VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANA SANGAMA", BELAGAVI - 590 018

A MINI PROJECT REPORT

on

"DAIRY MANAGEMENT SYSTEM"

Submitted by

Shrikanth	**4SF19IS099**
Shubham Sharma	**4SF19IS101**

BACHELOR OF ENGINEERING

in

INFORMATION SCIENCE & ENGINEERING

Under the Guidance of

Mrs. Harinakshi C,

Assistant Professor,

Department of ISE,

at

SAHYADRI

College of Engineering and Management

Adyar, Mangaluru - 575 007

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SAHYADRI

College of Engineering and Management

Adyar, Mangaluru - 575 007

Department of Information Science & Engineering

CERTIFICATE

This is to certify that the mini project entitled **"Dairy Management System"** has been carried out by **Shrikanth (4SF19IS099) and Shubham (4SF19IS101)** the bonafide students of Sahyadri College of Engineering and Management, Bachelor of Engineering in Information Science & Engineering of Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections / suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements in respect of mini project work prescribed in File Structures Laboratory with Mini Project(18ISL67) for the said degree in sixth semester.

Signature of the Guide1	**Signature of the Guide2**	**Signature of the HOD**
Mrs. Harinakshi C	Ms. Jayapadmini Kanchan	Dr. Shamanth Rai

External Viva:

Examiner's Name	Signature with Date
1.	.....
2.	.....

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Adyar, Mangaluru - 575 007

Department of Information Science & Engineering

DECLARATION

We hereby declare that the entire work embodied in this Mini Project Report titled **"Dairy Management System"** has been carried out by us at Sahyadri College of Engineering and Management, Mangaluru under the supervision of **Mrs. Harinakshi C,** for **Bachelor of Engineering** in **Information Science & Engineering**. This report has not been submitted to this or any other University for the award of any other degree.

Shrikanth (4SF19IS099)

Shubham Sharma (4SF19IS101)

Dept. of ISE, SCEM, Mangaluru

Abstract

Dairy Management System is software project that enables the management of data in Dairy shops and farms. It is designed to ease up the task of keeping track of daily sales and stocks of the dairy products, with a very high degree of fault tolerance. The user can manage the details of staffs, cows, milk, and other dairy products. User can insert, delete, modify the records. The user can also check the status of sales of cows, whether the required cow is sold or not. This project is developed using C++ language. The user is required to log in into the account or sign up if one doesn't already have an account. So to avoid mixing up of records of different customers or users. This software will reduce the work of storing the details manually. Also today's world is a genuine computer world and is getting faster day-by-day. Thus considering above necessities, the software for dairy management system has become necessary which would be useful in managing the bank more efficiently.

Acknowledgement

It is with great satisfaction and euphoria that we are submitting the Mini Project Report on **"Dairy Management System"**. We have completed it as a part of the curriculum of Visvesvaraya Technological University, Belagavi for the award of Bachelor of Engineering in Information Science & Engineering.

We are profoundly indebted to our guide, **Mrs. Harinakshi C**, Assistant Professor, Department of Information Science & Engineering for innumerable acts of timely advice, encouragement and We sincerely express our gratitude.

We express our sincere gratitude to **Dr. Shamanth Rai**, Head and Associate Professor, Department of Information Science & Engineering for his invaluable support and guidance.

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Finally, yet importantly, we express our heartfelt thanks to our family and friends for their wishes and encouragement throughout the work.

Shrikanth (4SF19IS099)

Shubham Sharma (4SF19IS101)

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Chapter 1

Introduction

Buying and selling dairy products require a lot of data to be managed like seller details, product details, customer details etc. Dairy Management System is used to maintain day to day transactions in dairy products distribution. This system helps to register all the suppliers, Buyer details, purchase, Sales details etc. The main objective of this system is to automate the complete operations of the dairy products distribution. The dairy product distributors need maintain hundreds of thousands of records, which is time consuming and also hard with manual work. By automating the management, the work load is reduced and also more time can be given to other important works.

This software will reduce the work of storing the details manually. Also today's world is a genuine computer world and is getting faster day-by-day. Thus considering above necessities, the software for dairy management system has become necessary which would be useful in managing the bank more efficiently.

1.1 Purpose

The main purpose of this project is to manage the records of daily sales and stocks. this system is to automate the complete operations of the dairy products distribution. By automating the management, the work load is reduced and also more time can be given to other important works. This system also helps in the easy maintenance of the dairy products, buyer details, purchases and also their Sales details.

