4.0	4.0	12.6	50.4
28-04-2023	15	2.3	4.0	4.0	12.6	28.98

ii)Type wise:-

COW

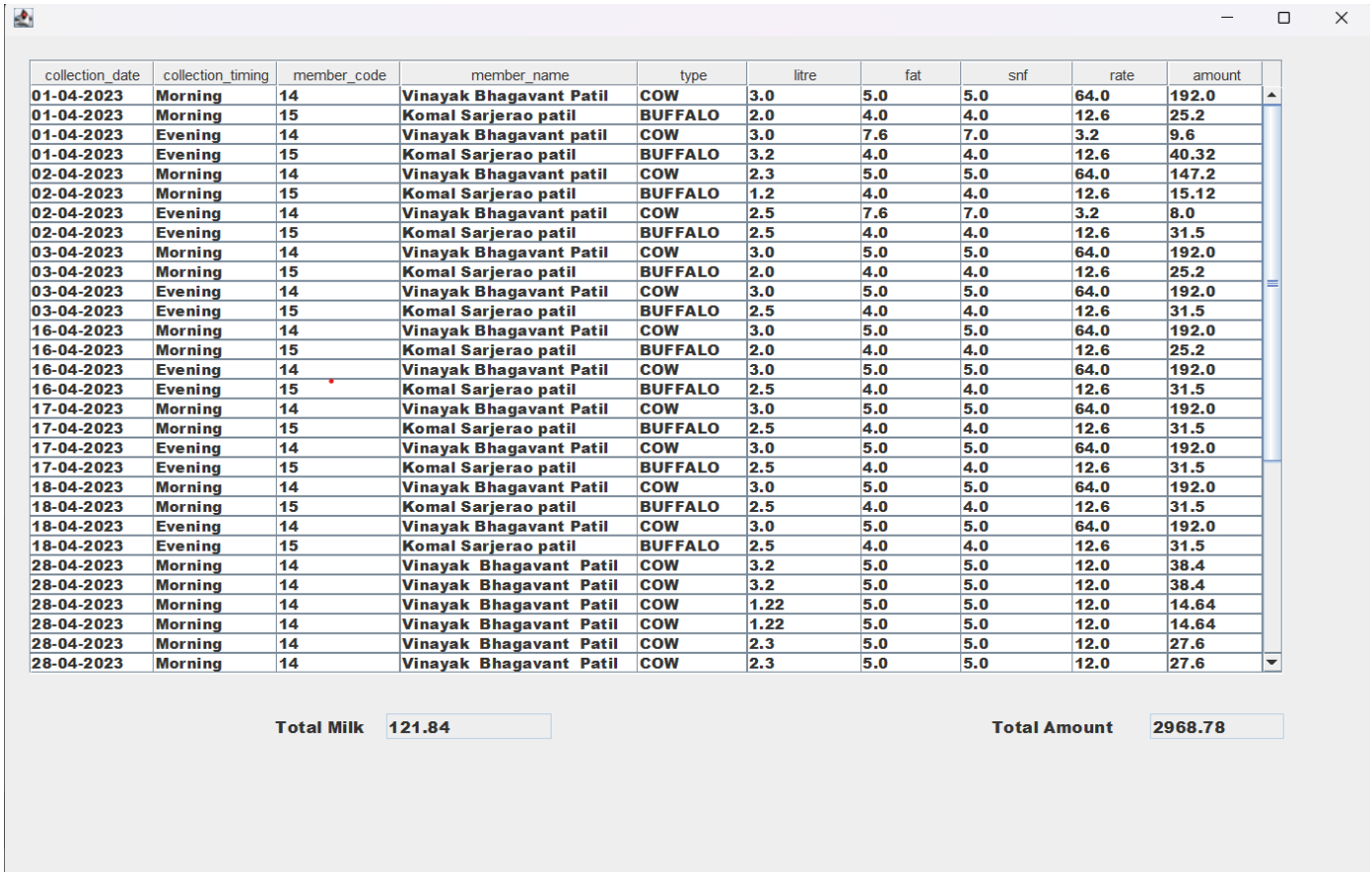
collection_date	member_co...	litre	fat	snf	rate	amount
01-04-2023	14	3.0	5.0	5.0	64.0	192.0
01-04-2023	14	3.0	7.6	7.0	3.2	9.6
02-04-2023	14	2.3	5.0	5.0	64.0	147.2
02-04-2023	14	2.5	7.6	7.0	3.2	8.0
03-04-2023	14	3.0	5.0	5.0	64.0	192.0
03-04-2023	14	3.0	5.0	5.0	64.0	192.0
16-04-2023	14	3.0	5.0	5.0	64.0	192.0
16-04-2023	14	3.0	5.0	5.0	64.0	192.0
17-04-2023	14	3.0	5.0	5.0	64.0	192.0
17-04-2023	14	3.0	5.0	5.0	64.0	192.0
18-04-2023	14	3.0	5.0	5.0	64.0	192.0
18-04-2023	14	3.0	5.0	5.0	64.0	192.0
28-04-2023	14	3.2	5.0	5.0	12.0	38.4
28-04-2023	14	3.2	5.0	5.0	12.0	38.4
28-04-2023	14	1.22	5.0	5.0	12.0	14.64
28-04-2023	14	1.22	5.0	5.0	12.0	14.64
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	14	2.3	5.0	5.0	12.0	27.6
28-04-2023	20	4.2	5.0	5.0	12.0	50.4
28-04-2023	20	1.2	5.0	5.0	12.0	14.4
28-04-2023	20	4.2	5.0	5.0	12.0	50.4