1.2 Scope

The main aim of an application is to somewhere automate records on the system. It gives all sorts of functions which are required by the diary in order to run a stable system. In addition it also helps in keeping track of day-to-day transactions of the diary products. The application changes or manipulates the new data that is added and is then re-recorded. One can register the details of the buyers, their purchase details and the sales details.

1.3 Overview

The Dairy Management System is an application for maintaining dairy products. This project has shown how dairy product distribution will take place and covers the basic functionalities such storing the buyer, sales and product details. The main aim of this project is to develop a system for Dairy Management System. This project has been developed to carry out the processes quickly and easily, which is not possible with manual system, which can be overcome by this system.

Chapter 2

Requirements Specification

2.1 Hardware Specification

- Processor : Intel(R) Core(TM) i3-1005G1 CPU @ 1.20GHz
- RAM : 8GB
- Hard Disk : 512GB
- Input Device : Standard keyboard and Mouse
- Output Device : Monitor

2.2 Software Specification

- Programming Language : C++
- IDE :Turbo C++

Chapter 3

System Design

3.1 Architecture Diagram

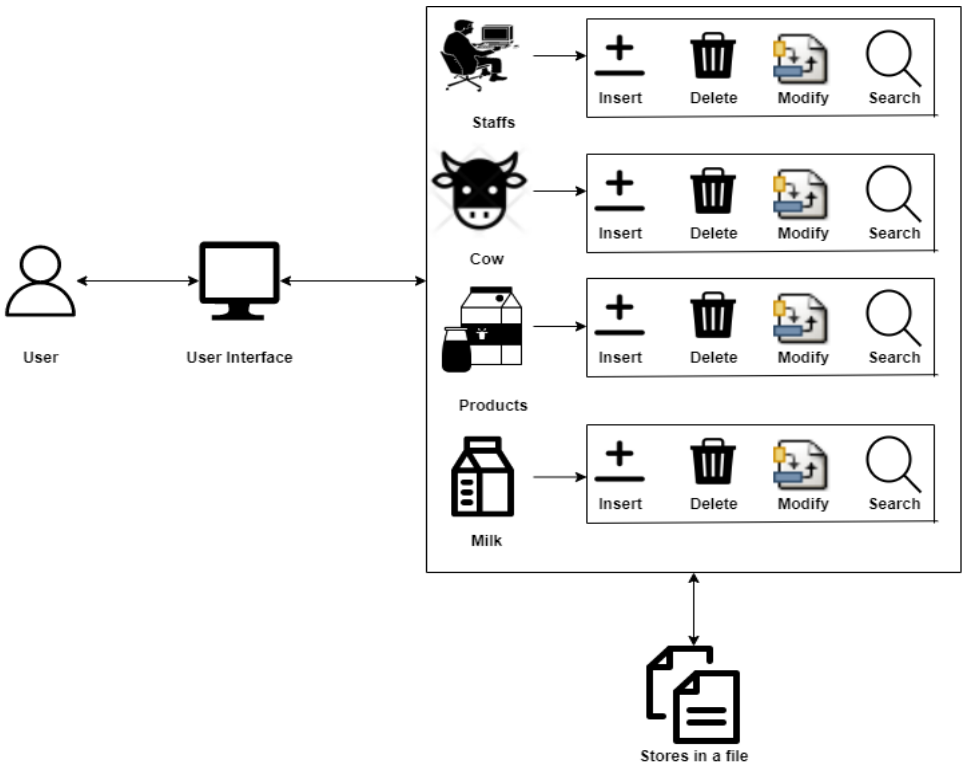


Figure 3.1: Architecture Diagram for Dairy Management System

User will interact with the system through user interface, and can manage records for Staff, Cows, Dairy Products and Milk. User can insert, delete, modify the records. The user can also search for the required record or data. At the end of the day all the details about the records of different entities will be stored in a file.

Chapter 4

Implementation

4.1 Code for Dairy Management System

Code displaying the number of cows:

The below figure is the code for displaying the number of cows. It displays the number of cows that are present.