BUFFALO

collection_da...	member_co...	litre	fat	snf	rate	amount
01-04-2023	15	2.0	4.0	4.0	12.6	25.2
01-04-2023	15	3.2	4.0	4.0	12.6	40.32
02-04-2023	15	1.2	4.0	4.0	12.6	15.12
02-04-2023	15	2.5	4.0	4.0	12.6	31.5
03-04-2023	15	2.0	4.0	4.0	12.6	25.2
03-04-2023	15	2.5	4.0	4.0	12.6	31.5
16-04-2023	15	2.0	4.0	4.0	12.6	25.2
16-04-2023	15	2.5	4.0	4.0	12.6	31.5
17-04-2023	15	2.5	4.0	4.0	12.6	31.5
17-04-2023	15	2.5	4.0	4.0	12.6	31.5
18-04-2023	15	2.5	4.0	4.0	12.6	31.5
18-04-2023	15	2.5	4.0	4.0	12.6	31.5
28-04-2023	15	2.3	4.0	4.0	12.6	28.98
28-04-2023	15	4.2	4.0	4.0	12.6	52.92
28-04-2023	15	4.1	4.0	4.0	12.6	51.66
28-04-2023	15	2.3	4.0	4.0	12.6	28.98
28-04-2023	15	1.2	4.0	4.0	12.6	15.12
28-04-2023	15	4.2	4.0	4.0	12.6	52.92
28-04-2023	15	4.0	4.0	4.0	12.6	50.4
28-04-2023	15	2.3	4.0	4.0	12.6	28.98

4)Milk Report:-

i)All members:-

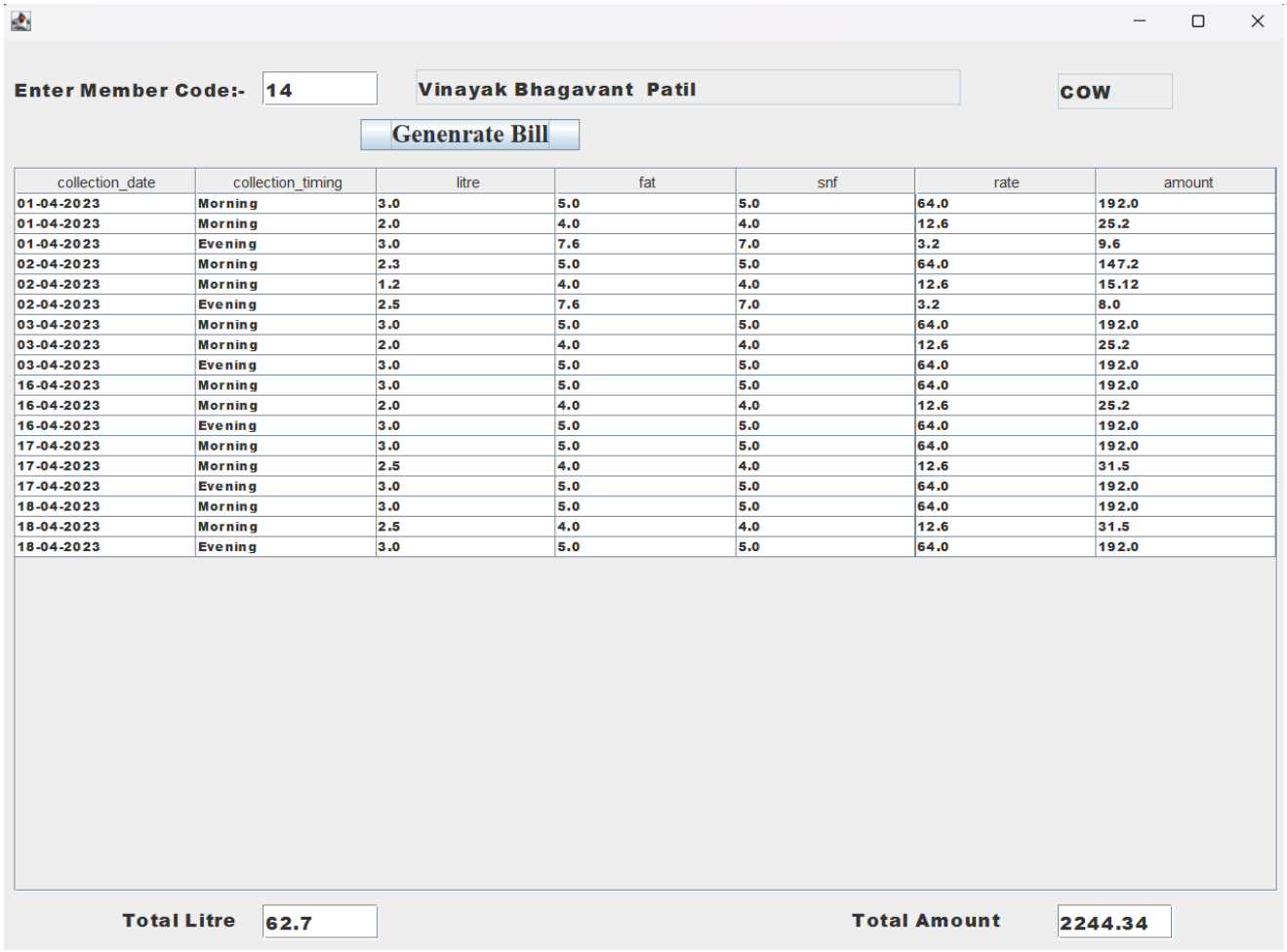


collection_date	collection_timing	member_code	member_name	type	litre	fat	snf	rate	amount
01-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
01-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.0	4.0	4.0	12.6	25.2
01-04-2023	Evening	14	Vinayak Bhagavant patil	COW	3.0	7.6	7.0	3.2	9.6
01-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	3.2	4.0	4.0	12.6	40.32
02-04-2023	Morning	14	Vinayak Bhagavant patil	COW	2.3	5.0	5.0	64.0	147.2
02-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	1.2	4.0	4.0	12.6	15.12
02-04-2023	Evening	14	Vinayak Bhagavant patil	COW	2.5	7.6	7.0	3.2	8.0
02-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
03-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
03-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.0	4.0	4.0	12.6	25.2
03-04-2023	Evening	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
03-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
16-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
16-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.0	4.0	4.0	12.6	25.2
16-04-2023	Evening	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
16-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
17-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
17-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
17-04-2023	Evening	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
17-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
18-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
18-04-2023	Morning	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
18-04-2023	Evening	14	Vinayak Bhagavant Patil	COW	3.0	5.0	5.0	64.0	192.0
18-04-2023	Evening	15	Komal Sarjerao patil	BUFFALO	2.5	4.0	4.0	12.6	31.5
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.2	5.0	5.0	12.0	38.4
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	3.2	5.0	5.0	12.0	38.4
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	1.22	5.0	5.0	12.0	14.64
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	1.22	5.0	5.0	12.0	14.64
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	2.3	5.0	5.0	12.0	27.6
28-04-2023	Morning	14	Vinayak Bhagavant Patil	COW	2.3	5.0	5.0	12.0	27.6

Total Milk 121.84

Total Amount 2968.78

ii) By one separate member:-



collection_date	collection_timing	litre	fat	snf	rate	amount
01-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
01-04-2023	Morning	2.0	4.0	4.0	12.6	25.2
01-04-2023	Evening	3.0	7.6	7.0	3.2	9.6
02-04-2023	Morning	2.3	5.0	5.0	64.0	147.2
02-04-2023	Morning	1.2	4.0	4.0	12.6	15.12
02-04-2023	Evening	2.5	7.6	7.0	3.2	8.0
03-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
03-04-2023	Morning	2.0	4.0	4.0	12.6	25.2
03-04-2023	Evening	3.0	5.0	5.0	64.0	192.0
16-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
16-04-2023	Morning	2.0	4.0	4.0	12.6	25.2
16-04-2023	Evening	3.0	5.0	5.0	64.0	192.0
17-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
17-04-2023	Morning	2.5	4.0	4.0	12.6	31.5
17-04-2023	Evening	3.0	5.0	5.0	64.0	192.0
18-04-2023	Morning	3.0	5.0	5.0	64.0	192.0
18-04-2023	Morning	2.5	4.0	4.0	12.6	31.5
18-04-2023	Evening	3.0	5.0	5.0	64.0	192.0

7. Conclusion

- **Conclusion :**

- The ‘Dairy Management System’ simplifies the management process and reduces human efforts.
- The ‘Dairy Management System’ is useful to store all records properly.
- System is easy to handle and the functions provided by ‘Dairy Management System’ are easily understandable so anyone can handle this software.
- The ‘Dairy Management System’ is user friendly as it provides quick access to all the records, fast processing, immediate results with high accuracy and data security.

8. Bibliography

i) Web sites:-

- www.google.com
- www.javatpoint.com
- www.stackoverflow.com
- www.youtube.com

ii) Reference Book:-

- **Core and Advanced Java, Black Book-dreamtech**