Figure 4.1: Code displaying the number of cows

Code for reading the data:

The below figure is the code for reading the data. This functions will read the data and stores it in a file.

```
cow.cpp > cowfunction()
11
12  void cow::read()
13  {
14      cout<<"COW ID:";
15      cin>>Cow_ID;
16      cout<<"BREED:";
17      cin>>Breed;
18      cout<<"STATUS:";
19      cin>>Status;
20      cout<<"PRICE:";
21      cin>>Amount;
22  }
23
24  void cow::pack()
25  {
26      buffer.erase();
27      buffer+=Cow_ID+"|"+Breed+"|"+Status+"|"+Amount+"$";
28      buffer+="\n";
29  }
30
31  void cow::write()
32  {
33      fstream file;
34      file.open("cow.txt",ios::out|ios::app|ios::binary);
35      file<<buffer;
36      file.close();
37  }
38
39  void cow::unpack()
40  {
41      int i=0;
42      Cow_ID.erase();
```

Figure 4.2: Code for reading the data

Code for modifying the dairy:

The below figure is the code for modifying the dairy. It allows the user to make any modifications if required.

```
dairyPrdct.cpp > modify(string)
142 void dairy::modify(string key)
143 {
144     int ch;
145     if(delete_data(key))
146 {
147     cout<<"\nWhat to modify:\n 1.Product_ID\n2.Product Name\n3.PRICE\n4.Quantity\n";
148     cin>>ch;
149     switch(ch)
150     {
151         case 1: cout<<"\nProduct_ID:";
152             cin>>Product_ID;
153             break;
154         case 2: cout<<"\nProduct Name:";
155             cin>>Product_name;
156             break;
157         case 3: cout<<"\nPRICE:";
158             cin>>prce;
159             qnt=stoi(Quantity);
160             ttl=prce*qnt;
161             prdctPrice=to_string(prce);
162             TotalPrice=to_string(ttl);
163             break;
164         case 4: cout<<"\nQuantity:";
165             cin>>qnt;
166             prce=stoi(prdctPrice);
167             ttl=prce*qnt;
168             Quantity=to_string(qnt);
169             TotalPrice=to_string(ttl);
170             break;
171
172     }
173     pack();
```

Figure 4.3: Code for modifying the dairy

Code for Dairy unpack:

The below figure is the code for Dairy unpack. It returns a list of individual values extracted from the string.

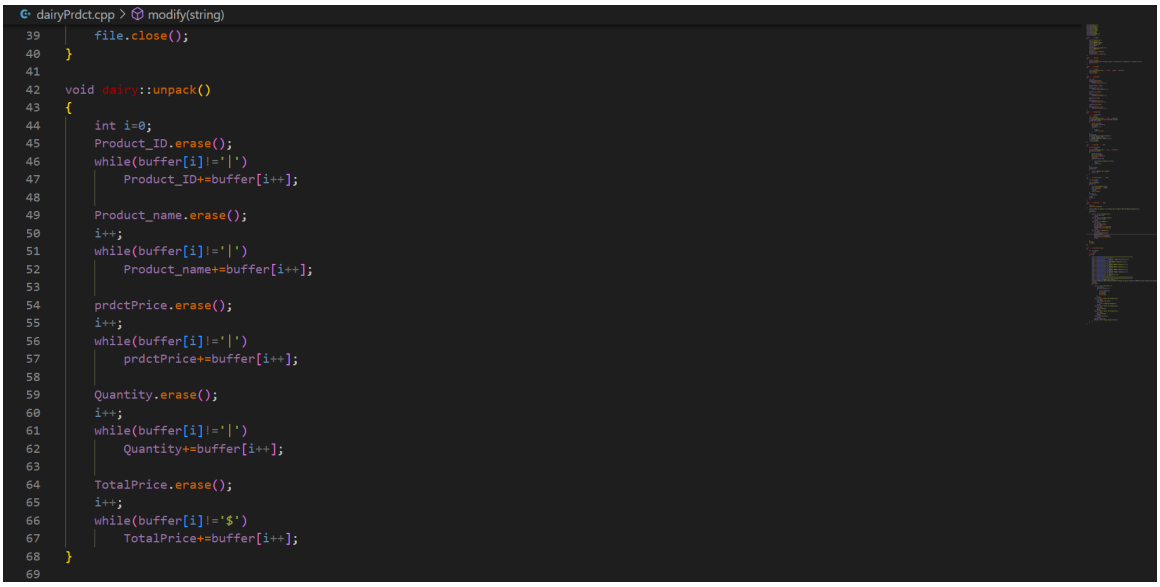


Figure 4.4: Code for Dairy unpack

Code for Milk Search:

The below figure is the code for searching milk. The user can search for milk to see if they are available or not.

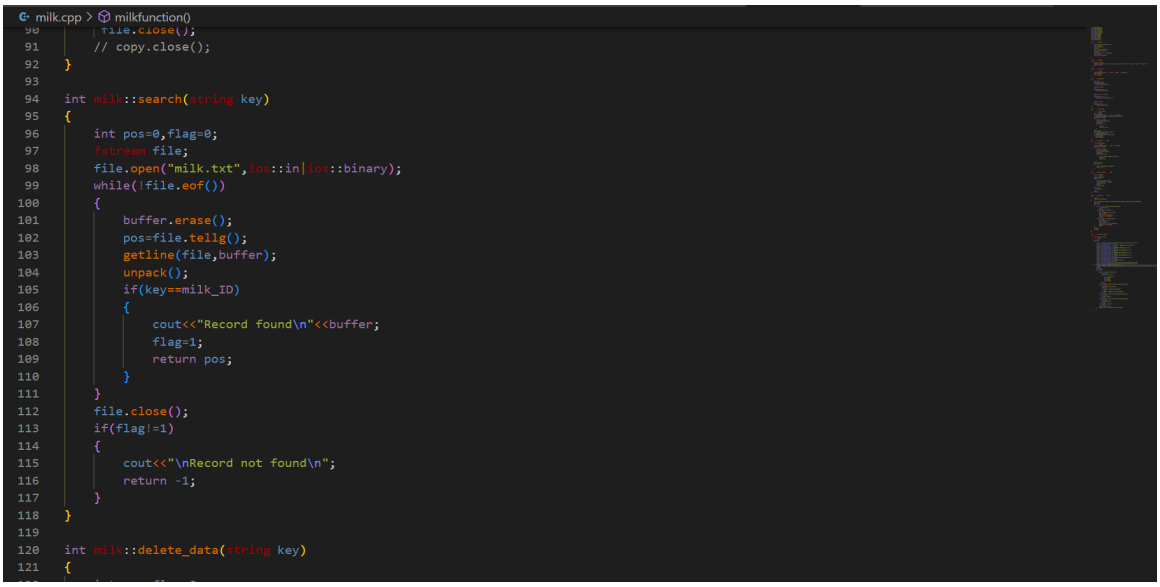
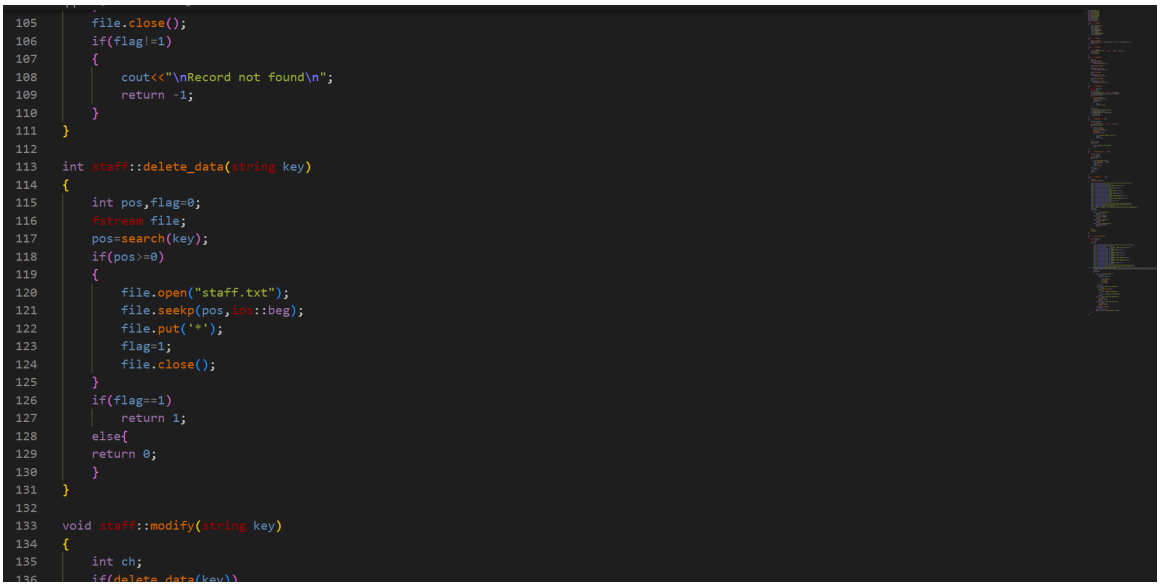


Figure 4.5: Code for Milk Search

Code for Deleting Staff:

The below figure is the code for deleting the staff. Here the admin can delete the staff if any changes takes place.



```
105     file.close();
106     if(flag!=1)
107     {
108         cout<<"\nRecord not found\n";
109         return -1;
110     }
111 }
112
113 int staff::delete_data(string key)
114 {
115     int pos,flag=0;
116     fstream file;
117     pos=search(key);
118     if(pos>=0)
119     {
120         file.open("staff.txt");
121         file.seekp(pos,ios::beg);
122         file.put('*');
123         flag=1;
124         file.close();
125     }
126     if(flag==1)
127         return 1;
128     else{
129     return 0;
130     }
131 }
132
133 void staff::modify(string key)
134 {
135     int ch;
136     if(delete_data(key))
```

Figure 4.6: Code for Deleting Staff

Chapter 5

Results and Discussion

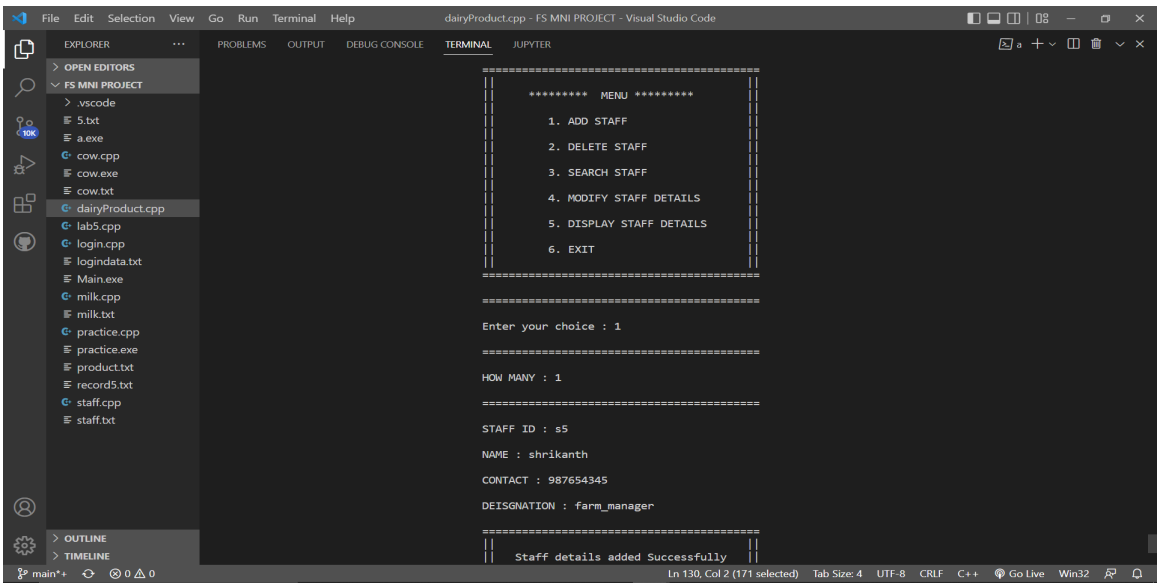


Figure 5.1: Add Staff

The above figure is the Add Staff page. Here the admin can add new staff by typing the name, contact and description.

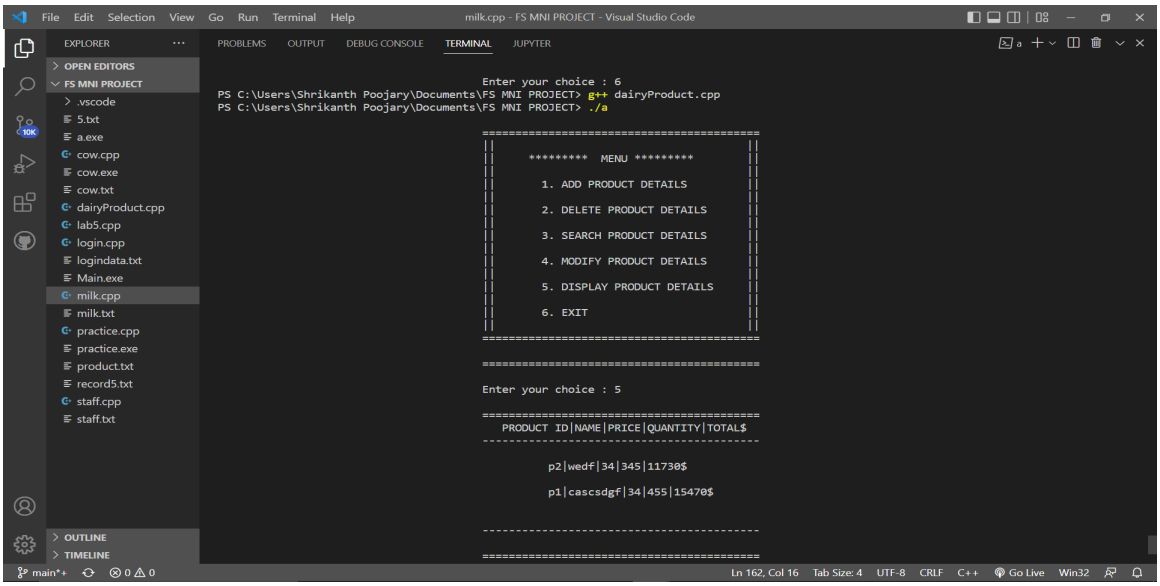


Figure 5.2: Display Product

The above figure is the Display Product page. This page displays the different types of products available in the dairy.

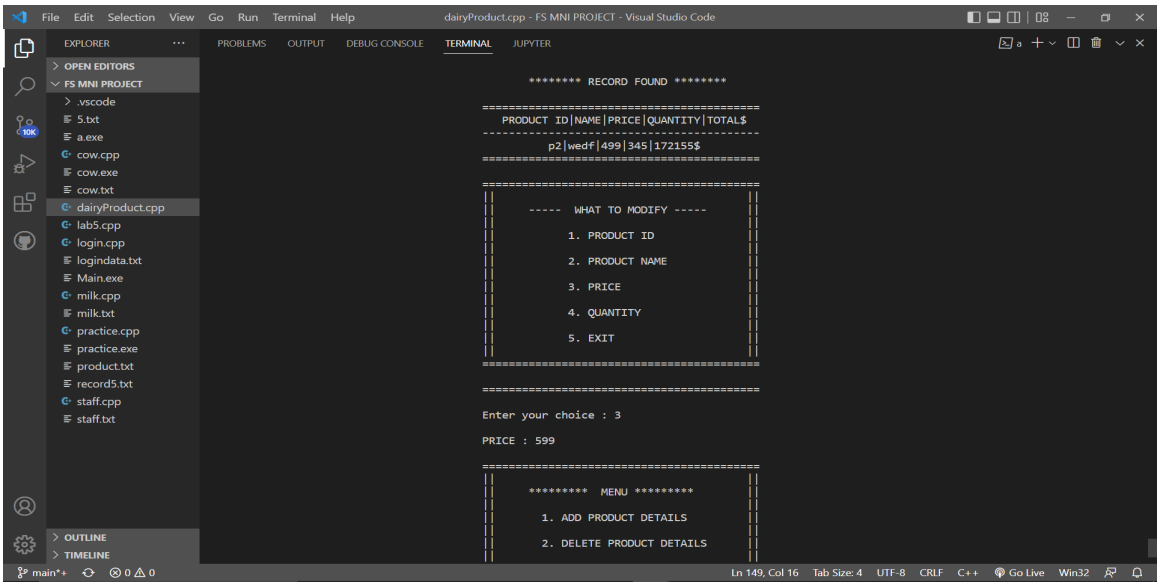


Figure 5.3: Modify Product

The above figure is the Modify Product page. Here the admin will be able to modify the products if any changes are required.

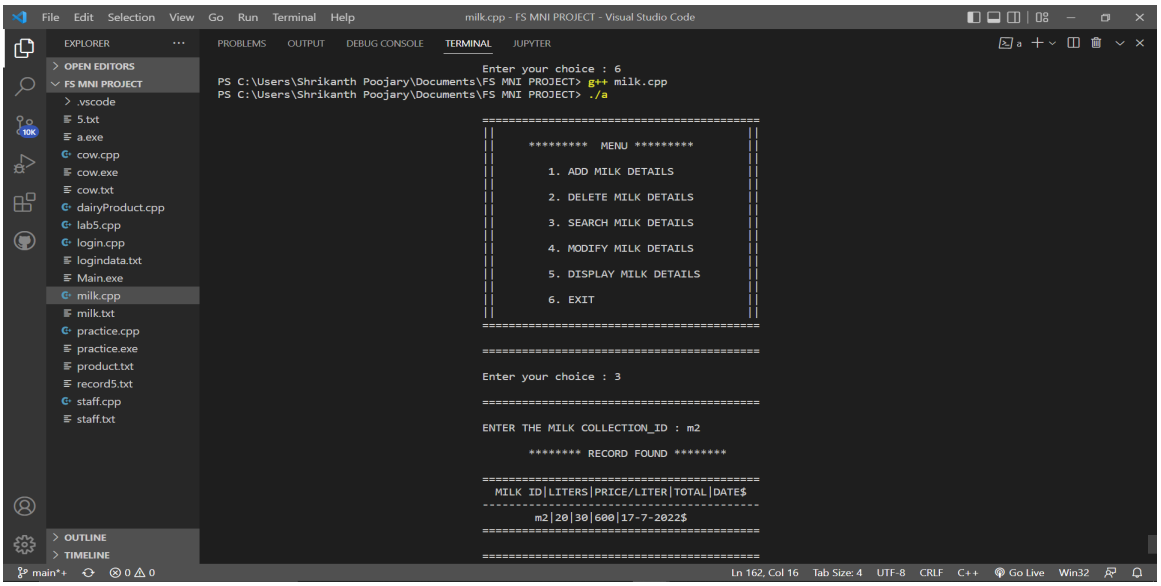


Figure 5.4: Search Milk

The above figure is the Search Milk page. Here the users will be able to search for milk.

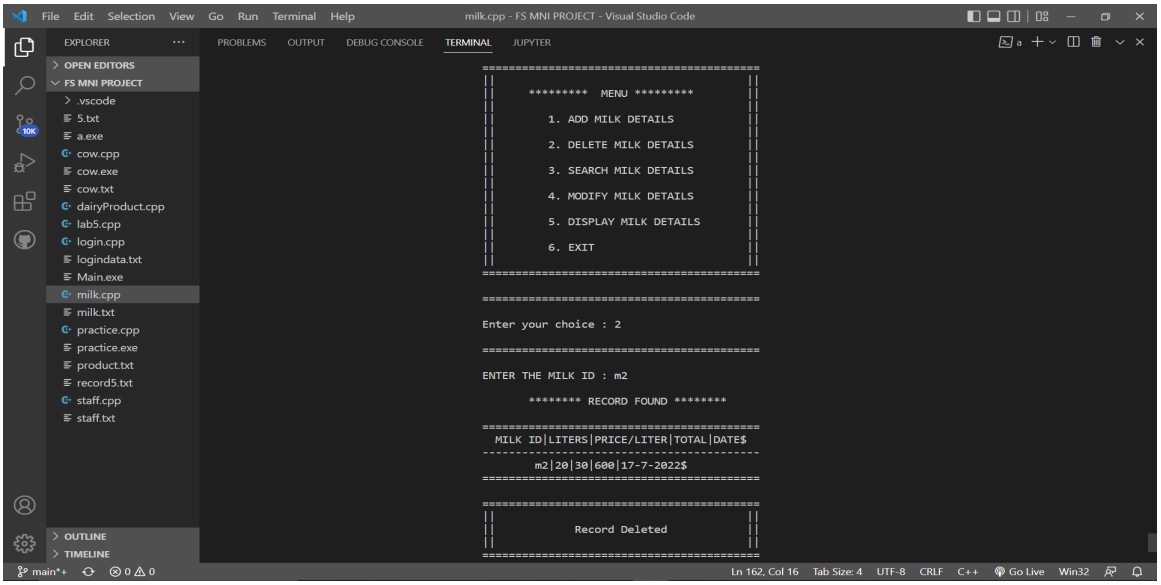


Figure 5.5: Delete Milk

The above figure is the Delete Milk page. The admin can delete the milk if its out of stock or if it is not available.

Chapter 6

Conclusion

Dairy Management System developed for a bank has been designed to achieve maximum efficiency and reduce the time taken to handle the data. It is designed to replace an existing system thereby reducing time taken for calculations and for storing data. The system is strong enough to withstand regressive daily operations under conditions where the record is maintained and cleared over a certain time of span. The implementation of the application in the dairy fields will considerably reduce data entry, time and also provide readily calculated reports. This project has many future applications like it can be used for better management using other techniques.

References

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